迪诺斯
Denox Environment

DENOX ENVIRONMENTAL & TECHNOLOGY HOLDINGS LIMITED
迪諾斯環保科技控股有限公司

(Incorporated in the Cayman Islands with limited liability)

Stock Code: 1452

ANNUAL **REPORT**

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CORPORATE INFORMATION

Board of Directors

Executive Directors

Ms. ZHAO Shu *(Chairlady)*
Mr. KONG Hongjun
Mr. LI Ke

Non-executive Directors

Mr. LI Xingwu
Mr. TEO Yi-Dar

Independent Non-executive Directors

Mr. LAM Yiu Por
Mr. LI Min
Mr. ONG Chor Wei

Audit Committee

Mr. LAM Yiu Por *(Chairman)*
Mr. LI Min
Mr. ONG Chor Wei

Remuneration Committee

Mr. LI Min *(Chairman)*
Ms. ZHAO Shu
Mr. ONG Chor Wei

Nomination Committee

Ms. ZHAO Shu *(Chairlady)*
Mr. LI Min
Mr. ONG Chor Wei

Joint Company Secretaries

Mr. CHAN Chung Kik, Lewis
Mr. LIU Lianchao

Authorised Representatives

Ms. ZHAO Shu
Mr. LIU Lianchao

Auditor

PricewaterhouseCoopers

Legal Advisers

As to Hong Kong laws

Woo Kwan Lee & Lo

As to Cayman Islands laws

Conyers Dill & Pearman

Registered Office

Cricket Square
Hutchins Drive
P.O. Box 2681
Grand Cayman, KY1-1111
Cayman Islands

CORPORATE INFORMATION

Principal Place of Business
Hong Kong

40th Floor, Sunlight Tower
No. 248 Queen's Road East
Wanchai
Hong Kong

PRC

Room 1507, Block 2, Nuode Center
No. 128 Nansi Huan Xi Road
Fengtai District, Beijing
100070, PRC

Cayman Islands Principal Share Registrar and Transfer Office

Conyers Trust Company (Cayman) Limited
Hutchins Drive
P.O. Box 2681
Grand Cayman, KY1-1111
Cayman Islands

Hong Kong Branch Share Registrar and Transfer Office

Tricor Investor Services Limited
Level 54, Hopewell Centre
No. 183 Queen's Road East
Hong Kong

Principal Bankers

The Hongkong and Shanghai Banking Corporation Limited
China Construction Bank Corporation
China Merchants Bank

Website

www.china-denox.com

Stock Code

01452

CHAIRLADY'S STATEMENT

Dear Shareholders,

On behalf of the board (the "**Board**") of directors (the "**Directors**") of Denox Environmental & Technology Holdings Limited (the "**Company**"), I am pleased to present the results of the Company and its subsidiaries (collectively, the "**Group**" or "**Denox**") for the year ended 31 December 2019.

Review on the work of the Group for 2019

Against the backdrop of slowing global economic growth and rising trade protectionism, China's GDP grew by 6.1% in 2019, the economy has achieved steady progress, and the macroeconomic operations have remained within a reasonable range.

In the field of traditional plate-type catalyst: In 2019, the thermal power industry where the Group's major customers operate in still ran at a low level, and the number of newly installed thermal power generating units and equipment utilization hours also remained at a low level, which indicates that the replacement of catalysts stored in the market of the Company has become the norm, and the price of DeNOx catalysts has bottomed out and gradually returned to the normal profit level.

In the field of extruded honeycomb catalysts: In 2019, the Group currently has large-scale production capacity for catalysts for China V diesel-powered vehicles and vanadium-based extruded honeycomb catalyst products for vessels (engines), and also has achieved a certain amount of sales of China V catalyst products. In the fields which honeycomb catalysts are more applied, such as cement and metallurgy, the Group conducted a lot of customer visits and technical exchanges.

In the field of China VI vehicle catalysts: In 2019, the Ministry of Ecology and Environment of China has postponed the time of implementing the Limits and Measurement Methods for Emissions from Diesel Fuelled Heavy-Duty Vehicles (China VI) to 2020 after taking comprehensive consideration, which allowed the Group to have more sufficient time to prepare to develop China VI catalysts and related products market given that the Group is a late entrant to the vehicle environmental protection industry. In 2019, the Group has carried out sample trial production, product testing and customer communication on catalyst-related products for various China VI vehicles.

CHAIRLADY'S STATEMENT

Outlook on the work of the Group for 2020

In 2020, the Group will continue to focus on the research and development, production and sales of industrial DeNOx catalysts and vehicles DeNOx catalysts. The main operations in 2020 include:

(1) Consolidate the Group's phased achievements in reducing cost and inventory of plate-type DeNOx catalysts in 2019, and strive for better financial performance in 2020;

(2) Continue to reinforce the sales and marketing of plate-type DeNOx catalysts of the Group in the thermal power industry, and strive to enter the honeycomb catalyst market in the thermal power industry;

(3) Continue to strengthen the research and development, production and sales of DeNOx catalysts of the Group in the non-electrical industry such as metallurgy and cement, and continue to track the market dynamics of the vessels (engine) industry; and

(4) For DeNOx catalysts for diesel-powered vehicles, complete the tail-in work of sales of DeNOx catalysts meeting China V emission standards, speed up the procurement, installation and commissioning of production equipment for China VI catalyst related products to strive for mass production as early as possible, and endeavor to realize a breakthrough in the sales of catalysts for natural gas-powered vehicles and diesel-powered vehicles under China VI emission standards as early as possible.

Finally, on behalf of the Board, I would like to thank all the employees of the Group for their dedication and contribution, and all the shareholders of the Company (the "Shareholders") and partners for their support and understanding. We will adjust the Group's operating strategy in accordance with the current market situation, continue to accelerate the Group's development in the non-electrical industry and vehicle industry, and strive to achieve profit targets as soon as possible.

Zhao Shu
Chairlady

27 March 2020

CORPORATE GOVERNANCE REPORT

The Board is pleased to present this Corporate Governance Report for the Reporting Period.

The Company is committed to achieving high standards of corporate governance to safeguard the interests of Shareholders and to enhance corporate value and accountability.

(A) Corporate Governance Practices

The Company has adopted the CG Code as its own code to govern its corporate governance practices. The Company has been conducting its business according to the principles of the CG Code during the Reporting Period.

Throughout the Reporting Period, the Company has complied with the relevant code provisions of the CG Code with the exception of Code Provision A.2.1 as set out in the Directors' Report below.

The Board will continue to review and monitor the practices of the Company with an aim to maintaining and improving a high standard of corporate governance practices.

(B) Directors' Securities Transactions

The Company has adopted the Model Code as its code of conduct regarding Directors' securities transactions. In response to a specific enquiry made by the Company, all Directors confirmed that they had complied with the Model Code throughout the Reporting Period.

(C) Directors

Board Composition

The Board currently consists of 8 Directors, comprising three executive Directors, two non-executive Directors and three independent non-executive Directors. As at the date hereof, the composition of the Board is set out as follows:

Executive Directors
Ms. ZHAO Shu
Mr. KONG Hongjun
Mr. LI Ke

Non-executive Directors
Mr. LI Xingwu
Mr. TEO Yi-Dar

Independent non-executive Directors
Mr. LAM Yiu Por
Mr. LI Min
Mr. ONG Chor Wei

The biographical information of the Directors and the relationships between the members of the Board (if any) are set out and disclosed in the section headed "Directors and Senior Management" of this annual report.

Roles and Responsibilities

The Board is responsible for determining our business and investment plans, preparing our annual financial budgets and financial reports, formulating proposals for profit distributions as well as exercising other powers, functions and duties as conferred by the memorandum of association and articles of association of the Company (the "**Articles of Association**"). Responsibilities relating to implementing decisions of the Board, directing and co-ordinating the daily operations and management of the Company are delegated to the management.

Directors must dedicate sufficient time and attention to the Group's affairs. Besides, the Company also requested all Directors to disclose to the Company annually the number and the nature of offices held in public companies or organisations and other significant commitments with an indication of the time involved.

In essence, the Board will take into account the re-electing Director's attendance of Board meetings and serving on committees in assessing his/her ability to devote sufficient time and attention to participate in the affairs of the Company. In addition, the Company will take into account the background, expertise and experience of the re-electing Directors in assessing the possible contribution by the re-electing Director to the Company.

Mr. Ong serves as a member in the Audit Committee, Remuneration Committee and Nomination Committee of the Company. During the past two years after Mr. Ong was last re-elected on 7 June 2018, he attended all board meetings, committee meetings and general meetings of the Company. On that basis, the Board is of the view that that Mr. Ong can devote sufficient time to the Board despite his directorship in seven or more listed companies.

In addition, the Board is of the view that Mr. Ong's management experience and positions in numerous listed companies, financial institutions and public bodies has contributed, and will continue to contribute, to the management and internal governance of the Company. On that basis, the Board supports the re-election of Mr. Ong and recommends Shareholders to vote in favor of the relevant resolution at the upcoming AGM.

Attendance Record of the Directors

The attendance record of each Director at the Board and board committee meetings, and annual general meeting of the Company held for the year of 2019 is set out below:

	Attendance/Number of Meetings				
	Board	Audit Committee	Remuneration Committee	Nomination Committee	Annual general meeting
Executive Directors					
Ms. ZHAO Shu	5/5	N/A	1/1	1/1	1/1
Mr. KONG Hongjun	5/5	N/A	N/A	N/A	1/1
Mr. LI Ke	5/5	N/A	N/A	N/A	1/1
Non-executive Directors					
Mr. LI Xingwu	5/5	N/A	N/A	N/A	1/1
Mr. TEO Yi-Dar	5/5	N/A	N/A	N/A	1/1
Independent non-executive Directors					
Mr. LAM Yiu Por	5/5	2/2	1/1	1/1	1/1
Mr. LI Min	5/5	2/2	N/A	N/A	1/1
Mr. ONG Chor Wei	5/5	2/2	1/1	1/1	1/1

Independence of the independent non-executive Directors

The Company has appointed three independent non-executive Directors, representing more than one-third of the Board, with one of them possessing appropriate professional qualifications or accounting or related financial management expertise. Based on the foregoing, the Board considers that the balance between executive Directors and independent non-executive Directors is reasonable and adequate to provide sufficient checks and balances that safeguard the interests of Shareholders and the Group as a whole.

The Company has received from each of the independent non-executive Directors a written confirmation of his independence pursuant to Rule 3.13 of the Listing Rules. The Board considers all independent non-executive Directors to be independent. The Board believes that there is a strong independent element in the Board to safeguard the interest of Shareholders.

All Directors, including independent non-executive Directors, are clearly identified in all corporate communications of the Company. A list of Directors is available on the websites of the Company and the Stock Exchange and will be updated, where necessary.

Induction and Development

Directors must keep abreast of their collective responsibilities. All Directors received an induction package covering the regulatory obligations of a director of a listed company. The Company also plans to provide briefings and other training to develop and refresh the Directors' knowledge and skills. The Company shall provide the Directors updates on the material changes to the Listing Rules and other applicable regulatory requirements. The Directors shall participate in appropriate continuous professional development to develop and refresh their knowledge and skills to ensure that their contribution to the Board remains informed and relevant. Circulars and guidance notes may be issued to Directors and senior management of the Company where appropriate, to ensure awareness of best corporate governance practices.

All Directors have participated in appropriate continuous professional development programs to develop and refresh their knowledge and skills and received regular briefings and updates on the Group's business, operations, risk management and corporate governance matters. All Directors are requested to provide the Company with their respective training records pursuant to the CG Code.

(D) Chairman and Chief Executive

Pursuant to code provision A.2.1 of the CG Code, the roles of chairman and chief executive should be separate and should not be performed by the same individual.

In considering that (a) the day-to-day responsibilities of the chief executive officer have been assumed by Ms. Zhao Shu, who is also the chairlady of the Company; and (b) Ms. Zhao Shu is the chairlady of the Group and has extensive experience in the Group's business operations and management in general, there is no separation of the roles of the chairlady and the chief executive officer of the Company. Given the current stage of the development of the Group, the Board is of the view that vesting the two roles in the same person provides the Company with strong and consistent leadership and facilitates the implementation and execution of the Group's business strategies which are in the best interests of the Company.

Under the leadership of Ms. Zhao Shu, the Board works efficiently and performs its responsibilities with all key and appropriate issues discussed in a timely manner. In addition, as all major decisions are made in consultation with members of the Board and relevant board committees, and there are three independent non-executive Directors on the Board offering independent perspective, the Board is therefore of the view that there are adequate safeguards in place to ensure sufficient balance of powers within the Board. The Board shall nevertheless review the structure and composition of the Board from time to time in light of prevailing circumstances, as to maintain a high standard of corporate governance practices of the Company.

(E) Appointment and Re-Election of Directors

The procedures of appointment, re-election and removal of Directors are laid down in the Articles of Association. The Nomination Committee of the Company is responsible for reviewing the Board composition, developing and formulating the relevant procedures for nomination and appointment of Directors, monitoring the appointment and succession planning of Directors and assessing the independence of independent non-executive Directors.

Mr. LI Min was appointed as independent non-executive Director on 1 November 2017 and has entered into a letter of appointment with the Company for an initial term of three years from the date of his appointment until terminated in accordance with the terms of the letter of appointment. Under the letter of appointment, either party may terminate such contract at any time by giving the other not less than three months' notice in writing.

Other Directors have entered into service contracts or letter of appointment with the Company for a term of three years with effect from 12 November 2018 until terminated in accordance with the terms of the service contracts or letter of appointment. Under the service contracts or letter of appointment, either party may terminate such contract at any time by giving the other not less than three months' notice in writing.

Code provision A.4.2 states that all directors appointed to fill a casual vacancy shall be subject to election by shareholders at the first general meeting after appointment and that every director, including those appointed for a specific term, shall be subject to retirement by rotation at least once every three years. Three Directors will retire in the forthcoming annual general meeting of the Company, and being qualified, have offered to be re-elected at the annual general meeting.

(F) Board Committees

The Board is responsible for performing the corporate governance duties including:

a) to develop and review the Company's policies and practices on corporate governance and make recommendations to the Board;

b) to review and monitor the training and continuous professional development of Directors and senior management;

c) to review and monitor the Company's policies and practices in compliance with legal and regulatory requirements;

d) to develop, review and monitor the code of conduct applicable to Directors, senior management and employees of the Company; and

e) to review the Company's compliance with the CG Code and disclosure in this report.

In compliance with the CG Code, the Company established three committees, namely the audit committee (the "**Audit Committee**"), the remuneration committee (the "**Remuneration Committee**") and the nomination committee (the "**Nomination Committee**"). These committees perform their distinct roles in accordance with their respective terms of reference which are available on the websites of the Company and the Stock Exchange.

Audit Committee

The Company established an Audit Committee on 19 October 2015 with written terms of reference in compliance with Rule 3.21 of the Listing Rules and paragraph C3 of the CG Code. The latest terms of reference of the audit committee are available on the websites of the Company and the Stock Exchange. As at the date hereof, the Audit Committee consists of three independent non-executive Directors, namely Mr. Lam Yiu Por (being the chairman of the Audit Committee who has a professional qualification in accountancy), Mr. Li Min, and Mr. Ong Chor Wei.

The primary duties of the Audit Committee are to assist the Board by providing an independent view of the effectiveness of the financial reporting process system, internal control and risk management systems of the Group, to oversee the audit process, to develop and review the policies of the Group and to perform other duties and responsibilities as assigned by the Board. In particular, the Audit Committee is empowered under its terms of reference to review any arrangement which may raise concerns about possible improprieties in financial reporting, internal control or other matters.

The Audit Committee held two meetings during the Reporting Period to review, among others, the financial results and reports, financial reporting and compliance procedures, internal control and risk management systems, appointment and scope of work of external auditors.

The Company's annual results for the year ended 31 December 2019 have been reviewed by the Audit Committee.

The attendance records of each member of the Audit Committee are set out in the section "Attendance Record of the Directors" above.

Remuneration Committee

The Company established a Remuneration Committee on 19 October 2015 with written terms of reference in compliance with Rule 3.25 of the Listing Rules and paragraph B1 of the CG Code. The latest terms of reference of the remuneration committee are available on the websites of the Company and the Stock Exchange. The Remuneration Committee consists of three members, being Mr. Li Min, Ms. Zhao Shu and Mr. Ong Chor Wei, two of whom are independent non-executive Directors. The Remuneration Committee is chaired by Mr. Li Min.

The primary duties of the Remuneration Committee include (but without limitation): (i) making recommendations to the Board regarding the policy and structure for the remuneration of the Directors and senior management and on the establishment of a formal and transparent procedure for developing remuneration policies; (ii) making recommendations to the Board on the remuneration packages of the Directors and senior management; (iii) reviewing and approving the management's remuneration proposals with reference to the Board's corporate goals and objectives; and (iv) considering and approving the grant of share options to eligible participants, if any, pursuant to the Share Option Scheme.

The Remuneration Committee held one meeting during the Reporting Period, with all members thereof present, to review and make recommendations to the Board on the existing remuneration packages of all Directors and senior management. The attendance records of each member of the Remuneration Committee are set out in the section "Attendance Record of the Directors" above.

The remuneration of senior management of the Company (other than the Directors) was within the following bands:

The remuneration bands	Number of individuals 2019	2018
Nil to HK$1,000,000	**1**	1
HK$1,000,001 – HK$2,000,000	**1**	1

Information on the emoluments of the Directors and the five highest paid individuals are set out in notes 8(a) and 32 to the consolidated financial statements, respectively.

Nomination Committee

The Company established a Nomination Committee on 19 October 2015 with written terms of reference. The latest terms of reference of the nomination committee are available on the websites of the Company and the Stock Exchange. The Nomination Committee consists of three members, being Ms. Zhao Shu, Mr. Li Min and Mr. Ong Chor Wei. Two of the members are independent non-executive Directors. The Nomination Committee is chaired by Ms. Zhao Shu.

The primary functions of the Nomination Committee include (but without limitation): (i) reviewing the structure, size and composition (including the skills, knowledge, experience and diversity of perspectives) of the Board at lease annually; (ii) reviewing the policy on Board diversity (the "**Policy**"); (iii) making recommendations to the Board on the appointment of members of the Board; and (iv) assessing the independence of independent non-executive Directors.

The purpose of the Policy, which was adopted by the Company on 19 October 2015, is to set out the basic principles to be followed to ensure that the Board has the appropriate balance of skills, experience and diversity of perspectives necessary to enhance the effectiveness of the Board and to maintain high standards of corporate governance. Selection of Board candidates shall be based on a range of diversity perspectives with reference to the Company's business model and specific needs, including but not limited to gender, age, race, language, cultural background, educational background, industry experience and professional experience. The Nomination Committee shall review the policy and the measurable objectives at least annually, and as appropriate, to ensure the continued effectiveness of the corporate governance of the Board.

The Nomination Committee held one meeting during the Reporting Period, with all members thereof present, to assess the independence of independent non-executive Directors, and review the proposed re-appointment of Directors at the annual general meeting of the Company. The Board also discussed the above measurable objectives, including but not limited to skills, knowledge, professional experience and cultural and educational background, and agreed that these measurable objectives were achieved for the diversity of the Board which contributed to the corporate strategy and the business development of the Company.

The attendance records of each member of the Nomination Committee are set out in the section "Attendance Record of the Directors" above.

(G) Accountability and Audit

Directors' and Auditor's acknowledgement

The Board acknowledges its responsibilities for the preparation of the financial statements of the Group for each financial year, which should give a true and fair view of the state of affairs of the Company and the Group and of the results and cash flow for that year in compliance with relevant laws and applicable accounting standards.

In preparing the financial statements for the year ended 31 December 2019, the Directors have adopted appropriate and consistent accounting policies and made prudent and reasonable judgments and estimations. The financial statements for the Reporting Period have been prepared on a going-concern basis.

The responsibility of the external auditor is to form an independent opinion, based on their audit, on those consolidated financial statements of the Group prepared by the Board and to report their opinion to the Shareholders. A statement by the auditor about their reporting responsibilities is set out in the Independent Auditor's Report.

Auditor's Remuneration

During the year, the Company engaged PricewaterhouseCoopers as the external auditor of the Group until the conclusion of the Annual General Meeting.

For the year ended 31 December 2019, the fees paid/payable to PricewaterhouseCoopers for the audit and review of the financial statements of the Group were RMB1.7 million.

Fees payable to PricewaterhouseCoopers for non-audit services in relation to agreed-upon procedures on the results announcement for the year ended 31 December 2019 provided to the Group was RMB0.01 million.

Risk Management and Internal Control

The Board is responsible for the risk management and internal control system of the Group and for reviewing its effectiveness.

The Group's internal control system is designed to safeguard assets against misappropriation and unauthorised disposition and to manage operational risks. These systems are designed to manage rather than eliminate the risk of failure to achieve business objectives, and can only provide reasonable but not absolute assurance against material misstatement or loss. Internal control and risk management systems are reviewed annually to ensure its continuous effectiveness. The Group has in place a risk management framework which has the following five components: risk identification, risk assessment, risk treatment, reporting and monitoring.

The Company has outsourced the internal control auditing function as it is more cost-effective. During the Reporting Period, the Company engaged an external internal control consultant to conduct review on the effectiveness of the Group's internal control system and reporting to the Audit Committee and the Board. A review of the effectiveness of the Group's system of internal control covering all key controls, including financial, operational and compliance and risk management controls, is conducted by rotation and performed annually. The examination consisted of enquiry, discussion and validation through observation and inspection. The result of the review has been reported to the Audit Committee and the Board and areas of improvement, if any, have been identified and appropriate measures have been put in place to manage the risks. Based on the reports from the Group's external and internal control consultant, the Audit Committee and the Board consider the Group's risk management and internal control system is adequate and effective and the Group has complied with the provisions on risk management and internal controls as set out in the CG Code.

Whistle Blowing Policy

To achieve and maintain the highest standards of openness, probity and accountability, the Company has adopted a whistle blowing policy on 19 October 2015. This policy aims to govern and deal with fairly and properly concerns raised by the Company's employees about any suspected misconduct or malpractice regarding financial reporting, internal control or other matters within the Company. The Audit Committee shall review such policy regularly and ensure that arrangements are in place for fair and independent investigation of these matters and for appropriate follow-up action.

(H) Joint Company Secretaries

Mr. Liu Lianchao has been appointed as the joint company secretary since 8 May 2015. Mr. Liu is a full time staff of the Group and is responsible for ensuring and advising the Board on, compliance of all policies and procedures in connection with the applicable rules and regulations. The Company has also engaged Mr. Chan Chung Kik, Lewis, as the joint company secretary since 8 May 2015, who is responsible for assisting Mr. Liu in performing his duties as the company secretary. For the year ended 31 December 2019, each of Mr. Liu and Mr. Chan received not less than 15 hours of relevant professional training to update their knowledge and skills.

Mr. Chan has tendered his resignation as the joint company secretary with effect from 1 June 2020. Following the resignation of Mr. Chan, the Board has decided to appoint Mr. Wong Yu Kit as one of the joint company secretaries with effect from 1 June 2020, and Mr. Liu will remain as one of the joint company secretaries. Please refer to the Company's announcement on 1 April 2020 for details.

The biographical details of Mr. Liu and Mr. Chan are set out under the section headed "Directors and Senior Management". The biographical details of Mr. Wong is set out in the Company's announcement on 1 April 2020.

(I) Shareholders' Right

Procedures for Shareholders to convene an extraordinary general meeting

- Any one or more Shareholders holding at the date of deposit of the requisition not less than one-tenth of the paid up capital of the Company carrying the right of voting at general meetings of the Company (the "**Eligible Shareholder(s)**") shall at all times have the right, by written requisition to the Board or the company secretary of the Company (the "**Company Secretary**"), to require an extraordinary general meeting to be called by the Board for the transaction of any business specified in such requisition, including making proposals or moving a resolution at the extraordinary general meeting.

- Eligible Shareholders who wish to convene an extraordinary general meeting for the purpose of making proposals or moving a resolution at the extraordinary general meeting must deposit a written requisition (the "**Requisition**") signed by the Eligible Shareholder(s) concerned to the principal place of business of the Company in Hong Kong at 40th Floor, Sunlight Tower, No. 248 Queen's Road East, Wanchai, Hong Kong, for the attention of the Company Secretary.

- The Requisition must state clearly the name(s) of the Eligible Shareholder(s) concerned, his/her/their shareholding in the Company, the reason(s) for convening an extraordinary general meeting, the agenda proposed to be included and the details of the business(es) proposed to be transacted in the extraordinary general meeting, signed by the Eligible Shareholder(s) concerned.

- The Company will check the Requisition and the identity and the shareholding of each Eligible Shareholder will be verified with the Company's branch share registrar in Hong Kong. If the Requisition is found to be proper and in order, the Company Secretary will ask the Board to convene an extraordinary general meeting within 2 months and/or include the proposal or the resolution proposed by the Eligible Shareholder(s) at the extraordinary general meeting after the deposit of the Requisition. On the contrary, if the Requisition has been verified as not in order, the Eligible Shareholder(s) concerned will be advised of this outcome and accordingly, the Board will not call for an extraordinary general meeting and/or include the proposal or the resolution proposed by the Eligible Shareholder(s) at the extraordinary general meeting.

- If within 21 days of the deposit of the Requisition the Board has not advised the Eligible Shareholder(s) of any outcome to the contrary and fails to proceed to convene such extraordinary general meeting, the Eligible Shareholder(s) himself/herself/themselves may do so in accordance with the Memorandum and Articles of Association of the Company (as amended from time to time), and all reasonable expenses incurred by the Eligible Shareholder(s) concerned as a result of the failure of the Board shall be reimbursed to the Eligible Shareholder(s) concerned by the Company.

Procedures for putting forward proposals at general meetings

There are no provisions allowing the Shareholders to propose new resolutions at the general meetings under the Cayman Islands Companies Law. However, Shareholders who wish to propose resolutions may follow Article 58 of the Articles of Association for including a resolution at an extraordinary general meeting. The requirements and procedures are set out section headed "Procedures for Shareholders to convene an extraordinary general meeting" in this report.

Pursuant to Article 85 of the Articles of Association, no person other than a Director retiring at the meeting shall, unless recommended by the Directors for election, be eligible for election as a Director at any general meeting unless a notice signed by a member (other than the person to be proposed) duly qualified to attend and vote at the meeting for which such notice is given of his intention to propose such person for election and also a notice signed by the person to be proposed of his willingness to be elected shall have been lodged at the head office or at the Hong Kong Branch Share Registrar and Transfer Office provided that the minimum length of the period, during which such notice(s) are given, shall be at least seven (7) days and that (if the notices are submitted after the dispatch of the notice of the general meeting appointed for such election) the period for lodgement of such notice(s) shall commence on the day after the dispatch of the notice of the general meeting appointed for such election and end no later than seven (7) days prior to the date of such general meeting. If a Shareholder wishes to propose a person (the "**Candidate**") for election as a director of the Company at a general meeting, he/she shall deposit a written notice at the Company's principal place of business at 40th Floor, Sunlight Tower, No. 248 Queen's Road East, Wanchai, Hong Kong or its Hong Kong Branch Share Registrar and Transfer Office at Level 54, Hopewell Centre, 183 Queen's Road East, Wanchai, Hong Kong. The written notice must include the personal information of the Candidate as required by Rule 13.51(2) of the Listing Rules.

The procedures for Shareholders to propose a person for election as director is published on the Company's website.

(J) Constitutional Documents

The constitutional documents of the Company are available on the websites of the Company and the Stock Exchange. There has been no changes in the Company's constitutional documents since the Listing Date.

(K) Shareholder and Investor Relations

The Company is committed to providing the Shareholders and other stakeholders (including potential investors) with balanced and understandable information about the Group. The Company uses various communication methods to ensure its Shareholders are kept well informed of key business imperatives. These include general meetings, annual reports, interim reports, various notices, announcements and circulars. To ensure all Shareholders timely access to important corporate information, the Company utilises its corporate website to disseminate to the Shareholders information such as announcements, circulars and annual and interim reports. Any information or documents of the Company posted on the Stock Exchange's website are also published on the Company's website (www.china-denox.com) under the section headed "Investor Relations". Other corporate information about the Company's business developments, goals and strategies, corporate governance and risk management are also available on the Company's website.

The Board continues to maintain regular dialogue with institutional investors and analysts to keep them informed the Group's strategy, operations, management and plans.

The annual general meeting and other general meetings of the Company provide a useful forum for Shareholders to exchange views with the Board. The Company provides Shareholders with relevant information on the resolution(s) proposed at a general meeting in a timely manner in accordance with the Listing Rules. The information provided shall be reasonably necessary to enable Shareholders to make an informed decision on the proposed resolution(s). Shareholders are encouraged to participate in general meetings or to appoint proxies to attend and vote at the meetings for and on their behalf if they are unable to attend the meetings. The chairlady of the Board and other Directors, the chairman/chairlady of board committees or their delegates, and the external auditors are available to answer Shareholders' questions at the annual general meeting. The chairman of the independent board committee or his/her delegate is also available to answer questions at any general meeting and to approve a connected transaction or any other transaction that is subject to independent shareholders' approval.

Shareholders may put forward their written enquiries to the Board. In this regard, the Shareholders may send those enquiries or requests as mentioned to the following:

Address:	Room 1507, Block 2, Nuode Center, No. 128 Nansi Huan Xi Road, Fengtai District, Beijing, 100070, PRC
Fax:	+86 10 88580859
Telephone:	+86 10 88829058

(L) Competing business

The Company has received an annual written confirmation from each of the controlling Shareholders in respect of the compliance by them and their close associates with the Deed of Non-Competition (as defined below). For further details, please refer to the section headed "Competing Business" in the directors' report.

(M) DIVIDEND POLICY

In deciding whether to propose a dividend and in determining the dividend amount, the Board shall take into account, inter alia, the following factors:

- the Company's actual and expected financial performance;
- retained earnings and distributable reserves of the Company and each of the subsidiaries of the Group;
- the Group's working capital requirements, capital expenditure requirements and future expansion plans;
- the Group's liquidity position;
- general economic conditions, business cycle of the Group's business and internal or external factors that may have an impact on the business, financial results and position of the Company; and
- other factors that the Board may deem appropriate and relevant.

Any declaration and payment as well as the amount of the final dividends requires the approval of the Shareholders, and is also subject to all relevant applicable laws, rules and regulations in the Cayman Islands and the Articles of Association. The Board will review the dividend policy from time to time and may exercise its sole and absolute discretion to update, amend and/or modify the dividend policy at any time as it deems fit and necessary.

The Directors are pleased to present their report together with the audited financial statements of the Group for the year ended 31 December 2019.

Principal Activities

The Company is an investment holding company with its principal subsidiaries engaged in design, development, manufacture and sales of DeNOx catalysts in the People's Republic of China (the "**PRC**"). During the year, there were no significant changes in the nature of the Group's principal activities.

The activities of the subsidiaries of the Company are set out in note 15 to the consolidated financial statements.

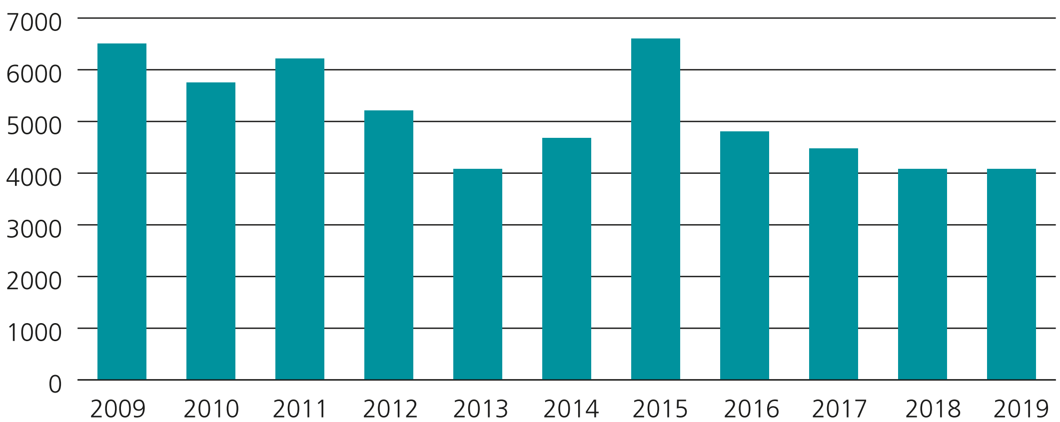
Business Review for 2019

(I) Plate-type DeNOx catalysts

1. Business landscape of the plate-type catalyst industry

By the end of 2019, China's installed power-generating capacity reached 2,010.66 million kw, representing an increase of 5.8% year-on-year. Among which, the installed capacity of thermal power was 1,190.55 million kw, accounting for 59.2% of the total installed capacity; and the installed capacity of thermal power increased by 40.92 million kw, still remaining at a low level.

Growth of Installed Electricity Capacity in China from 2009 to 2019 (Thermal Power) (ten thousand kw)



The above data shows that the market capacity of plate-type DeNOx catalysts in 2019 had no big change from the previous year, and the newly added installed capacity of the thermal power industry generally demonstrated a downward trend. The catalyst market of the thermal power industry was mainly derived from the normal replacement of catalysts stored in thermal power plants. The catalyst market will enter into the new stage of norm for a long time as we have previously estimated.

Due to compliance with relevant environmental protection requirements in China, the DeNOx catalyst market of other industrial sectors such as metallurgy and cement industries continued to experience rapid growth in 2019. However, the above non-electrical industries are much different from the thermal power industry in operating conditions, which also have new requirements for DeNOx catalysts in terms of type, formula and technical parameters, and the Group is required to conduct technological development for relevant products accordingly. The Group had no previous results of investment and operations in the non-electrical industry, which will bring about opportunities but also challenges to the Group.

2. ***The Group's key work in respect of plate-type catalyst products***

(1) Marketing and after-sale services

In 2019, the price of DeNOx catalysts in the power industry continued to stabilize and rebound. The Marketing Department completed catalyst technical proposals for over 230 projects; and submitted 57 official bids with clients such as power generation groups and local power plants, among which 24 supply contracts (including those for the project awarded through invitation to tenders) were entered into in 2019. The contract value for 2019 continued to increase when compared with 2018. It is worth noting that the Group has won two bundling tender projects of more than 1,000 m^3 from China Huaneng Group Co., Ltd. and Shandong Weiqiao Group.

In 2019, the Group has obtained preliminary acceptance of 18 generating units in 15 power plants and final acceptance of 14 generating units in 7 power plants, while the closed loop projects involving 25 generating units in 13 power plants have been completed throughout the year (subject to receipt of all the contract payment).

(2) Products Production

In 2019, the Group completed production of catalysts for 39 projects, the completion rate of both production plan and delivery of goods were 100%. In the circumstance of almost no increase in the number of employees for plate-type business, through the continuous improvement of the performance appraisal system of the workshop to mobilize the enthusiasm of employees, the output increased significantly as compared to 2018 on the premise of ensuring quality.

In 2019, the Group continued to take various measures to reduce product manufacturing costs and product inventory, resulting in positive effect by the end of 2019, which is expected to be further reflected in the operating data for 2020.

(II) Honeycomb catalysts

1. In view of the fact that the catalysts for vessels (engines) have not formed a mass market, the Group has adjusted the market direction of honeycomb catalysts to non-electrical industries such as metallurgy and cement sectors as well as the field of gas generator sets. The Group has contacted and communicated with non-electrical customers to better understand customer needs, and obtained some small-scale orders, laying the foundation for marketing in 2020; and

2. In 2019, the Group already had large-scale production capacity for honeycomb catalyst products, of which the production process has been further improved and the qualification rate has been significantly enhanced.

(III) DeNOx catalysts for diesel-powered vehicles and natural gas-powered vehicles

1. In 2019, the Group successfully developed customers for the catalysts for diesel-powered vehicles under China V standards, and obtained sustained and stable orders throughout the year. The Group's catalyst products under China V standards have won the trust of customers for their stable quality and high qualification rate;

2. In 2019, the Group developed catalyst products for natural gas-powered vehicles under China VI standards. Based on the comparative analysis on the products of the Group made by third-party testing agencies and customers, it is believed that the Group's catalyst products for natural gas-powered vehicles have good quality. At present, the cooperation between the Group and customers has entered the stage of announcement and business negotiation, which will be an important milestone for the Group in the field of China VI vehicles; and

3. In 2019, the Group developed several categories of catalyst products for China VI diesel-powered vehicles and non-road vehicles, and communicated with many domestic automobile factories, diesel engine factories and non-road vehicle manufacturers on product and system solutions. The Group purchased various research and development equipment and small-scale production equipment to lay the foundation for obtaining orders in the future.

Key work arrangements for 2020

(I) Plate-type and honeycomb DeNOx catalysts

1. Increase marketing efforts in the power industry, recruit additional sales staff to enrich the sales team, and establish regional sales center on a trial basis to enhance regional marketing;

2. In 2019, the Group has done a lot of market work in the non-electrical field, but has not achieved a substantial market breakthrough. In 2020, the Group will continue to strengthen the marketing efforts in the field of metallurgy, cement and gas generator set on the premise of ensuring product quality;

3. In order to better control the quality and cost of honeycomb catalyst products, the Group will take various ways to establish technical cooperation with other companies in various aspects such as production technology and production process; and

4. On the basis of 2019, the Group will continue to tap potential in depth, continue to reduce the unit production cost of products through the improvement of production processes and production technologies, and strive to ensure the gross margin level of plate-type catalyst products.

(II) Catalysts for diesel-powered vehicles and vessel (engine)

1. China V vehicle catalysts

Due to the delay in the introduction of China VI emission regulations, there will still be a small amount of China V catalyst markets in 2020. The Group will continue to provide customers with stable quality products, maintain normal gross profit levels, and minimize the financial pressure in the research and development and investment period of China VI products.

2. *Catalysts for China VI vehicle systems*

2020 is a crucial year for the Group to lay a solid foundation for our China VI products, the Group will take following measures in this regard:

(1) Speed up the procurement of large-scale production line equipment and carry out installation and commissioning as early as possible, so as to enable the Group to meet the conditions for customer inspections as early as possible;

(2) The Group's catalyst products for natural gas-powered vehicles have stable quality and thus a certain market advantage. The Group will, on the basis of completing the sample delivery and product testing, seize the time to conduct announcement on acquisition and order negotiation, and strive for a breakthrough in obtaining the first order as early as possible; and

(3) Continue to carry out the research and development, trial production, testing and customer communication on the catalysts products for China VI diesel-powered vehicles and China IV non-road vehicles, and deeply understand customer needs and dynamics of the peers both at home and abroad to seek competitive opportunities.

(III) Continue to carry out merger, acquisition and re-organization in the energy saving and environmental protection sector

In addition to the industrial denitration catalyst and vehicle catalyst product series, the Group will continue to seek opportunities regarding merger, acquisition and re-organization in energy conservation, environmental protection and other related sectors, to reduce the Group's risk of relying on a single product.

FINANCIAL REVIEW

Revenue from contracts with customers

The following table sets forth revenue generated from sale of plate-type DeNOx catalysts and DeNOx catalysts for diesel-powered vehicles in absolute amount and as percentages of total revenue for the years indicated:

	2019		2018	
	RMB'000	**%**	RMB'000	%
Plate-type DeNOx catalysts	**53,894**	**87.6**	54,280	99.7
DeNOx catalysts for diesel-powered vehicles	**5,829**	**9.5**	156	0.3
Others	**1,817**	**2.9**	-	-
Total	**61,540**	**100.0**	54,436	100.0

The Group recorded a total revenue of approximately RMB61.5 million in 2019, representing an increase of 13.1% as compared to approximately RMB54.4 million in 2018.

Revenue generated from sales of plate-type DeNOx catalysts remained stable in approximately RMB54 million in both years of 2018 and 2019. The average selling price of plate-type DeNOx catalysts per m³ increased by approximately 13.2% from RMB8,406 per m³ in 2018 to RMB9,521 per m³ in 2019, while the sales volume of plate-type DeNOx catalysts decreased by approximately 12.3% from 6,455 m³ in 2018 to 5,658 m³ in 2019. The plate-type DeNOx catalysts market was mainly derived from the normal replacement of catalysts stored in thermal power plants in 2019.

In 2019, the Group began to supply DeNOx catalysts for diesel-powered vehicles (China V standard) products to customer and recorded a revenue of approximately RMB 5.8 million with gross profit margin of 26.0%. Subject to the China VI standards in executed by China soon, the total sales of China V standard products was limited. The Group will foster the research and development and trial production of China VI catalyst and related products.

Gross profit/(loss)

In 2019, the Group recorded a gross profit of approximately RMB6.7 million resulted from the selling price rebound of plate-type DeNOx catalysts and sales of DeNOx catalysts for diesel-powered vehicles (China V standard) products with higher profit margin. In 2018, the Group recorded a gross loss of approximately RMB3.8 million as a result of continued vicious market competition.

Selling and marketing expenses

Selling and marketing expenses primarily consist of transportation cost, consulting service expenses and employee benefit expenses, etc. The Group's selling and marketing expenses remained relative stable in 2018 and 2019, representing 16.3% and 17.6% of the Group's total revenue from contracts with customers in 2018 and 2019, respectively.

Administrative expenses

Administrative expenses mainly consist of impairment losses of machinery and technical know-how, employee benefit expenses, depreciation and amortisation. The Group's administrative expenses increased by 24.3% from approximately RMB28.1 million in 2018 to approximately RMB34.9 million in 2019 which was primarily attributable to the increase in the impairment losses of machinery and technical know-how for DeNOx catalysts for diesel-powered vessels business from approximately RMB8.3 million in 2018 to approximately RMB13.9 million in 2019.

Finance income/costs (net)

Finance income includes interest income on cash and cash equivalents and restricted cash; and net foreign exchange gains on financing activities. Finance costs includes interest expenses on lease liabilities and net foreign exchange losses on financing activities. The Group recorded a net finance costs of approximately RMB1.3 million in 2019, which mainly represents the realised exchange losses arising from the conversion of Hong Kong dollars to Renminbi while it recorded a net finance income of approximately RMB3.8 million in 2018 which mainly represents RMB3.3 million foreign exchange gains mainly from cash and cash equivalents denominated in Hong Kong dollars and United States dollars due to the depreciation of Renminbi in 2018.

Loss attributable to the shareholders of the Company

As a result of the foregoing, the loss attributable to the Shareholders of the Company Increased by 0.9% from approximately RMB39.7 million in 2018 to approximately RMB40.1 million in 2019.

Other performance indicators

The following table sets forth other performance indicators of the Group as at the dates or for the years indicated:

	As at or for the year ended 31 December	
	2019	2018
Current Ratio *(Note 1)*	**5.0 times**	7.2 times
Quick Ratio *(Note 2)*	**3.8 times**	6.1 times
Return on equity *(Note 3)*	**N/A**	N/A
Return on total assets *(Note 4)*	**N/A**	N/A

Notes:

(1) Current ratio is calculated based on total current assets of the Group divided by total current liabilities of the Group as at the end of the respective year.

(2) Quick ratio is calculated based on total current assets of the Group less inventories of the Group divided by total current liabilities of the Group as at the end of the respective year.

(3) Return on equity is calculated by dividing income attributable to shareholders of the Company for the year by the arithmetic mean of the opening and closing balance of total equity attributable to shareholders of the Company.

(4) Return on total assets is calculated by dividing income attributable to shareholders of the Company for the year by the arithmetic mean of the opening and closing balance of total assets of the Group.

Current ratio and quick ratio

The Group's current ratio decreased from 7.2 times as at 31 December 2018 to 5.0 times as at 31 December 2019 and quick ratio decreased from 6.1 time as at 31 December 2018 to 3.8 times as at 31 December 2019. Such decrease was mainly due to the increase in down payment from customers of approximately RMB10.1 million as at 31 December 2018 to approximately RMB23.8 million as at 31 December 2019 because more sales contracts were awarded in the second half of 2019.

Return on equity and return on total assets

The Group did not record a return on equity and return on total assets in 2018 and 2019, as it has recorded a loss attributable to the Shareholders of the Company for the years ended 31 December 2018 and 2019.

Liquidity and Capital Resources

The Group's financial position remains solid and the Group possessed sufficient cash to meet its commitments and working capital requirements. As at 31 December 2019, the Group had net current assets of approximately RMB199.1 million (2018: approximately RMB221.3 million) of which cash and cash equivalents were approximately RMB125.4 million (2018: approximately RMB145.4 million) and were denominated in RMB, US$, HK$ and Euro€ as at 31 December 2019.

On 12 November 2015, the Company successfully listed its shares on the main board of the Stock Exchange (the "**Listing**") and allotted and issued 125,000,000 shares at HK$2.10 in relation to its initial public offering (the "**Initial Public Offering**"). Net proceeds from the Initial Public Offering (after deducting the underwriting fees and related expenses) amounted to approximately RMB171.0 million. The success of the Listing marked a new milestone and granted the Group an access to the international capital markets. As a result, the Group now has the financial agility to capture additional growth opportunities in the DeNOx catalyst industry.

Use of net proceeds from the Listing

As at 31 December 2019, net proceeds not utilised of approximately RMB68.3 million were deposited into interest bearing bank accounts with licensed commercial banks and will be applied according to the section headed "Use of proceeds" of the prospectus of the Company dated 30 October 2015.

	Planned Amount RMB'million	Amount utilised up to 31 December 2019 RMB'million	Balance as at 31 December 2019 RMB'million
Development of DeNOx catalysts for diesel-powered vehicles	78.6	43.4	35.2
Acquisition of potential target companies in the Group's industry that can help to expand the Group's market coverage or key raw material suppliers	46.2	21.9	24.3
Research and development	17.1	12.0	5.1
Expansion of the Group's sales network and establishment of the Group's regional sales offices in China as well as in Europe	6.9	4.8	2.1
Replacement of the Group's No. 1 production line	5.1	3.5	1.6
Working capital and general corporate purposes	17.1	17.1	–
	171.0	102.7	68.3

Borrowings

The Group had no outstanding bank loans and other borrowings as at 31 December 2018 and 2019.

Capital expenditure

The Group incurred capital expenditure to expand its operations, maintain its equipment and increase its operational efficiency. For the year ended 31 December 2019, the Group had invested approximately RMB9.9 million for the purchase of property, plant and equipment (2018: approximately RMB4.4 million). These capital expenditures were financed by internal resources of the Group.

Capital commitment

As at 31 December 2019, the Group had capital commitment amounted to RMB2.0 million for capital contribution to an associate company, Langfang Denox Environmental & Technology Co., Ltd., which is principally engaged in development and manufacture of DeNOx catalysts for vehicles. As at 31 December 2018, the Group had capital commitment amounted to approximately RMB0.6 million for acquisition of property, plant and equipment.

Contingent liabilities

The Group did not have any material contingent liabilities as at 31 December 2018 and 2019.

Significant Investments Held, Material Acquisitions and Disposals of Subsidiaries, Associates and Joint Ventures, and Future Plans for Material Investments or Capital Assets

There were no significant investments held, no material acquisitions or disposals of subsidiaries, associates and joint ventures during the year ended 31 December 2019.

Save as disclosed in this report, there was no plan authorised by the Board for other material investments or additions of capital assets at the date of this report.

Employees

As at 31 December 2019, the Group had 165 employees (2018: 160). Remuneration policies are reviewed regularly to ensure that the Group is offering competitive employment packages to employees. Remuneration of the Group's employees includes salaries, pension, discretionary bonus, medical insurance scheme and other applicable social insurance. The Group's remuneration policy for the directors, senior management and employees was based on their experience, level of responsibility and general market conditions. Any discretionary bonus and other merit payments are linked to the profit performance of the Group and the individual performance of the Directors, senior management members and employees. Further, the Group adopted the share option scheme on 14 October 2015. Please refer to the section headed "Share Option Scheme" for details. The Group's growth is dependent upon the skills and dedication of employees. The Group recognises the importance of human resources in competitive industry and has devoted resources to training employees. The Group has established an annual training program for its employees so that new employees can master the basic skills required to perform their functions and existing employees can upgrade or improve their production skills.

Principal Risks and Uncertainties

The Group's business, financial condition, results of operations and prospects may be affected by a number of risks and uncertainties.

The following section lists out the principal risks and uncertainties identified by the Group. It is a non-exhaustive list and there may be other risks and uncertainties further to the principal risk areas outlined below which are not presently known to the Group, or that the Group currently deems to be immaterial but could turn out to be material in the future.

Risks pertaining to the market price of plate-type DeNOx catalysts

The average selling price of plate-type DeNOx catalysts per m^3 has experienced a drop from RMB25,080 per m^3 in 2014 to RMB9,521 per m^3 in 2019 due to market vicious competition. To compete effectively and maintain the Group's market share, the Group has reduced its selling prices. The Group's business and revenue growth is dependent on favourable market conditions in the PRC and therefore any potential decline in selling prices in the PRC could have a material adverse effect on its business, results of operations and financial condition.

Risks pertaining to the reliance on the major customers

The customer base of the Group is highly concentrated. Most of its customers are major coal-fired power plants, DeNOx EPC service providers and boiler manufacturers. For the year ended 31 December 2019, sales to the largest customer and five largest customers of the Group, which are the large state-owned power generation groups in China in aggregate accounted for approximately 23.16% and 66.4% of the Group's total revenue, respectively. Failure to maintain relationships with its major customers, adverse change in their business, investment strategies and/or reduction in the growth rate of their investment in DeNOx equipment may pose an adverse significant impact on the Group's business, financial conditions or results of operations.

Foreign exchange risk

The Group mainly operates in the PRC with most of the transactions originally denominated and settled in RMB, of which foreign exchange risk is considered insignificant. The Group is exposed to foreign exchange risk primarily with respect to certain of its bank deposits which were denominated in HK$, US$ and EUR€. RMB experienced certain fluctuation against HK$ and US$ during the year ended 31 December 2019 which is the major reason for the exchange gains recognised by the Group. During the year ended 31 December 2019, the Group did not carry out any hedging activity against foreign currency risk. Any substantial exchange rate fluctuation of foreign currencies against RMB may have a financial impact on the Group.

Environmental Protection

The business operations of the Group are subject to various environmental, health and safety laws and regulations, which require it to undergo environmental impact assessments and review processes and implement environmental, health and safety programs and procedures to control risks associated with the design, construction and operation of the production facilities of the Group. Further, the Group has established an environmental protection and responsibility system, including adoption of effective measures to prevent and control exhaust gas, sewage, waste residues, dust or other waste materials, to discharge waste properly and to pay certain discharge fees in accordance with the PRC Environmental Protection Law and related regulations.

Compliance with Laws and Regulations

Compliance procedures are in place to ensure adherence to applicable laws, rules and regulations in particular, those have significant impact on the Group. The Audit Committee is delegated by the Board to monitor the Group's policies and practices on compliance with legal and regulatory requirements and such policies are regularly reviewed. Any changes in the applicable laws, rules and regulations are brought to the attention of relevant employees and relevant operation units from time to time.

The Board also paid attention to the Group's policies and practices on compliance with legal and regulatory requirements. The Group would seek professional legal advice from its legal advisers to ensure transactions and business to be performed by the Group are in compliance with the applicable laws and regulations.

The Group's operations are mainly carried out by the Company's subsidiaries in the mainland China while the Company itself is listed on the Stock Exchange. As far as the Company is aware, the Group has complied in material aspects with the relevant laws and regulations which have a significant impact on the business and operations of the Group during the year ended 31 December 2019.

Key Relationships with the Group's Employees, Customers and Suppliers

Workplace Quality

The Group is an equal opportunity employer and does not discriminate on the basis of personal characteristics. With an aim to enhancing the quality of the Board's performance by diversity, the board diversity policy was adopted in October 2015. Details of such board diversity policy are set out in the corporate governance report. Further, the Group has employee handbooks outlining terms and conditions of employment, expectations for employees' conduct and behaviour, employees' rights and benefits. The Group establishes and implements policies that promote a harmonious and respectful workplace.

The Company believes that the Directors, senior management and employees are instrumental to the success of the Group and that their industry knowledge and understanding of the market will enable the Group to maintain the competitiveness in the market. As such, the share option scheme was adopted by the Company on 14 October 2015 for the purpose of providing incentives and rewards to eligible participants who contributed to the success of the Group's operations. The Group provides on-the-job training and development opportunities to enhance its employees' career progression. Through different trainings, staff's professional knowledge in corporate operations, occupational and management skills are enhanced. The Group also organised charitable and staff-friendly activities for employees, such as annual dinner, to promote staff relationship. The Group provides on providing a safe, effective and congenial working environment. Adequate arrangements, trainings and guidelines are implemented to ensure the working environment is healthy and safe. The Group provided health and safety communications for employees to present the relevant information and raise awareness of occupational health and safety issues.

The Group values the health and well-being of its staff. In order to provide employees with health coverage, its employees are entitled to medical insurance benefits.

Relationships with the Group's other stakeholders

The Group maintains good relationships with existing and potential customers (including the major customers) as understanding of the market trends would enable the Group to monitor and respond to change in a timely manner, which are crucial to the development and success of the Group.

Results and Appropriations

The results of the Group for the year ended 31 December 2019 are set out in the accompanying financial statements on page 74.

Final Dividends

The Board does not recommend the payment of a final dividend for the year ended 31 December 2019 (2018: Nil).

Closure of Register of Members

For determining the entitlement of the Shareholders to attend and vote at the annual general meeting of the Company to be held on Friday, 12 June 2020 (the "**Annual General Meeting**"), the register of members of the Company will be closed from 8 June 2020 to 12 June 2020, both days inclusive, during which period no transfer of Shares will be registered. In order to be eligible to attend and vote at the Annual General Meeting, all transfers documents, accompanied by the relevant share certificates, must be lodged with the Company's branch share registrar in Hong Kong, Tricor Investor Services Limited, at level 54, Hopewell Centre, 183 Queen's Road East, Hong Kong for registration no later than 4:30 p.m. on 5 June 2020.

Financial Summary

A summary of the consolidated results and the assets and liabilities of the Group for the last five financial years is set out on page 139.

Property, Plant and Equipment

Details of the movements in property, plant and equipment during the year ended 31 December 2019 are set out in note 12 to the consolidated financial statements.

Share Capital and Reserves

Details of the share capital and reserves of the Group and the Company are set out in notes 22 and 23 to the consolidated financial statements, respectively.

Major Customers and Suppliers

For the year ended 31 December 2019, the aggregate sales attributable to the largest customer and the five largest customers of the Group accounted for approximately 23.16% and 66.4% of the Group's aggregate revenue respectively, while the aggregate purchases attributable to the largest supplier and the five largest suppliers of the Group accounted for approximately 22.2% and 60.6% of the Group's aggregate purchases respectively.

None of the Directors, their close associates or any Shareholder (whom to the knowledge of the Directors owns more than 5% of the total number of the issued Shares) had any interests in the Group's five largest customers or suppliers.

Share Option Scheme

On 14 October 2015, the Company adopted a share option scheme (the "**Share Option Scheme**") whereby the Board may, at its discretion, offer to grant an option to subscribe for such number of new Shares to (a) full-time or part-time employees, executives or officers of the Company or any of its subsidiaries; (b) any directors (including independent non-executive Directors) of the Company or any of its subsidiaries; and (c) any advisers, consultants, suppliers, customers and agents to the Company or any of its subsidiaries (the "**Eligible Participants**") as described in the Share Option Scheme in order to serve as incentives or rewards for their contribution or potential contribution to the Company and/or any of its subsidiaries. An option may be accepted by an Eligible Participant not later than 30 days after the date on which such option is offered in writing to such Eligible Participant.Upon acceptance of the option, the grantee shall pay HK$1 (or an equivalent amount in RMB) to the Company by way of consideration for the grant. Details of the Share Option Scheme are set out below:

(a) Maximum number of Shares available for issue

The maximum number of Shares in respect of which options may be granted under the Share Option Scheme and under any other share option schemes of the Company must not in aggregate exceed 49,403,700 Shares, representing 10% of the total number of Shares as at the date of this report, respectively, excluding for this purpose Shares which may have been issued upon the exercise of the options which have lapsed in accordance with the terms of the Share Option Scheme (or any other share option schemes of the Company). Subject to the issue of a circular by the Company and the approval of the Shareholders in general meeting and/or such other requirements prescribed under the Listing Rules from time to time, the Board may: (i) renew this limit at any time to 10% of the Shares in issue as of the date of the approval by the Shareholders in general meeting; and/or (ii) grant options beyond the 10% limit to Eligible Participants specifically identified by the Board.

Notwithstanding the foregoing, the Shares which may be issued upon exercise of all outstanding options granted and yet to be exercised under the Share Option Scheme and any other share option schemes of the Company at any time shall not exceed 30% of the Shares in issue from time to time. No options shall be granted under any schemes of the Company (including the Share Option Scheme) if this will result in the 30% limit being exceeded. The maximum number of Shares in respect of which options may be granted shall be adjusted, in such manner as the auditor of the Company or an approved independent financial adviser shall certify to be appropriate, fair and reasonable in the event of any alteration in the capital structure of the Company in accordance with the terms of the Share Option Scheme whether by way of consolidation, capitalisation issue, rights issue, sub-division or reduction of the share capital of the Company but in no event shall exceed the limit prescribed in this paragraph.

(b) Maximum number of options to each Eligible Participant

The total number of Shares issued and which may fall to be issued upon exercise of the options granted under the Share Option Scheme and any other share option schemes of the Company (including both exercised and outstanding options) to each Eligible Participant in any 12-month period up to the date of grant shall not exceed 1% of the Shares in issue as at the date of grant. Any further grant of options in excess of this 1% limit shall be subject to: (i) the issue of a circular by the Company which shall comply with Rules 17.03(4) and 17.06 of the Listing Rules containing the identity of the Eligible Participant, the numbers of and terms of the options to be granted (and options previously granted to such participant) the information as required under Rule 17.02(2)(d) and the disclaimer required under Rule 17.02(4) of the Listing Rules; and (ii) the approval of the Shareholders in general meeting and/or other requirements prescribed under the Listing Rules from time to time with such Eligible Participant and his/her close associates (or his/her associates if such Eligible Participant is a connected person) (as defined in the Listing Rules) abstaining from voting.

(c) Price of Shares

The subscription price of a Share in respect of any particular option granted under the Share Option Scheme shall be such price as the Board in its absolute discretion shall determine, save that such price will not be less than the highest of: (i) the official closing price of the Shares as stated in the Stock Exchange's daily quotation sheets on the date of grant, which must be a day on which the Stock Exchange is open for the business of dealing in securities; (ii) the average of the official closing prices of the Shares as stated in the Stock Exchange's daily quotation sheets for the five business days immediately preceding the date of grant; and (iii) the nominal value of a Share.

(d) Granting options to connected persons

Any grant of options to a Director, chief executive or substantial Shareholder of the Company or any of their respective associates is required to be approved by the independent non-executive Directors (excluding any independent non-executive Director who is the grantee of the options). If the Board proposes to grant options to a substantial Shareholder or any independent non-executive Director or their respective associates which will result in the number of Shares issued and to be issued upon exercise of options granted and to be granted (including options exercised, cancelled and outstanding) to such person in the 12-month period up to and including the date of such grant: (i) representing in aggregate over 0.1% or such other percentage as may be from time to time provided under the Listing Rules of the Shares in issue; and (ii) having an aggregate value in excess of HK$5 million or such other sum as may be from time to time provided under the Listing Rules, based on the official closing price of the Shares at the date of each grant, such further grant of options will be subject to the issue of a circular by the Company and the approval of the Shareholders in general meeting by way of a poll at which all connected persons of the Company shall abstain from voting in favor of the resolution concerning the grant of such options at the general meeting, and/or such other requirements prescribed under the Listing Rules from time to time. Any vote taken at the meeting to approve the grant of such options shall be taken as a poll.

(e) Time of exercise of Option and duration of the Share Option Scheme

An option may be exercised in accordance with the terms of the Share Option Scheme at any time after the date upon which the option is deemed to be granted and accepted and prior to the expiry of 10 years from that date. The period during which an option may be exercised will be determined by the Board in its absolute discretion, save that no option may be exercised more than 10 years after it has been granted. No option may be granted more than 10 years after the date of approval of the Share Option Scheme. Subject to earlier termination by the Company in general meeting or by the Board, the Share Option Scheme shall be valid and effective for a period of 10 years from 14 October 2015.

(f) Details of any options granted under the Share Option Scheme

During the Reporting Period and up to the date hereof, no option had been granted or agreed to be granted under the Share Option Scheme.

Directors

The Directors during the Reporting Period and up to the date of this report were:

Executive Directors

Ms. ZHAO Shu *(Chairlady)*
Mr. KONG Hongjun
Mr. LI Ke

Non-executive Directors

Mr. LI Xingwu
Mr. TEO Yi-Dar

Independent non-executive Directors

Mr. LAM Yiu Por
Mr. LI Min
Mr. ONG Chor Wei

Biographical details of the Directors and senior management of the Group are set forth in the section headed "Directors and Senior Management" of this report.

In accordance with Article 84(1) of the Articles of Association, one-third of the Directors for the time being shall retire from their offices by rotation provided that every Director shall be subject to retirement at an annual general meeting at least once every three years. As such, Ms. Zhao Shu, Mr. Teo Yi-Dar and Mr. Li Min shall retire from office and being eligible, offer themselves for re-election at the Annual General Meeting.

Changes to Information in Respect of Director

Pursuant to Rule 13.51B(1) of the Listing Rules, the following changes in the information of Mr. Ong Chor Wei, the independent non-executive Director has taken place since the publication of 2018 annual report:

- Mr. Ong was a non-executive director of Vico International Holdings Limited (Stock Code: 1621), a company listed on the Stock Exchange, during June 2017 to February 2019.

Please refer to the section headed "DIRECTORS AND SENIOR MANAGEMENT" of this annual report for the updated details of his information.

Confirmation of Independence

The Company has received, from each of the independent non-executive Directors, a confirmation of his independence pursuant to Rule 3.13 of the Listing Rules. The Company considers all the independent non-executive Directors independent.

Directors' Service Contracts

Mr. LI Min was appointed as independent non-executive Director on 1 November 2017 and has entered into a letter of appointment with the Company for an initial term of three years from the date of his appointment until terminated in accordance with the terms of the letter of appointment. Under the letter of appointment, either party may terminate such contract at any time by giving the other not less than three months' notice in writing.

Other Directors have entered into service contracts or letter of appointment with the Company for an initial term of three years with effect from 12 November 2018 until terminated in accordance with the terms of the service contracts or letter of appointment. Under the service contracts or letter of appointment, either party may terminate such contract at any time by giving the other not less than three months' notice in writing.

None of the Directors (including any Director who may be proposed for re-election at the forthcoming Annual General Meeting) has entered into any service agreement with the Company which is not determinable by the Group within one year without payment of compensation (other than statutory compensation).

Retirement Benefit Schemes

The Group operates a mandatory provident fund scheme (the "**MPF Scheme**") in Hong Kong. The Group also participates in an employee social insurance plan as required by the regulations in the PRC, under which the Group is required to contribute a specific percentage of the salaries of its employees to the retirement scheme. Details of the retirement benefits schemes of the Group are set out in note 2.20 to the consolidated financial statements.

Directors' and Chief Executive's Interests in Shares, Underlying Shares and Debentures

As at 31 December 2019, the interests and short positions of the Directors and chief executive of the Company in the Shares, underlying Shares and debentures of the Company and its associated corporations, within the meaning of Part XV of the SFO, which have been notified to the Company and the Stock Exchange pursuant to Divisions 7 and 8 of Part XV of the SFO, including interests and short positions which the Directors and chief executive of the Company were taken or deemed to have under such provisions of the SFO, or which are recorded in the register required to be kept pursuant to section 352 of the SFO or as otherwise notified to the Company and the Stock Exchange pursuant to the Model Code were as follows:

Name of Directors	Capacity	Number of Shares held	Approximate percentage of shareholding *(Note 2)*
Ms. Zhao Shu	Beneficial owner	14,812,477 (L)	2.99%
	Interest in controlled corporation *(Note 3)*	153,031,609 (L)	30.89%
Mr. Li Xingwu	Interest in controlled corporation *(Note 4)*	51,075,015 (L)	10.31%
Mr. Kong Hongjun	Interest in controlled corporation *(Note 5)*	8,887,475 (L)	1.79%
Mr. Li Ke	Interest in controlled corporation *(Note 6)*	2,962,474 (L)	0.60%

Notes:

1. The letter "L" denotes the person's long position in the Shares.

2. The percentages are calculated based on 495,349,000 Shares in issue as at 31 December 2019.

3. These 153,031,609 Shares are held by Advant Performance Limited which is wholly owned by Ms. Zhao. Ms. Zhao is deemed to be interested in these Shares by virtue of the SFO.

4. These 51,075,015 Shares are held by EEC Technology Limited which is wholly owned by Mr. Li. Mr. Li is deemed to be interested in these Shares by virtue of the SFO.

5. These 8,887,475 Shares are held by Global Reward Holdings Limited ("**Global Reward**") which is wholly owned by Mr. Kong. Mr. Kong is deemed to be interested in these Shares by virtue of the SFO.

6. These 2,962,474 Shares are held by Fine Treasure Asia Holdings Limited ("**Fine Treasure**") which is wholly owned by Mr. Li Ke. Mr. Li Ke is deemed to be interested in these Shares by virtue of the SFO.

Save as disclosed above, as at 31 December 2019, none of the Directors or chief executive of the Company had or was deemed to have any interests or short positions in the Shares, underlying Shares or debentures of the Company or any of its associated corporations (within the meaning of the SFO) which were notified to the Company and the Stock Exchange pursuant to Divisions 7 and 8 of Part XV of the SFO, or were recorded in the register required to be kept pursuant to section 352 of the SFO, or is otherwise notified to the Company and the Stock Exchange pursuant to the Model Code.

Equity Linked Agreements

Save as disclosed in the section headed "Share Option Scheme", no equity linked agreements were entered into during or subsisted at the end of the year ended 31 December 2019.

Directors' Right to Acquire Shares or Debentures

Save for the Share Option Scheme as disclosed in this annual report, at no time during the year ended 31 December 2019 was the Company, its subsidiaries, holding companies or fellow subsidiaries a party to any arrangements to enable Directors to acquire benefits by means of the acquisition of shares in, or debentures of, the Company or any other body corporate.

Substantial Shareholders' Interests in Securities

As at 31 December 2019, so far as the Directors were aware of, the following persons' (other than the Directors and chief executive of the Company) interests or short position in the Shares and underlying shares of the Company, being interests of 5% or more, as recorded in the register required to be kept pursuant to section 336 of the SFO were as follows:

Name of Shareholder	Capacity	Number of Shares held	Approximate percentage of shareholding *(Note 2)*
Advant Performance Limited	Beneficial owner	153,031,609 (L)	30.89%
EEC Technology Limited	Beneficial owner	51,075,015 (L)	10.31%
Kickstart Holdings Limited	Beneficial owner	40,188,996 (L)	8.11%
Spring Capital Asia Fund, L.P.	Interest in controlled corporation *(Note 3)*	40,188,996 (L)	8.11%

Notes:

1. The letter "L" denotes the person's long position in the Shares.

2. The percentages are calculated based on the 495,349,000 Shares in issue as at 31 December 2019.

3. Kickstart is beneficially and wholly owned by Spring Capital Asia Fund, L.P.. Spring Capital Asia Fund, L.P. is deemed to be interested in these Shares held by Kickstart by virtue of the SFO.

Save as disclosed above, as at 31 December 2019, the Directors were not aware of any other person (other than the Directors or chief executive of the Company) having an interest or short position in the Shares and underlying shares of the Company which were required to be disclosed to the Company under the provisions of Divisions 2 and 3 of Part XV of the SFO, or which were recorded in the register required to be kept under section 336 of the SFO.

Management Contracts

No contracts concerning the management and administration of the whole or any substantial part of the business of the Company were entered into or existed during the Reporting Period.

Directors' Interests in Transactions, Arrangements and Contracts

No transactions, arrangements or contract of significance to which the Company or any of its subsidiaries was a party and in which a Director or his/her connected entity had a material interest, whether directly or indirectly, subsisted at any time during the Reporting Period.

Controlling Shareholders' Interests in Contracts

No contracts of significance between the controlling shareholder of the Company or any of its subsidiaries and the Group had been made during the Reporting Period.

Permitted Indemnity Provision

Under the Articles of Association, every Director or other officers of the Company acting in relation to any of the affairs of the Company shall be entitled to be indemnified against all actions, costs, charges, losses, damages and expenses which he/she may incur or sustain in or about the execution of his/her duties in his/her office. The Company has arranged appropriate insurance cover in respect of legal action against its Directors and officers.

Competing Business

A deed of non-competition dated 25 October 2015 (the "**Deed of Non-Competition**") was entered into between the Company and the controlling Shareholders, namely Ms. Zhao Shu and Advant Performance Limited, who have undertaken to the Company that she/it would not, and would procure her/its close associates (other than members of the Group) not to directly or indirectly be involved in or undertake any business (other than the Group's business) that directly or indirectly, competes, or may compete, with the Group's business or undertaking, or hold shares or interest in any companies or business that compete directly or indirectly with the business engaged by the Group from time to time, unless otherwise permitted according to the Deed of Non-Competition. The Company has received an annual written confirmation from each of the controlling Shareholders in respect of the compliance by them and their close associates with the Deed of Non-Competition.

Each of Ms. Zhao Shu and Advant Performance Limited, the controlling shareholders (within the meaning of the Listing Rules) of the Company, has confirmed to the Company that each of them and its close associates has complied with the non-compete undertaking given by her/it to the Company under the Deed of Non-competition. The independent non-executive Directors have reviewed the status of compliance and enforcement of the non-compete undertaking and confirmed that all the undertakings thereunder have been complied with throughout the year ended 31 December 2019.

Other than the Group's business, none of the Directors or their respective associates have any interests in any business that competes or is likely to compete with the Group's business during the year ended 31 December 2019.

Purchase, Sale or Redemption of Listed Securities

During the year ended 31 December 2019, the Company bought back a total of 1,312,000 Shares of the Company on the Stock Exchange. All the Shares bought back were subsequently cancelled by the Company. Details of those transactions are as follows:

Month of buy-back	Number of Shares bought back	Price Per Share Highest HK$	Price Per Share Lowest HK$	Aggregate price HK$
December 2019	1,312,000	0.330	0.223	402,239

Save as disclosed above, neither the Company nor any of its subsidiaries has purchased, sold or redeemed any of the Company's listed securities during the year ended 31 December 2019.

Pre-Emptive Rights

There are no provisions for pre-emptive rights under the Articles of Association or the laws of the Cayman Islands which would oblige the Company to offer new Shares on a pro-rata basis to existing Shareholders.

Compliance with the Model Code

The Company has adopted the Model Code as set out in Appendix 10 to the Listing Rules during the year. Having made specific enquiries with all Directors, all Directors confirmed that they had complied with the required standards set out in the Model Code during the Reporting Period.

Compliance with Code on Corporate Governance Practices

The Company is committed to high standards of corporate governance and recognises that good corporate governance is important for the long-term success of the Company's business.

During the Reporting Period, the Company has complied with the applicable code provisions of the CG Code with the exception of code provision A.2.1 as set out below.

According to code provision A.2.1 of the CG Code, the role of the chairman and chief executive of the Company should be separate and should not be performed by the same individual. In considering that (a) the day-to-day responsibilities of the chief executive officer have been assumed by Ms. Zhao Shu, who is also the chairlady of the Company; and (b) Ms. Zhao Shu is the chairlady of the Group and has extensive experience in the business operation and management in general, there is no separation of the roles of the chairlady and the chief executive officer of the Company. Given the current stage of the development of the Group, the Board is of the view that vesting the two roles in the same person provides the Company with strong and consistent leadership and facilitates the implementation and execution of the Group's business strategies which are in the best interests of the Company.

The Board will continue to review and monitor the practices of the Company with an aim to maintaining high standards of corporate governance.

Sufficiency of Public Float

Based on the information that is publicly available to the Company and within the knowledge of its Directors, as at the date of this report, the Company has maintained the prescribed public float as required by the Listing Rules during the Reporting Period.

Review by the Audit Committee

The Audit Committee comprises three independent non-executive Directors, namely, Mr. Lam Yiu Por, Mr. Li Min and Mr. Ong Chor Wei. The Audit Committee has reviewed the audited financial statements of the company for the year ended 31 December 2019 in conjunction with the Company's auditors and management and has also discussed auditing, risk management, internal control and financial reporting matters including accounting practices and principles adopted by the Group.

Auditor

The financial statements of the Company for the year ended 31 December 2019 have been audited by PricewaterhouseCoopers.

Professional Tax Advice Recommended

If any Shareholder is unsure about the taxation implications of purchasing, holding, disposing of, dealing in or the exercise of any rights in relation to the Shares, it is advised to consult an expert.

On behalf of the Board
Zhao Shu
Chairlady

Hong Kong, 27 March 2020

BOARD OF DIRECTORS

Executive Directors

Ms. Zhao Shu (趙姝), aged 54, was appointed as a Director on 7 November 2014 and was re-designated as an executive Director on 19 October 2015. She is primarily responsible for the overall management of the Group. Ms. Zhao is the chairlady of the Board, the chief executive officer and authorised representative of the Company, the chairlady of the Nomination Committee and a member of the Remuneration Committee. Ms. Zhao is also the general manager of Beijing Denox and Gu'an Denox Environmental Equipment Manufacturing Co., Ltd. ("**Gu'an Denox**"). Ms. Zhao has over 23 years of experience in the environmental protection industry. Prior to joining the Group, Ms. Zhao held various positions in the 5th Design and Research Institute of China Ordinance Industry (中國兵器工業第五設計研究院), now known as China Wuzhou Engineering Corporation Ltd. (中國五洲工程設計有限公司), a company providing integrated services for engineering construction, from August 1988 to February 1998 where she last served as an engineer and was primarily responsible for coordinating with different professionals to complete the whole design of power projects. From February 1998 to December 2004, Ms. Zhao held various positions in China Huadian Engineering Co., Ltd. (中國華電工程（集團）有限公司), a prime contractor for project construction and service applied in the industry of electronic power, petrifaction, harbor, metallurgy, mining, civilian and new energy engineering where she last served as executive deputy general manager of its desulphurization business department and was primarily responsible for the implementation of the prime contracts and procurement contracts. From February 2005 to February 2006, Ms. Zhao served as the general manager assistant of Guohua Ebara Environmental Engineering Co., Ltd. (國華荏原環境工程有限責任公司), a company engaging in environmental engineering projects where she was primarily responsible for handling commercial and legal matters. From March 2006 to May 2011, Ms. Zhao held various positions in China Datang Technologies & Engineering Co., Ltd. (中國大唐集團科技工程有限公司), a prime contractor for the projects related to environmental protection for the power industry, including denitrification in power plants where she served as the general manager of its environmental affairs department until late 2010 and was primarily responsible for the management of the desulphurization and denitrification business. Ms. Zhao received her bachelor of engineering, majoring in engineering for thermal power conversion, from Shanghai Institute of Mechanism (上海機械學院), now known as the University of Shanghai for Science and Technology (上海理工大學) in July 1988. Ms. Zhao obtained the qualification as a senior project manager (高級項目管理師) granted by the Occupational Skills Appraisal Center from the Ministry of Labor and Social Security (勞動和社會保障部職業技能鑒定中心) in November 2006. Ms. Zhao is interested in 14,812,477 Shares. By virtue of the SFO, Ms. Zhao was deemed to be interested in 153,031,609 Shares held by Advant Performance Limited , a company wholly owned by Ms. Zhao. For further details, please refer to the section headed "Directors' and chief executive's interests in Shares, Underlying Shares and Debentures" in the directors' report.

Mr. Kong Hongjun (孔紅軍), aged 52, was appointed as the Director on 9 February 2015 and was re-designated as an executive Director on 19 October 2015. Mr. Kong is also the deputy general manager of Beijing Denox, Gu'an Denox and the Company and is primarily responsible for the cost management of raw materials and equipment procurement of, and provision of technical support to, the Group. Prior to joining the Group, Mr. Kong served as procurement manager of the environmental protection department of China Huadian Engineering Co., Ltd. (中國華電工程（集團）有限公司), a company principally engaged in for project construction and service applied in the industry of electronic power, petrifaction, harbor, metallurgy, mining, civilian and new energy engineering, from May 1993 to April 2006, where he was primarily responsible for the procurement of machinery. From June 2006 to April 2008, he served as the general manager of Beijing Mixwell Mixing Equipment Co., Ltd. (北京邁士華混合設備有限公司), a manufacturer of mixers, where he was primarily responsible for management of the company. Mr. Kong held various positions in China Datang Technology & Engineering Co., Ltd. (中國大唐集團科技工程有限公司) from May 2008 to February 2011 where he last served as deputy manager of the environmental affairs department and was primarily responsible for procurement management, project management and cost control. Mr. Kong received his bachelor of engineering from China University of Mining and Technology (中國礦業大學) in July 1990, majoring in engineering for thermal power engineering (電廠熱能動力工程) of power plants. He received his master of engineering from Southeast University (東南大學) in February 1993, majoring in thermal power engineering (電廠熱能動力工程) of power plants. Mr. Kong obtained the qualification as an engineer granted by the Ministry of Electric Power Industry of the PRC (中華人民共和國電力工業部) in September 1996. By virtue of the SFO, Mr. Kong was deemed to be interested in 8,887,475 Shares held by Global Reward. For further details, please refer to the section headed "Directors' and chief executive's interests in Shares, Underlying Shares and Debentures" in the directors' report.

Mr. Li Ke (李可), aged 52, was appointed as the Director on 9 February 2015 and was re-designated as an executive Director on 19 October 2015. Mr. Li is also the deputy general manager of Beijing Denox, Gu'an Denox and the Company. He is primarily responsible for the production management, equipment management, research and development and quality control of the Group. Prior to joining the Group, he was the assistant engineer of Scivic Engineering Corporation (機械工業第四設計研究院), a company engaged in the engineering management and supervision, from July 1991 to January 1994 where he was primarily responsible for the design of power stations. From February 1994 to January 2010, Mr. Li held various positions in Kurabo Denim (Zhuhai) Textile Co., Ltd. (倉紡（珠海）紡織有限公司), a company engaged in manufacturing of textile products, where he last served as the head of its engineering works department and was primarily responsible for the set-up and maintenance of the equipment and enhancement of technical alterations. Mr. Li received his bachelor of engineering from Southeast University (東南大學) in July 1991, majoring in thermal power engineering (電廠熱能動力工程) of power plants. Mr. Li was awarded the China Machinery Industry Science and Technology Award (Third Class) in October 2012. By virtue of the SFO, Mr. Li was deemed to be interested in 2,962,474 Shares held by Fine Treasure. For further details, please refer to the section headed "Directors' and chief executive's interests in Shares, Underlying Shares and Debentures" in the directors' report.

Non-executive Directors

Mr. Li Xingwu (李興武), aged 53, was appointed as the Director on 7 November 2014 and was re-designated as a non-executive Director on 19 October 2015. Prior to joining the Group, Mr. Li held various positions in China National Electric Equipment Corporation (中國電工設備總公司), now known as China National Electric Engineering Co., Ltd. (中國電力工程有限公司), a company engaged in EPC contracting, complete equipment supply, engineering consultation, engineering design, project management and supervision, installation and commissioning, technical service, power plant maintenance and operation from July 1988 to January 2000 where he last served as project manager and was primarily responsible for providing technical support and advice to major projects and helping to promote technological innovation. From January 2000 to July 2009, Mr. Li served as project manager of General Machinery Development Co., Ltd. (通達機械有限公司), a trading company engaged in the sale of various types of general machinery, electrical equipment and instrument products, where he was primarily responsible for implementation and management of the transportation and water supplies projects. Since August 2009, Mr. Li founded Yu The Great Environmental Engineering (Beijing) Co., Ltd. (中禹環境工程（北京）有限公司), a contractor for construction projects where he serves as the chairman and is primarily responsible for strategic planning. Mr. Li received his bachelor of engineering, majoring in engineering for thermal conversion, from Shanghai Institute of Mechanism (上海機械學院), now known as University of Shanghai for Science and Technology (上海理工大學) in July 1988. Mr. Li obtained the qualification as a senior engineer (高級工程師) in respect of construction of the thermal conversion granted by the Ministry of Mechanical Industry (機械工業部) in October 1998. By virtue of the SFO, Mr. Li was deemed to be interested in 51,075,015 Shares held by EEC Technology Limited. For further details, please refer to the section headed "Directors' and chief executive's interests in Shares, Underlying Shares and Debentures" in the directors' report.

Mr. Teo Yi-Dar (張毅達), aged 49, was appointed as the Director on 9 February 2015 and was re-designated as a non-executive Director on 19 October 2015. Mr. Teo has over 18 years of direct investment experience. From 1996 to 1997, Mr. Teo served as a manufacturing engineer in SGS-Thomson Microelectronics Pte. Ltd. (now known as ST Microelectronics), a company engaged in the manufacturing of semiconductors, where he was primarily responsible for manufacturing. From 1997 to 1999, Mr. Teo served as a business development executive of Keppel Corporation Limited (Stock Code: BN4), a company engaged in the marine, property, and infrastructure businesses and whose shares are listed on the Singapore Exchange Securities Trading Limited ("**Singapore Exchange**"), where he was primarily responsible for business development. Since 1999 till 2016, Mr. Teo joined SEAVI Advent Private Equity Group, a capital firm, where he is currently an investment director and is primarily responsible for managing direct investment activities in Asia. Currently, Mr. Teo is the Director of TPSC Asia Pte Ltd, a petrochemical company in Singapore. Mr. Teo was, or has been, a non-executive director of the following companies in the last three years preceding the date of this annual report:

Period of Services	Name of the Companies	Principal business activities	Position	Responsibilities
July 2006 to present	Yangzijiang Shipbuilding (Holdings) Ltd., whose shares are listed on the Singapore Exchange (Stock Code: BS6)	Agency service for shipbuilding and related activities	Independent non-executive director	Overseeing the management independently
March 2007 to present	China Yuanbang Property Holdings Limited, whose shares are listed on the Singapore Exchange (Stock Code: B2X)	Development of real estate	Independent non-executive director	Overseeing the management independently
December 2011 to present	Penyao Environmental Protection Co Ltd, whose shares are listed on the Shenzhen ChiNext Exchange (Stock Code: 300664)	Water supply and waste water treatment	Non-executive Director	Overseeing the management
February 2013 to present	Asia Vets Holdings Ltd, whose shares are listed on the Singapore Exchange (Stock Code: 5RE)	Provider of veterinary services	Independent non-executive director	Overseeing the management independently
November 2014 to present	HG Metal Manufacturing Limited, whose shares are on the Singapore Exchange (Stock Code: 526)	Trading of steel products	Non-executive Director	Overseeing the management

Mr. Teo received his bachelor of engineering (electrical), master of science, majoring in industrial and systems engineering, and master of science, majoring in applied finance, from the National University of Singapore in July 1996, June 1998 and August 2000, respectively. Mr. Teo obtained his qualification as a chartered financial analyst granted by the Association for Investment Management and Research in September 2001.

Independent Non-executive Directors

Mr. Lam Yiu Por (林曉波), aged 43, was appointed as the independent non-executive Director on 18 October 2015. Mr. Lam is the chairman of the Audit Committee. Mr. Lam has more than 21 years of experience in the field of finance and accounting. He has been the vice president and chief financial officer of Greentech Technology International Limited (a company listed on the main board of the Stock Exchange (stock code: 195)) since November 2013. He is also an independent non-executive director of JNBY Design Limited (Stock code: 3306). Mr. Lam graduated from the Hong Kong Polytechnic University with a Bachelor of Arts in Accountancy in November 1997. He is also a fellow member of the Association of Chartered Certified Accountants, a certified public accountant of the Hong Kong Institute of Certified Public Accountants, a chartered financial analyst of the CFA Institute and an associate member of The Hong Kong Institute of Chartered Secretaries and The Institute of Chartered Secretaries and Administrators. Mr. Lam was an independent non-executive director of Yat Sing Holdings Limited (stock code: 3708) during the period of December 2014 to March 2016, was an independent non-executive director of China Tontine Wines Group Limited (Stock code: 389) during the period of November 2016 to November 2018, and was a non-executive director of Zhong Ao Home Group Limited (stock code: 1538) during the period of April 2015 to May 2017, these three companies which are listed on the main board of the Stock Exchange.

Mr. Li Min (李民), Ph.D. aged 51, was appointed as an independent non-executive Director on 1 November 2017. Mr. Li is the chairman of the Remuneration Committee and a member of each of the Audit Committee and the Nomination Committee. Mr LI has been a researcher at the Department of Energy and Power Engineering at the School of Vehicle and Traffic Engineering in Henan University of Science and Technology where he is currently an associate professor and is primarily responsible for teaching and researching on internal combustion engine vibration and noise control, internal combustion engine structure finite element simulation (CAE) and diesel engine tail gas treatment. From July 1991 to February 1996, Mr. Li Min was an assistant engineer Luoyang Yisuo Company Technology Center (洛陽一拖公司技術中心) where he was primarily responsible for engine testing and pump design work.

Mr. Li Min received 2 second prizes of Scientific and Technological Progress in Henan Province, and approval for 4 applications of invention patent. He also conducted and completed 2 appraisals for Henan Provincial Department of Science and Technology. He has published more than 20 academic theses in domestic and foreign academic periodicals, of which more than 10 were published by EI. He obtained education and teaching awards such as the outstanding teacher, the outstanding lecturer of master program and the outstanding lecturer of undergraduate design programme at Henan University of Science and Technology.

Mr. Li Min received his bachelor's degree from Xi'an Jiaotong University in July 1991, his master's degree from Henan University of Science and Technology in July 2000, and his doctorate's degree from Tianjin University in March 2009.

Mr. Ong Chor Wei (王祖偉), aged 50, was appointed as an independent non-executive Director on 18 October 2015. Mr. Ong is a member of each of the Audit Committee, the Remuneration Committee and the Nomination Committee.

Mr. Ong has over 29 years of experience in finance and accounting. Mr. Ong is currently an executive director of Net Pacific Financial Holdings Limited (Stock Code: 5QP) and a non-executive director of Joyas International Holdings Limited (Stock Code: E9L), both companies are listed on the Singapore Exchange. Mr Ong is an executive director of Zibao Metals Recycling Holdings Plc (Stock: BO), a company trading on AIM, a market operated by the London Stock Exchange. Mr. Ong is an independent non-executive director of Man Wah Holdings Limited (Stock Code: 1999), O-Net Technologies (Group) Limited (Stock Code: 877) (formerly known as O-Net Communications (Group) Limited), Nameson Holdings Limited (Stock Code: 1982) and Smart Globe Holdings Limited (Stock code: 8485), respectively, all of which are listed on the Stock Exchange. Mr Ong is a non-executive director of Prosperous Printing Company Limited (Stock code: 8385), which is listed on the Stock Exchange.

Previously, he served as a non-executive director of Hong Wei (Asia) Holdings Company Limited (Stock Code:8191), a company listed on the Growth Enterprise Market of the Stock Exchange, during November 2012 to October 2016. He was a non-executive director of Vico International Holdings Limited (Stock Code: 1621), a company listed on the Stock Exchange, during June 2017 to February 2019.

Mr. Ong holds a Master of Business Administration degree that was jointly awarded to him by the University of Wales and the University of Manchester in March 2000. Mr. Ong also holds a Bachelor of Laws degree from The London School of Economics and Political Science, University of London in August 1990. Mr. Ong is an associate member of The Institute of Chartered Accountants in England and Wales and a member of the Hong Kong Institute of Certified Public Accountants.

SENIOR MANAGEMENT

Mr. Liu Lianchao (劉連超), aged 45, was appointed as one of the joint company secretaries and the authorised representative of the Company on 8 May 2015. Mr. Liu is also the deputy general manager of Beijing Denox, Gu'an Denox and the Company. Mr. Liu is primarily responsible for the management of human resources and company secretarial matters. Prior to joining the Group, Mr. Liu served as a technician of Daimler Chrysler Railway System Signal (Shenyang) Co., Ltd. (瀋陽戴姆勒克萊斯勒鐵路系統信號有限公司), a company principally engaged in the design of railway signaling system from June 1999 to March 2001, where he was primarily responsible for technical works. From April 2004 to April 2005, Mr. Liu served as a manager of the human resources department of Zhejiang Putong Fuwu Shichang Co., Ltd. (浙江普通服務市場有限公司), a company providing the storage and distribution services, where he was responsible for the set-up of the distribution center and management of human resources. From February 2006 to April 2012, Mr. Liu served as an officer of the department of planning and development of China Datang Technologies & Engineering Co., Ltd. (中國大唐集團科技工程有限公司) where he was primarily responsible for planning and development. Mr. Liu received his bachelor of engineering, majoring in fluid power transmission and control, from Beijing University of Aeronautics and Astronautics (北京航空航天大學), now known as Beihang University, in July 1998. Mr. Liu received his master of business administration from Tongji University (同濟大學) in November 2004. Mr. Liu received his doctorate's degree of management, majoring in corporate management, from Renmin University of China (中國人民大學) in January 2011. Mr. Liu obtained the qualification as economist granted by the Personnel Bureau in November 2006.

Mr. Chan Chung Kik, Lewis (陳仲戟), aged 47, is the chief financial officer of the Group and one of the joint company secretaries of the Company since May 2015, and is primarily responsible for the overall financial management functions of the Group. Prior to joining the Group, he had worked in international accounting firms and other company listed on the main board of the Stock Exchange. He has over 23 years of experience in auditing, accounting and corporate finance. He received his bachelor's degree in accounting from the University of Canberra, Australia in September 1997 and is a fellow member of the Hong Kong Institute of Certified Public Accountants and a member of the Certified Practising Accountants of Australia. Mr. Chan has tendered his resignation as the chief financial officer of the Group and one of the joint company secretaries of the Company with effect from 1 June 2020.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

About the Environmental, Social and Governance Report

The Environmental, Social and Governance (the "**ESG**") Report (the "**ESG Report**") illustrates the sustainability performance of the Group regarding the environmental and social aspects. The ESG Report should be read in conjunction with the *Corporate Governance Report*, so as to have a holistic picture on the ESG performance of the Group. The ESG Report is reviewed and approved by the Board.

Reporting Boundary

The reporting scope of the ESG Report covers the Company and its subsidiaries, including Beijing Denox Environmental & Technology Co., Ltd ("**Beijing Denox**"), Gu'an Denox Environmental Equipment Manufacturing Co., Ltd ("**Gu'an Denox**") and Wuxi Denox Environmental & Technology Co., Ltd ("**Wuxi Denox**"). The ESG Report includes the office operation and the design, development, manufacturing and sales of DeNOx catalysts. The reporting period is from 1 January 2019 to 31 December 2019 (the "**Reporting Period**"), which is consistent with the Annual Report 2019.

Reporting Guideline

The ESG Report is prepared in accordance with Appendix 27 Environmental, Social and Governance Reporting Guide (the "**ESG Reporting Guide**") to the Listing Rules issued by the Stock Exchange. The ESG Report follows the "comply or explain" provisions of the ESG Reporting Guide and the Group has followed the four reporting principles consisting of materiality, quantitative, balance and consistency in preparing the ESG Report. The appendix of the ESG Report is an index of the ESG Reporting Guide, which provides a reference for readers.

Reporting Language

This ESG Report is published in Traditional Chinese and English versions. If there is any ambiguity between the two versions, the Traditional Chinese version shall prevail.

1. Sustainability Management

The Group believes that sustainability is an indispensable part of business, so we proactively review and manage the Group's impacts on the environment and society. The Group continuously refines its sustainability management by establishing a management system that takes into account the business characteristics of the industry and the company, setting related targets, and sharing the results with its stakeholders in the form of ESG report for them to better understand the Group's sustainability performance.

1.1. *Management Framework and System*

The Group established a sustainability management framework with the participation of all levels in the Group, so as to promote sustainable development continuously and strengthen the implementation of internal management measures. The Group's sustainability management framework is as follows:

The Board

Management Representatives

Responsible Parties of Subsidiaries

Employees

The Group adopted a three-pronged approach to progressively build up the sustainability management system, which encompasses risk management, compliant operation and policy establishment.

Risk Management	Regulatory Compliance	Management System Establishment
The Group established a risk management and internal control system to identify, evaluate, manage and monitor the risks, and thus to comprehensively consider the measures to be taken to reduce the potential harm or loss. The Board is responsible for the risk management and internal control of the Group and regularly reviews the effectiveness of the system.	The Group attaches great importance to operating in a compliant manner. The Group keeps abreast of the latest initiatives and policies, legal regulations and other requirements of national and regional legislative bodies to ensure that the Group's production and operation comply with applicable laws and regulations.	With the establishment of internal regulations, reasonable management systems and standardised and well-organised management models, the Group delivers operational efficiencies, and hence progressively improving its sustainability performance.

1.2. *Targets and Performance*

A sound quality, environmental, occupational health and safety management system is the cornerstone of the Group's sustainable development. The Group established a quality, environmental, occupational health and safety management system according to the requirement of *GB/T 19001-2016/ISO 9001:2015 Quality Management Systems – Requirements*, *GB/T 24001-2016/ISO 14001:2015 Environmental Management Systems – Requirements with Guidance for Use* and *GB/T 28001-2011/OHSAS 18001:2007 Occupational Health and Safety Management Systems – Requirements*. Beijing Denox and Gu' an Denox have been audited by third-party agencies and the quality management system, the environmental management system and the occupational health and safety management system have been certified to be in conformity to the above standards.

The Group sets annual targets relating to quality, environmental and occupational health and safety, and continuously implements relevant measures and monitors the performance. A list of targets and achievements in 2019 is shown below:

Aspects	Targets	Achievement in 2019
Environmental	100% meet the national and local standards related to environmental protection	✓
	0 Environmental pollution incident	✓
Employee	0 Safety accident rate	✓
	0 Fire incident rate	✓
Product Quality	Procurement compliance rate ≥ 99%	✓
	Product on-time delivery rate 100%	✓
	Customer satisfaction rate ≥ 90%	✓
	Contract fulfilment rate 100%	✓

1.3. *Stakeholders Engagement*

1.3.1. Needs and Expectations of Stakeholders

Stakeholder engagement is critical to achieving the goal of sustainable development in a successful and effective manner. The Group actively communicates with stakeholders through various channels such as e-mail, websites, shareholders' meetings, annual report, interim reports, announcements, circulars, conferences, etc., to obtain a broad understanding of their views on the environmental and social aspects of the Group and to enable the identification and evaluation of environmental and social risks, such that the Group will be able to accommodate the requirements and expectations of stakeholders by making corresponding adjustments to its development strategy.

Stakeholders	Needs and Expectations	Responses
Relevant Government Departments	Comply with environmental and safety-related laws and regulations	Enhance the screening and identification of safety hazards and work with relevant departments proactively to conduct safety inspections; Implement environmental protection measures accordingly
Shareholders and Investors	Business developments; Maintain competitiveness in the market	Formulate an operation plan which conforms to the strategy of the Group; Focus on the research and development, production and sales of industrial DeNOx catalysts and vehicles DeNOx catalysts
Customers	Products comply with relevant laws and regulations, ensure products quality and provide after-sales service; Products comply with national environmental requirements	Keep abreast of the latest environmental protection policies and market demand, enrich the variety of products, and commit to research and development and technical transformation of DeNOx catalysts; Strengthen product quality control and improve product quality
Employees	Reasonable working hours; A clean and tidy workplace	Establish a reasonable work schedule; Arrange regular cleaning for office and production plant
Suppliers	Fair and transparent procurement; Win-win cooperation	Conduct annual supplier assessment, formulate a qualified supplier list and ensure that the products provided by suppliers meet the quality, environmental and safety requirements
Neighbourhood Communities	Protect the community environment	Strengthen the emission reduction technology of DeNOx catalyst to assist the emission reduction of the key pollution industries; Implement environmental protection measures and enhance environmental management

1.3.2. Materiality Assessment

The Group conducts the materiality assessment regularly with the participation of its stakeholders. The Group continuously gauges the opinions of stakeholders regarding their most concerned ESG issues to provide a comprehensive analysis for the identification of issues of high materiality to both the Group and its stakeholders. The result serves as a reference for the Group to set and modify its strategic directions for sustainable development.

During the preparation of the ESG Report, the Group has entrusted a third-party consultant to assist in the process of materiality assessment. The materiality assessment is conducted in the following four main steps:

- **Identification:** The Group sorted out relevant ESG issues from the ESG Reporting Guide to the Listing Rules of the Stock Exchange and other sustainability reporting guidelines and ensured that the issues reflect the nature of the Group's business.

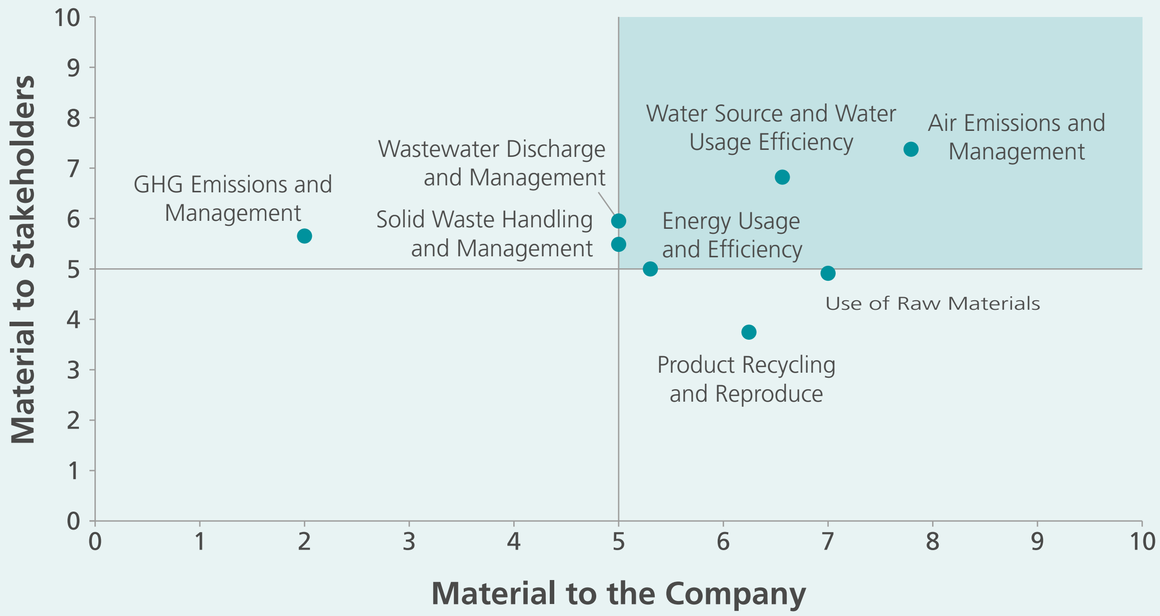
- **Survey:** Using an online survey, the stakeholders prioritised the importance of each issue to themselves or to the company. The stakeholders involved in this survey included the Board, senior management, employees, shareholders, investors and suppliers.

- **Analysis:** The Group analysed the opinions obtained from the survey based on two dimensions, the "importance to the company" and the "importance to stakeholders" to determine the relative importance of each issue.

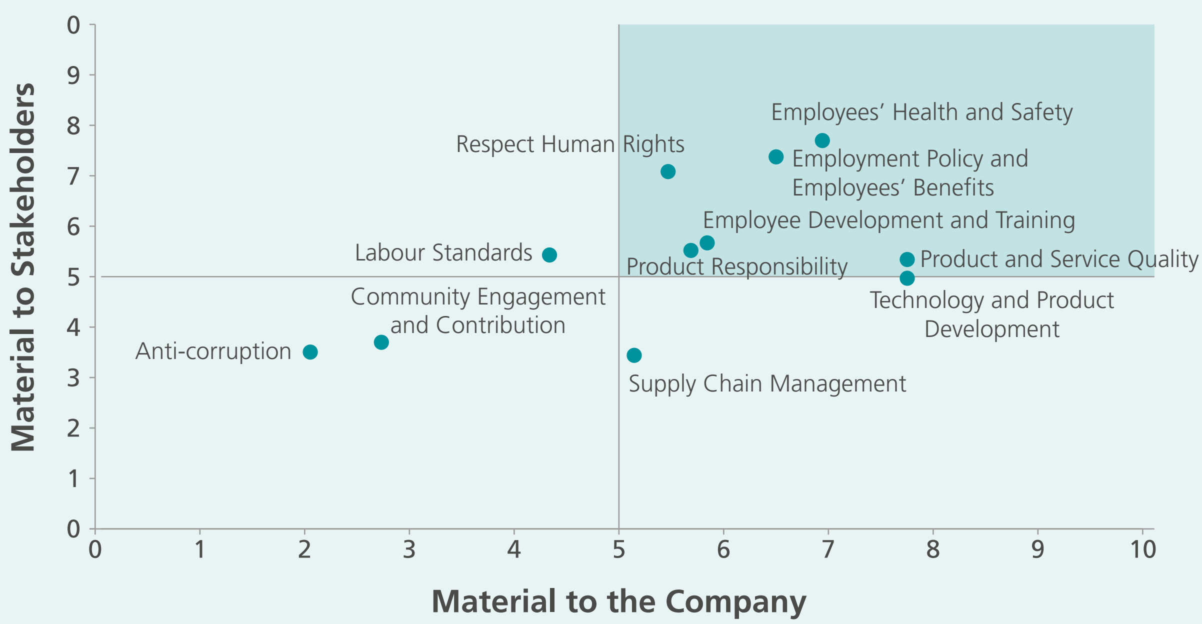
- **Verification:** The Group's senior management and the Board reviewed and verified the prioritised issues.

Opinions obtained from the survey were mapped on materiality matrices, as a result, 5 environmental-related and 6 social-related issues with higher materiality were identified.

Materiality Matrix for Environmental Issues



Materiality Matrix for Social Issues



The issues with higher materiality to the Group and its stakeholders have been verified as shown in the table below. The management approach and performance of the Group on such topics are elaborated in the subsequent sections.

Issues with Higher Materiality **Environmental Aspects**	**Social Aspects**
• Air Emissions and Management	• Employees' Health and Safety
• Wastewater Discharge and Management	• Employment Policy and Employees' Benefit
• Water Source and Water Usage Efficiency	• Respect Human Rights
• Solid Waste Handling and Management	• Employee Development and Training
• Energy Usage and Efficiency	• Product and Service Quality
	• Product Responsibility

2. *Environmental Protection*

As a company focused on tackling air pollution, the Group regards environmental protection as its responsibility and actively promotes the culture of environmental conservation. The Group strictly abides by the relevant laws and regulations relating to air and greenhouse gas ("**GHG**") emissions, discharges into water and land, generation and disposal of waste and noise pollution that have a significant impact on the Group, including but not limited to the *Environmental Protection Law of the PRC*, the *Water Pollution Prevention and Control Law of the PRC*, the *Law of the PRC on the Prevention and Control of Environment Pollution Caused by Solid Wastes*, the *Law of the PRC on Prevention and Control of Pollution from Environmental Noise*, the *Environmental Protection Tax Law of the PRC*, the *Integrated Emission Standard of Air Pollutants*, the *Implementation Rules of the Action Plan for the Implementation of Air Pollution Prevention and Control in Beijing-Tianjin-Hebei Region and Surrounding Areas*, etc. During the Reporting Period, the Group did not violate any laws and regulations relating to air and GHG emissions, discharges into water and land, generation and disposal of waste and noise pollution that have a significant impact on the Group.

2.1. Environmental Impacts

The Group advocates low-carbon environmental protection practices in operations and fulfils its environmental responsibilities by implementing energy conservation and environmental protection systems. The Group has formulated the *Control Procedure of Environmental Factors Identification and Assessment* to identify and evaluate the Group's material environmental factors in the process of procurement, sales, technical development, production and after-sales service. The Group has evaluated the impacts of the identified environmental factors and has implemented corresponding effective measures to ensure that environmental factors that may cause negative environmental impacts are effectively controlled, and hence minimising significant impacts on the environment and natural resources.

2.1.1. Air Pollutants and GHG Emissions

In view of the Group's business nature, the emissions of air pollutants primarily came from fossil fuel combustion of production equipment; while GHG emissions primarily came from the direct emissions from fossil fuel combustion of production equipment and indirect emissions that occur through the use of purchased electricity.

The Group reduces emissions at source and by installing end-of-pipe treatment facilities to minimise the dust, sulphur dioxide and nitrogen oxides generated from the processes of product ageing and roasting.

- At Source: All of the Group's production equipment uses natural gas as fuel or is powered by electricity to minimise the emissions of air pollutants at source. The Group has also successfully replaced gas boilers for heating from the production plant in Gu'an by using electricity for heating in 2018.

- End Treatment: A small amount of dust is generated from the mixing process. The Group has installed dust collection devices with removal efficiency of 99% for the mixers to ensure that the emission standard is met. The Group has set up exhaust gas treatment facilities at the exhaust vents of all production equipment, and has stipulated that exhaust gases must be treated using measures such as recovery, absorption, adsorption and catalytic combustion and to meet the requirements setting out in the *Integrated Emission Standard of Air Pollutants* (GB 16297-1996) before discharge. Direct emissions without treatment are strictly prohibited.

Case Study: Mitigation of Heavily Polluted Weather

To proactively tackle with heavily polluted weather, the Group has formulated the *Implementation of Emergency Response Plan for Heavily Polluted Weather* and conducted the cut-off arrangement for the production according to the government's notices when necessary. During the Reporting Period, Gu'an Denox displayed the warning grades, emergency measure levels and emergency start-up time on the bulletin board in the production plant. It also implemented corresponding emergency measures according to the warning grades. During the Reporting Period, Gu'an Denox stopped its operation for 34 days, which reduced about an equivalent of 0.236 tonnes of dust emissions in total.

The Group constantly strengthens its energy use management to cut down unnecessary electricity consumption, and thus reduces GHG emissions that occur through the use of purchased electricity. In addition, the Group organises internal and external meetings in the form of teleconference whenever possible to reduce the carbon footprint associated with travelling.

2.1.2. Wastewater Discharge

The Group's wastewater discharge mainly comes from domestic sewage generated in the office area, as well as industrial wastewater and domestic sewage discharge in the production plants. Among them, all the domestic sewage generated from the office is discharged into the municipal pipelines through the drainage system of the building.

Most of the water used during the production process of the Group is evaporated during the process of product ageing and roasting, and thus there was no significant wastewater discharge. In addition, the Group has installed comprehensive wastewater treatment facilities to treat all types of wastewater generated during the operation. The Group maintains the treatment facilities regularly to ensure smooth operation so that the quality of wastewater discharge meets the requirements of the *Integrated Wastewater Discharge Standard (GB 8978-1996)* and the local wastewater treatment plant. The Group also tests the quality of wastewater regularly to ensure compliance with the discharge standard. During the Reporting Period, the Group discharged an estimated amount of 1,951.50 tonnes wastewater.

2.1.3. Waste Handling

The Group is committed to strengthening the management of waste and abides by relevant national standards, such as the *Standard for Pollution Control on the Storage and Disposal Site for General Industrial Solid Wastes* (GB 18599-2001) and the *Standard for Pollution Control on Hazardous Waste Storage* (GB 18597-2001). The Group has formulated the *Waste Management Procedures* and the *DeNOx Hazardous Waste Management System* to regulate the procedures for the collection, storage and handling of all types of wastes.

The Group's waste mainly consists of non-hazardous wastes (including dust, cutting materials, general wastes, food wastes, etc.) and hazardous wastes (including waste chemicals, waste batteries, waste cartridges, waste electronic products, etc.). The Group strengthens its management and supervision for waste collection and storage. In doing so, the Group sets up labelled storage containers to collect different types of hazardous wastes, preventing the mixing of hazardous wastes into non-hazardous wastes. Aiming to achieve 100% safe disposal rate of hazardous wastes, qualified waste disposal units are commissioned by the Group for centralised handling. The Group classifies, collects and stores each type of non-hazardous wastes, and they are collected by the property management company for further handling.

In order to reduce the amount of solid waste, Gu'an Denox collects the shredded materials generated during the mixing process and reuses them in the production process. The annual recycling amount is about 0.2 tonne.

2.1.4. Noise Pollution Management

The noise pollution of the Group mainly arises from the operation of production equipment. The Group has formulated the *Control Procedure of Noise Pollution* to strengthen the management of noise sources and to reduce noise pollution at source. The Group installed a stable and reliable equipment foundation to reduce mechanical noise caused by vibration and installs shock absorbers on the equipment with high rotational inertia and high speed. In addition, the Group repairs and maintains the equipment regularly to have a fluent flow of oil, water and gas to ensure the equipment operates in good condition.

The Group also conducts regular noise monitoring to ensure that noise reduction measures are effectively implemented.

2.1.5. Energy Use and Water Use

Main energy sources of the Group include electricity and natural gas, both are purchased energy. The water consumption of the Group is for production and domestic purposes, which mainly comes from municipal water mains, and thus the Group has not encountered any difficulty in water sourcing. Aiming to lower consumption, the Group has established the *Measures of Energy Management of Production Centre* and the *Procedure of Resources Conservation Management*, implemented a number of energy and water conservation measures and regularly records the consumption of electricity, natural gas and water.

The energy and water conservation measures of the Group include:

Energy Conservation	Water Conservation
• Assign the Equipment Management Department to manage the energy consumption, to verify anomalies and to provide suggestions for rectification. • Set the indoor air temperature to 26°C in summer and 20°C in winter. • Electrical appliances that are used every day, such as computers, copiers and air conditioners are turned off after business hours on time. • Record vehicle fuel consumption on a monthly basis.	• Raise employees' awareness of water conservation, conserve the use of water and turn on the water fixtures when needed and turn them off promptly after use. • Proper control of the opening degree of the water valve to prevent water wastage. • Strengthen the daily maintenance of water fixtures and water pipes. Repair the water supply system when dripping and leakage occur in a timely manner.

During the Reporting Period, the energy and water conservation measures of the Group were effectively implemented with no anomalies detected.

2.1.6. Other Resources Consumption

The Group promotes the principle of appropriate consumption for raw materials and packaging materials to reduce wastage. The Group implements a variety of measures to reduce paper use, including the reuse of letter envelopes, the transmission of internal documents via e-mail, the installation of paper recycling bins, the reuse of single-sided printed paper, etc.

2.2. Contribute to Emissions Reduction

As an environmentally-friendly corporate, the Group not only actively reduces the impact of its operations on the environment but also focuses on the research and development of green products to accommodate the national emission reduction policies and to meet the community's demand for denitrification catalysts. The Group actively invests in strengthening the research and development of DeNOx catalysts for thermal power generating units, diesel-powered vehicles and vessels (engines).

Case Study: Research, Development and Production of Coating Catalysts

On 22 June 2018, China's Ministry of Environmental Protection released the *Limits and Measurement Methods for Emissions from Diesel Fuelled Heavy-Duty Vehicles* ("China VI"), which sets out the timetable for the implementation of pollutant emission limits for heavy-duty diesel-powered vehicles under China VI emission standards. In early 2018, the Group established a research and development team for the production of coating catalysts. The team is capable of developing products that meet the China V and VI vehicle emission standards. During the Reporting Period, the Group actively contributed to pollution mitigation by strengthening the research and development works and trial production of catalysts under the China VI emission standards, and at the same time enhanced the technological collaborations and communications with customers.

2.3. Environmental Data

2.3.1. Emissions

Emissions	Units	Data[1, 2] 2019	2018	2017
Air emissions[3]				
Sulphur dioxide	Tonnes	0.098	0.090	0.025
Nitrogen oxides	Tonnes	0.215	0.181	0.078
Carbon oxide	Tonnes	0.129	0.110	–
Dust	Tonnes	0.200	0.169	3
GHG emissions				
Scope 1: direct emissions (stationary sources and cooking)[4]	Tonnes CO2	220.108	176.982	84.325
Intensity of scope 1: direct emissions (stationary sources and cooking)	Tonnes CO2 per m^3 production volume	0.025	0.026	0.013

Emissions	Units	Data[1, 2] 2019	2018	2017
Emission				
Scope 1: direct emissions (mobile sources)[5]	Tonnes CO2 equivalent	45.871	47.469	49.860
Intensity of scope 1: direct emissions (mobile sources)	Tonnes CO2 equivalent per m3 production volume	0.005	0.007	0.008
Scope 2: energy indirect emissions[6]	Tonnes CO2	3,184.095	2,986.591	2,286.222
Intensity of scope 2: energy indirect emissions	Tonnes CO2 per m^3 production volume	0.368	0.436	0.362
Scope 3: other indirect emissions[7]	Tonnes CO2 equivalent	23.600	21.737	–
Intensity of scope 3: other indirect emissions	Tonnes CO2 equivalent per m3 production volume	0.003	0.003	–
Planted trees	No. of trees	2	2	2
Emissions reduction due to planted trees[8]	Tonnes CO2 equivalent	0.046	0.046	0.046
Non-hazardous wastes handled				
Total non-hazardous wastes	Tonnes	55.028	79	3
Intensity of non-hazardous waste	Tonnes per m^3 production volume	0.006	0.012	4.754 x 10-4
– Domestic wastes	Tonnes	41.228	61	–
– Food wastes	Tonnes	9	12	–
– Production wastes	Tonnes	4.600	6	–
Hazardous wastes handled				
Total hazardous wastes (except ink cartridges)	Tonnes	0.722	1.200	1
Intensity of hazardous waste (except ink cartridges)	Tonnes per m^3 production volume	8.331 x 10-5	1.751 x 10-4	1.585 x 10-4
– Waste hydraulic oil	Tonne	0.712	1	–
– Waste paint containers	Tonne	0	0.200	–
Ink cartridges	No. of ink cartridges	3	4	–

1. The scope of environmental data includes the office in Beijing, and the production plants in Gu'an and Wuxi.
2. The intensity of environmental performance of the Group is calculated based on per m3 production volume. The Group commenced the production of vehicle catalyst products in 2019, and hence the calculation of environmental performance intensity for 2019 included plate-type and vehicle catalyst products.
3. The scope of air pollutants includes those emitted from stationary sources, vehicles and cooking, and were calculated using the National Emission Inventory Guidebook for On-road Vehicles (*Trial)* issued by the Ministry of Ecology and Environment of the PRC and the *Manual of the First National Pollution Source Census of Industrial Sources and Pollution Emission Factors and the Manual of the First National Pollution Source Census of Urban Life Sources and Pollution Emission Factors i*ssued by the First National Census of Pollution Sources Leading Group Office of State Council.
4. The scope 1 GHG emissions came primarily from the use of stationary source and cooking, and were calculated using the Calculation Method and Reporting Guidance on Greenhouse Gas Emissions *for Other Industrial Enterprises (Trial)* issued by the National Development and Reform Commission of the PRC. The Group started to disclose the GHG emissions related to cooking in 2019.
5. The scope 1 GHG emissions came primarily from the use of vehicles and forklift trucks, and were calculated using the Calculation Method and Reporting Guidance on Greenhouse Gas Emissions for On-road Transportation Enterprises (Trial) issued by the National Development and Reform Commission of the PRC. The Grou*p started to disclose the GHG em*issions related to cooking in 2019, and the GHG emissions were calculated using the Calculation Method and Reporting Guidance on Greenhouse Gas Emissions *for Other Industrial Enterprises (Trial)* issued by the National Development and Reform Commission of the PRC.
6. The scope of scope 2 GHG emissions included the electricity consumption, and were calculated using the 2*011-2012 Regional Power Grid Average CO2 Emission Factors in China* published by the National Development and Reform Commission of the PRC.
7. The scope of scope 3 GHG emissions included business air travel by employees, and were calculated using the carbon emissions calculator developed by the International Civil Aviation Organization, a United Nations agency.
8. The GHG emissions reduction from planted trees were calculated using the Guidelines to Account for and Report on Greenhouse Gas Emissions and Removals for Buildings (Commercial, Residential o*r Institutional Purposes) in Hong Kong* published by the Electrical and Mechanical Services Department and Environmental Protection Department of Hong Kong.

2.3.2. Resources Consumption

Resources Consumption	Units	Consumption[1, 2] 2019	2018	2017
Energy Consumption				
Electricity consumption	kWh	3,653,339	3,421,416.600	2,625,964.500
Intensity of electricity consumption	kWh per m^3 production volume	421.804	499.258	416.093
Natural gas consumption	10 thousand m^3	9.977	8.344	3.900
Intensity of natural gas consumption	10 thousand m^3 per m^3 production volume	1.152×10^{-3}	1.218×10^{-3}	6.180×10^{-4}
Gasoline consumption	Litre	19,894	20,593	21,697.4
Intensity of gasoline consumption	Litre per m^3 production volume	2.297	3.005	3.438
Liquefied petroleum gas consumption	Litre	1,407	1,485	–
Intensity of liquefied petroleum gas consumption	Litre per m^3 production volume	0.162	0.217	–
Water Consumption				
Water consumption from municipal supply	Tonnes	10,236.344	8,585.838	8,474.500
Intensity of water consumption from municipal supply	Tonnes per m^3 production volume	1.182	1.253	1.343
Packaging materials consumption[9]				
Total packaging materials	Tonnes	73.960	78.217	–
Intensity of packaging materials	Tonne per m^3 production volume	0.009	0.011	–
– Wood	Tonnes	66	70.500	–
– Plastic	Tonnes	4.720	2.250	–
– Paper	Tonne	0.120	0.167	–
– Metal	Tonnes	3.120	5.300	–

3. People-oriented

Aiming to foster a people-oriented culture in the workplace, the Group continuously enhances its human resources system, builds a diverse and inclusive team, safeguards employees' health and safety and supports their development.

9. The Group has started to report the amount of packaging materials used since 2018.

3.1. *Employees' Rights*

The Group strictly complies with the laws and regulations relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination, other benefits and welfare and prevention of child or forced labour that have a significant impact on the Group, including but not limited to the *Labour Law of the PRC*, the *Labour Contract Law of the PRC*, the *Trade Union Law of the PRC*, the *Law of the PRC on the Protection of Minors*, the *Announcement of the State Council on the Regulations of Paid Annual Leave of Employees*, and the *Provisions on the Prohibition of Using Child Labour*. The Group provides legal and reasonable remuneration and benefits to its employees. During the Reporting Period, the Group did not violate the laws and regulations relating to employment and labour standards that have a significant impact on the Group. The Group has established policies and management systems related to employment and labour standards to safeguard the rights and interests of employees.

Recruitment and Dismissal	Compensation and Promotion	Working Hours and Rest Periods
To strengthen the employment management system and to implement a fair, impartial and transparent recruitment process, the Group has formulated the *Employee Recruitment System* and the *Management Approach for Employee Selection* to standardise the recruitment requirements and procedures. The Group enters into employment contracts with the employees legitimately. All contracts have included terms relating to remuneration, benefits, employee health and safety, confidentiality obligations and grounds for termination. The Group also established regulations relating to employee turnover and dismissal to safeguard the interests of both the employees and the Group.	To reflect the adoption of fair and impartial salary arrangement principle and enhance employee's performance, the Group has formulated the *Management Approach for Remuneration System* and implemented regulations relating to remuneration and promotion. The Group offers opportunities for the adjustment of remuneration and promotion in response to employees' performance, work experience, educational background and professional qualifications. The remuneration package includes salary, retirement pension, discretionary bonus, medical insurance plan and other applicable social insurance.	The Group adopts shift work and stipulates that employees work eight hours a day. The Group has established the *Work Attendance Regulation* to ensure that its employees are entitled to paid leave and other statutory holidays. The Group not only provides marriage leave, maternity leave and paternity leave in accordance with the *Regulations of Hebei Province on Population and Family Planning*, bereavement leave are also provided to the employees.

Fair Opportunity, Prohibit Discrimination	Prohibit Child Labour	Prohibit Forced Labour
The Group advocates equal and diversified opportunities of employment in the processes of recruitment, remuneration, promotion and training. To let employees fully demonstrate their expertise and potentials, the Group values the uniqueness of each of them, and does not discriminate against employees because of their races, nationalities, age and gender.	The Group has placed heavy emphasis of safeguarding children's rights, and resolutely prohibits the employment of persons under the age of 16. The Group requires candidates to provide valid identity certification during recruitment process and employment to prove that they meet the statutory age requirements, and ensure that the Group fully complies with the laws and regulations relating to prohibition of child labour. If any cases of child labour are found, the Group would immediately terminate the employment relationship with relevant parties, investigate the incident and improve the recruitment process. During the Reporting Period, there were no cases of using of child labour found within the Group.	The Group has formulated the *Control Procedure against Forced Labour and the Use of Prisoners*, and strictly forbids forced labour. At the same time, the Group has never employed prisoners who are serving their sentences and has never conducted business with any units or organisations that employ prisoners. During the Reporting Period, there were no cases of forced labour found within the Group.

As at the end of the Reporting Period, the Group has 165 employees.

	No. of Employees	
	2019	2018
Total no. of employees	165	160
By gender		
Male	121	121
Female	44	39
By employment type		
Leader	8	8
Management	17	17
Senior employee	21	25
General employee	119	110
By age group		
< 30	35	44
30 – 40	63	92
41 – 50	40	0
> 50	27	24
By geographical region		
Beijing	16	13
Gu'an	119	117
Wuxi	30	30

	Employee Turnover Rate	
	2019	2018
Employee turnover rate	15%	9%
By gender		
Male	19%	8%
Female	2%	11%
By age group		
< 30	35%	17%
30 – 40	10%	6%
41 – 50	2%	0%
> 50	7%	0%
By geographical region		
Beijing	0%	0%
Gu'an	19%	11%
Wuxi	3%	0%

3.2. Caring for Employees

The Group attaches great importance to employee communication. In order to facilitate better communication with employees, the Group has developed the *Employee Representative Election Procedure*, which allows all employees to vote for employee representatives in each department. Employee representatives are responsible for broadly collect employees' opinions and suggestions and meet up regularly to discuss and communicate with management regarding company's performance in employment, such as compensation and benefits, working hours, discrimination cases, etc.

Moreover, the Group has an employee grievance mechanism that allows employees to report workplace misconduct and to provide feedback directly to the company. Moreover, to handle employee's opinions and suggestions in a timely manner, the Group has formulated the *Management Procedures of Employee's Opinions, Suggestions, Complaints Processing and Feedback* to standardise the complaint handling procedures and processing time limits.

The Group regularly carries out team activities and provides a variety of recreational and sports activities, helping employees to lift their mood and relieve work pressure in their spare time.

Case Study: Annual Company Outing for Beijing and Gu'an Teams

In August 2019, the Group's Beijing and Gu'an teams gathered together for the annual company outing. The Group took this opportunity to thank its employees for their efforts and contributions throughout the year.

Case Study: Company Outing for Wuxi Team

During the Reporting Period, the Group's Wuxi team organized a company outing to offer a getaway for management and employees to relax and unwind. It also provided a chance to facilitate communication between employees at all levels.

3.3. Employees' Health

The Group strictly complies with the laws and regulations relating to protecting employees from occupational hazards that have a significant impact on the Group, including but not limited to the *Law of the PRC on the Prevention and Control of Occupational Diseases* and the *Administrative Measures for Diagnosis and Identification of Occupational Diseases*. During the Reporting Period, the Group did not violate the laws and regulations listed above that have a significant impact on the Group. In order to prevent, control and eliminate occupational hazards that may arise during the production process, the Group has developed and implemented its *Occupational Health Management Policy*, and has identified occupational hazards and implemented effective preventive measures. The Group also regularly monitors the exposure of employees to occupational hazards.

The Group has developed the *Personal Protective Equipment Management Policy*, and provides employees with necessary personal protection equipment on a monthly basis, including gloves, masks and ear protectors. To avoid occupational diseases such as pneumoconiosis and noise-induced hearing loss, employees are required to properly use personal protective equipment in the production process. Dedicated personnel is assigned to inspect the quality of personal protective equipment at the production plant. The Group also investigates employees' opinions on personal protective equipment and performs necessary corrections to ensure that the equipment provided meet actual needs.

In addition, the Group from time to time disseminates the knowledge relating to occupational health and safety to employees. The knowledge is disseminated via briefings, flyers, training and other effective ways to remind employees to comply with the provisions on occupational disease prevention and control and to provide guidance on the correct use of protective equipment and facilities.

Apart from providing regular body check, qualified hospitals were commissioned by the Group for employees to conduct occupational health-related medical examinations in accordance with the *Technical Specifications for Occupational Health Surveillance* (GBZ 188-2014).

By providing exercise and fitness equipment, the Group encourages employees to do more exercise to relieve their work pressures, improve their bodies' cardiopulmonary function and carry out muscle building through exercise and to maintain the body in a healthy condition.

Case Study: Exercise and Fitness Equipment

Gu'an Denox pays attention to the physical and mental health of its employees. It created a fitness corner in the office and set up fitness equipment with safety instructions.

Wuxi Denox included a table tennis table in the office of the production plant for employees to exercise and learn the skills from each other during break time.

3.4. *Employees' Development*

The Group empowers employees to grow along the Group and to enrich their knowledge and skills with a diverse spectrum of trainings. The Group has formulated the *Control Procedure of Human Resources* and has stipulated that training shall be arranged for every employee before their duties are being taken up in order to equip them with necessary basic skills. Also, on-the-job training is provided to strengthen employees' skills and professionalism.

The Group develops the *Annual Training Plan* according to the training needs of each subsidiary. To ensure the quality, training is held by persons with relevant professional qualifications or with relevant training experience, and post-training assessments are conducted to ensure that employees meet the job requirements and responsibilities.

During the Reporting Period, training programs including the new employee training, safety training and occupational health training were conducted.

Case Study: Production Safety Training

Gu'an Denox sees production safety as a top priority, and continuously enhances employees' safety awareness and knowledge through training. During the Reporting Period, Gu'an Denox explained to the employees of the production centre about the details of the *Regulations on Safety Production Risk Control and Hidden Dangers control in Hebei Province* to strengthened their risk identification and control capabilities.

	Percentage of Employees Trained	Average Training Hours Received per Employee[10]
By gender		
Male	84%	3.06
Female	71%	3.69
By employment type		
Leader	13%	25.00
Management	53%	7.22
Senior employee	73%	4.69
General employee	89%	2.56

4. *Quality Products and Services*

The Group is committed to providing customers with high-quality products and services. We constantly communicate with customers, suppliers and other relevant stakeholders to further improve product quality. The Group strictly abides by the laws and regulations relating to product responsibility that have a significant impact on the Group, including but not limited to the *Work Safety Law of the PRC*, the *Product Quality Law of the PRC*, the *Regulations on Quality Responsibilities for Industrial Products*, the *Advertising Law of the PRC*, the *Trademark Law of the PRC* and the *Regulation on the Implementation of the Trademark Law of the PRC*. During the Reporting Period, the Group did not violate the laws and regulations relating to product responsibility that have a significant impact on the Group.

10. Employees who have been trained during the Reporting Period are included.

4.1. *Quality Control*

The Group believes that the performance, quality and safety of its products are critical to customers, and to the reputation and success of the Group. The Group implements quality assurance and monitoring procedures during every production process to ensure only products and services with high-quality and safety are delivered to its customers.

Raw Material Inspection:	Best quality products are produced by high-quality raw materials. The Group has established the *Incoming Inspection Standard*, which stipulated that inspectors shall conduct inspections on raw materials according to the inspection items and implementation details listed on the *Raw Materials Inspection Guide*. To enable product quality at source, unqualified materials shall be replaced or returned.
Production Process:	The Group approaches its' production works in a prudent and sincere manner. The Group has formulated inspection methods and procedures for every manufacturing and packaging process in the *Inspection Guidance* to provide guidance for inspectors to perform checking and examination for semi-finished products and finished products.
Product Tracking During Installation and Operation:	After product installation, the Group assigns dedicated personnel to provide assistance throughout the whole process of customer-arranged product testing and commissioning process to ensure the proper functioning of products, and thus ensuring customer's needs are met.

Case Study: Achieved Certification for Quality Management System

During the Reporting Period, the Group officially began to supply DeNOx catalysts for diesel-powered vehicles. To accommodate the Group's strategy of market expansion for DeNOx catalyst for mobile-source, Gu'an Denox has continuously enhanced its quality management system and expanded the scope of the management system audited by third-party. Aiming to build customer confidence, the quality management system of Gu'an Denox has been certified to be in conformity with IATF 16949:2016 Automotive Quality Management System Standard during the Reporting Period.

The Group treats the identification of unqualified products after delivery or used as a major quality issue. The Group would initiate negotiation with customers in a timely manner and would take corrective or preventive measures appropriately. The Group established the *Control Procedure of Unqualified Products* and the *Control Procedure for Nonconformity, Corrective and Preventive Measures* to stipulate the assessment and handling procedures for unqualified products. Unqualified products are identified, isolated and handled according to the specified procedures. During the Reporting Period, the Group did not recall any products.

4.2. *Product Responsibility*

4.2.1. Product Health and Safety

The Group regularly conducts product testing according to the *Testing Guideline of SCR Catalysts for the Thermal Power Plants* (DL/T1286-2013) to ensure that the products' chemical composition complies with relevant regulations. The active ingredients of the Group's products are primarily transition metals or precious metals, which are of the same mass and chemical properties before and after the products are put into use, such that the products will not be hazardous after they are heated. In addition, the Group uses porous ceramic as the product carrier, which is stable and safe with no significant changes after being put in a high-temperature environment.

4.2.2. Product Labelling

The Group has properly managed the product labelling. Information such as the product name, product number and product quality inspection certificate is shown on the product label to prevent products from being misused in the delivery process. Moreover, each product of the Group possesses a distinctive identification which enables traceability on the source of the product, the responsible person and the distribution of the product. This enables that if any problems occur, the Group can utilise the unique product identification to identify the root cause in time, and takes appropriate measures to ensure that the products are meeting specified requirements.

4.2.3. Protection of Intellectual Property Rights

The Group insists on intellectual property rights protection and infringement prevention. The Group safeguards the rights of the Group and others by strictly abides by the laws and regulations relating to intellectual property rights protection, such as the *Patent Law of the PRC*, the *Tort Liability Law of the PRC*, the *Copyright Law of the PRC*, etc.

4.3. *Customer-oriented*

4.3.1. Comments and Feedback

The Group values customers' opinions and suggestions. We improve our service quality continuously. The Group actively communicates with customers during the sales process to build good customer relationships and to deliver comprehensive and tailor-made services. The Group has established the *Customer Complaint Handling Procedure* to handle customer complaints systematically. The Group documents the complaint and conducts investigation and analysis in a timely manner after receiving a customer complaint. To handle customer complaints in a timely and effective manner, the Group actively negotiates and proposes suitable solutions to customers. Moreover, the Group utilises the lessons learnt from the complaint handling process and continuously improves its business management and operation, thus to achieve better levels of service quality. During the Reporting Period, the Group had not received any complaints concerning its products.

4.3.2. Customers' Privacy Protection

The Group is committed to customer privacy protection in the course of business. The Group strives to keep a proper register of customers information and ensure information security. In order to strengthen internal confidential management, the Group has established the *Company Confidentiality Management System (Trial)*, which sets out the responsibility of each department regarding confidential management. Marketing Department of the Group has easier and more convenient access to customer information, and thus, the Group has developed specific measures for maintaining information confidentiality for this department, including:

– Manage information in a centralised management approach, and appoint specific locations and management personnel for customer information;

– Provide locks for the filing cabinets where the printed documents are kept and require management personnel to lock up the cabinets when they leave the area in a timely manner to prevent the loss and unauthorised copying of documents or theft;

– Prohibit employees from disclosing customer information to unrelated persons within and outside of the Group without the authorisation of customers and the Group's management.

During the Reporting Period, the Group did not receive any cases concerning the breaches of customer information.

4.3.3. Avoid False Publicity

The Group insists on honest and fair trading and will not tolerate any illegal and fraudulent multi-level marketing activities. The information released from the official channels of the Group must have gone through the company's stringent internal auditing procedure before its publication in order to ensure authenticity and to protect consumers' interests.

5. Responsible Operations

5.1. Safety in Production

Conducting our production safely is one of the Group's key directions in business development. The Group has established and implemented an Occupational Health and Safety Management System to integrate stringent safety standards and procedures into the operation, sales, production and service processes. The Group strictly complies with the laws and regulations relating to providing a safe working environment and have a significant impact on the Group, including but not limited to the *Work Safety Law of the PRC*, the *Fire Protection Regulation of the PRC, etc*. During the Reporting Period, the Group did not violate the laws and regulations listed above that have a significant impact on the Group. Safety at production is significant and its everyone's responsibility. The Group has implemented the Safety Production Liability System and required employees at all levels to be liable for the safety work within their scope of duty. In addition, the Group has formed a Safety Production Leading Team aiming to strengthen the management of safe production. The safety-related responsibilities are set to ensure that relevant measures are strictly implemented by all employees of all departments.

5.1.1. Day-to-day Management

The Group's manufacturing process involves the use of machineries which poses different safety risks. In order to reduce the safety risks associated with the use of machinery, the Group has established safety regulations for every aspect of operation and production, and all machine operators will commence their work only after completion of relevant training. In addition, the Group has installed effective safety devices and guards on machinery and equipment to prevent direct contact between the human body and the dangerous parts of machinery.

Case Study: Safety Operation Regulation

Welding operation is involved in the production process of Gu'an Denox, which poses safety hazards such as burning, electric shock, etc. To prevent the occurrence of safety incidents during welding, Gu'an Denox has formulated the *Operation Regulation of Manual Electric Arc Welding Work* to regulate the operation of arc welding in four areas including personal protective equipment, working environment, working procedure and welding equipment checking and maintenance. Gu'an Denox also ensures its welders have fully grasped the relevant safety measures.

Case Study: Safeguarding Equipment

Wuxi Denox installed guards or shields for the dangerous machine and equipment in the manufacturing plants. Wuxi Denox also performs regular maintenance to ensure that the guards or shields are in good conditions.

Safety hazard prevention and control are the primary focus in production. To uncover and report hidden safety risks and proactively perform rectification promptly, production plants of the Group are required to perform inspection according to the items and frequency stipulated in the work procedures titled *Regulations of Safe Production Inspection* and *Incidents and Hidden Risk Detection and Control System*. The Group shall develop practical corrective plans for the safety risks identified in a timely manner and shall ensure that the measures are implemented effectively to eliminate the potential risks. Gu'an Denox conducted a safety self-inspection for the entire production plant in December 2019 concerning the areas of safety management system, safety education, working environment, emergency support, etc., and all standards are met.

5.1.2. Emergency Preparation and Response

Subsidiaries of the Group formulate the *Emergency Action Plan* for production plants annually and organise different types of emergency drills to enhance employees' familiarity with the emergency plan, and hence to improve their emergency responsiveness. The Group implements safety risks control measures for every aspect. Although office environments are generally considered low-risk workplaces comparing with manufacturing plants, the Group never neglects the safety hazards in office and has developed contingency plans for potential hazards (such as fire, electric shock, etc.).

During the Reporting Period, there was no work-related death nor lost working days due to work injury.

5.2. Supply Chain Management

The Group regards suppliers as important business partners. As a responsible corporate, the Group attaches great importance to the environmental and social impacts of its business and suppliers and desires to develop a sustainable supply chain with its suppliers.

The Group has established a rigorous supplier management system. To ensure the quality and stability of the Group's supply chain, the Group has formulated the *Procurement System for the Procurement Department* whereby all potential suppliers that are applicable to the system must undergo a full review and screening process. In addition, the Group takes the environmental and social performance of its suppliers into considerations for supplier selection to avoid environmental and social risks.

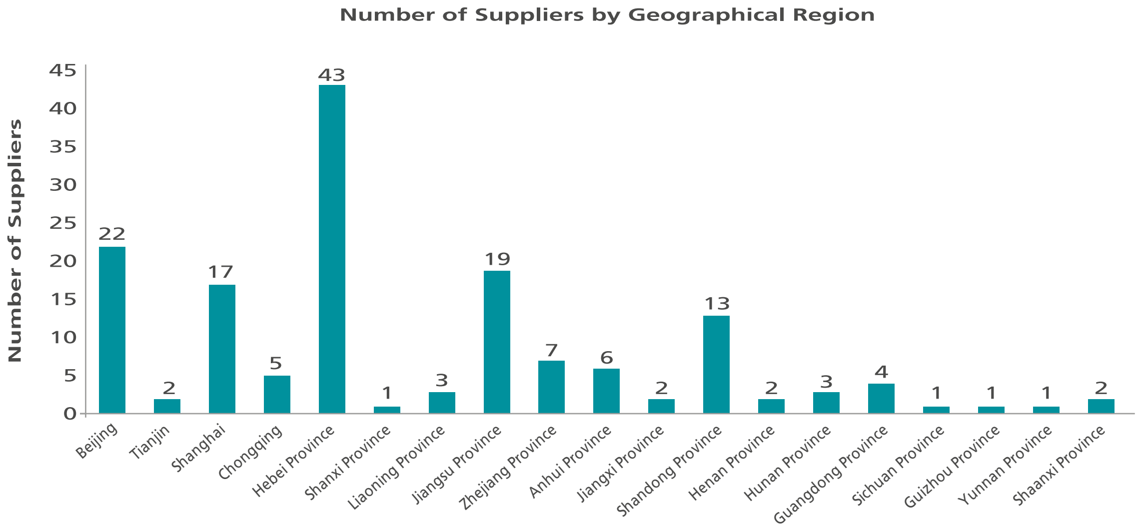
Case Study: Considering Suppliers' Environmental and Safety Performance

In addition to the usual qualification verification of potential suppliers, Gu'an Denox also verifies whether the environmental and safety performance of potential suppliers meets the Group's standards, including:

Environmental Indicators for Assessment	Safety Protection Requirement
• Synchronisation rate of pollution control facilities and production equipment	• Workability of fire safety provisions
• Air emissions and wastewater discharge compliance rate and solid waste handling rate	• Safety management system for special equipment and corresponding records
• Major environmental pollution incident	• Safety management system for electricity and corresponding records
• Environmental nuisance caused to residents	• Management system for natural gas and corresponding records
• Substantial violation of environmental-related laws and regulations	• Safety management system for dangerous goods and corresponding records

To ensure suppliers' actual operation continuously meets the Group's requirements, the Group regularly evaluates suppliers in accordance with its *Supplier Survey and Evaluation Form*. If suppliers fail to meet our requirements, they must improve within a given period of time or their relations with the Group shall be ceased. During the Reporting Period, the Group evaluated the performance of raw material suppliers, and all of them passed the Group's evaluation.

The Group adheres to the principle of local procurement and gives priority to local qualified suppliers. The number of suppliers of the Group by geographical region is as below:



5.3. *Business Integrity*

The Group strives to create a clean playing field and practices good corporate governance by the establishment of an effective management system to uphold the reputation of the Group and to protect the rights of stakeholders. The Group strictly complies with the laws and regulations relating to the prevention of bribery, extortion, fraud and money laundering that have a significant impact on the Group, including but not limited to the *Criminal Law of the PRC,* the *Anti-unfair Competition Law of the PRC*, the *Anti-money Laundering Law of the PRC*, the *Regulations of the PRC for Suppression of Corruption*, etc.

To ensure that business is carried out in a corruption-free manner, the Group has formulated the *Control Procedure* for *Anti-corruption and Anti-bribery* and requests the individuals of key positions to sign the *Statement of Undertaking Combating Bribery/Corruption*. Understanding how procurement processes can be vulnerable to corruption, the Group formulated the *Code of Conduct for Procurement Personnel* specialising in setting out the behavioural requirements during the procurement process and requires all employees involving in procurement to conduct business in accordance with the principles of integrity and compliance with business ethics. To maintain ethical standards among the Group's business partners, a *Statement of Undertaking Combating Bribery/Corruption for Supplier* shall be signed by suppliers, service providers and contractors who have dealings with the Group.

The Group never indulges in or condone corruption. The Group established confidential reporting channels for employees and companies that have dealings with the Group to report corruption. The Group established the *Control Procedure for Anti-Corruption and Anti-Bribery* to stipulate the reporting methods of misconduct behaviour, the investigation procedures, and the corresponding handling approaches. If a report is received, the Group shall process the case in accordance with the internal management system upon investigation and verification, and in the event of a commercial bribery offence, the case would be referred to the judiciary.

During the Reporting Period, the Group did not violate any laws and regulations relating to the protection of bribery, extortion, fraud and money laundering that have a significant impact on the Group, nor did it receive any litigation cases against the Group or its employees involving bribery, extortion and money-laundering.

5.4. *Focusing on the Community*

The Group communicates with the community actively to understand its needs and expectations. The Group understands that the community pays particular attention to the environmental impacts associated with our operations and we have been continuously improving our environmental management system to minimise the environmental impacts, and hence, to reduce our impacts in the neighbourhood. The Group also established a complaint and response mechanism. If feedback from the neighbourhood community is received, the Group would investigate and evaluate the issues mentioned in the feedback actively and provide responses.

Case Study: Participated in Tree Planting

During the Reporting Period, the Group's employees assisted in greening the community through participation in shrub planting activities.

To the Shareholders of Denox Environmental & Technology Holdings Limited
(incorporated in the Cayman Islands with limited liability)

Opinion

What we have audited

The consolidated financial statements of Denox Environmental & Technology Holdings Limited (the "**Company**") and its subsidiaries (the "**Group**") set out on pages 74 to 138 which comprise:

- the consolidated balance sheet as at 31 December 2019;
- the consolidated statement of comprehensive income for the year then ended;
- the consolidated statement of changes in equity for the year then ended;
- the consolidated statement of cash flows for the year then ended; and
- the notes to the consolidated financial statements, which include a summary of significant accounting policies.

Our opinion

In our opinion, the consolidated financial statements give a true and fair view of the consolidated financial position of the Group as at 31 December 2019, and of its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards ("**IFRSs**") and have been properly prepared in compliance with the disclosure requirements of the Hong Kong Companies Ordinance.

Basis for Opinion

We conducted our audit in accordance with International Standards on Auditing ("**ISAs**"). Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Consolidated Financial Statements section of our report.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Independence

We are independent of the Group in accordance with the International Ethics Standards Board for Accountants' Code of Ethics for Professional Accountants ("**IESBA Code**"), and we have fulfilled our other ethical responsibilities in accordance with the IESBA Code.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Key audit matter identified in our audit is related to impairment of property, plant and equipment and intangible assets.

Key Audit Matter	How our audit addressed the Key Audit Matter
Impairment of property, plant and equipment and intangible assets	
Refer to Note 4(c), Note 6, Note 12 and Note 14 to the consolidated financial statements. As at 31 December 2019, the net carrying amounts of the Group's property, plant and equipment and intangible assets were approximately RMB42,375,000 and RMB3,758,000, respectively, against which impairment loss of approximately RMB9,146,000 and RMB5,737,000 were made and charged to the income statement for the year then ended, respectively. During the year ended 31 December 2019, the Group continued to suffer delay in realisation of revenue from sale of DeNOx catalysts for diesel-powered vehicle and vessels, indicating that the carrying values of the Group's property, plant and equipment and intangible assets as detailed in Note 12 may be impaired. Management performed an assessment on impairment of the assets at cash generating unit (the "**CGU**") level. Impairment losses were identified and allocated to the relevant assets including machinery, technical know-how and patent rights.	Our procedures in relation to the assessment of impairment of property, plant and equipment and intangible assets include: • We understood, evaluated and tested management's key controls over the Group's impairment assessment including the periodic impairment indication evaluations as to whether indicators of impairment existed by corroborating with management and market information; • We assessed the reasonableness of management's determination of CGU based on our knowledge of the business including the use of the assets and internal reporting process; • We assessed the appropriateness of management's use of valuation methodology and its compliance with management's circumstances and relevant accounting standards; • We assessed management's forecast and calculation of the CGUs' value in use, including:

Key Audit Matter	How our audit addressed the Key Audit Matter
Management applied significant judgement in determining the value in use of the relevant CGUs, of which the key assumptions adopted in the calculation of value in use include: i) sales growth rates and gross profit margin rates within the forecast period; and ii) discount rate. We focused on this area because of the magnitude of balances of property, plant and equipment and intangible assets and significance of management judgement and assumptions applied.	– assessing the reasonableness of sales growth rates and gross profit margin rates by comparing the historical operating results and future operating plans of the CGU, taking into consideration of the economic and industry outlook; – assessing the discount rate by reference to market data, and risk factor of comparable companies and market premium; – assessing the reasonableness of other key input data such as capital expenditure and market share by comparing with the management budget and corroborating with industry information; and – testing the mathematical accuracy of the discounted cash flows model and the allocation of impairment losses to relevant assets. Based on the above procedures performed, we considered that the reasonableness of management's judgement and assumptions applied in impairment assessment of property, plant and equipment and intangible assets were supported by evidences we obtained.

Other Information

The directors of the Company are responsible for the other information. The other information comprises all of the information included in the annual report other than the consolidated financial statements and our auditor's report thereon.

Our opinion on the consolidated financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated.

If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of Directors and the Audit Committee for the Consolidated Financial Statements

The directors of the Company are responsible for the preparation of the consolidated financial statements that give a true and fair view in accordance with IFRSs and the disclosure requirements of the Hong Kong Companies Ordinance, and for such internal control as the directors determine is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the directors are responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the Group or to cease operations, or have no realistic alternative but to do so.

The Audit Committee is responsible for overseeing the Group's financial reporting process.

Auditor's Responsibilities for the Audit of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. We report our opinion solely to you, as a body, and for no other purpose. We do not assume responsibility towards or accept liability to any other person for the contents of this report. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with ISAs, we exercise professional judgment and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the directors.

- Conclude on the appropriateness of the directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.

- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with the Audit Committee regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide the Audit Committee with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with the Audit Committee, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

The engagement partner on the audit resulting in this independent auditor's report is Dou Wang, Angel.

PricewaterhouseCoopers
Certified Public Accountants

Hong Kong, 27 March 2020

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

For the year ended 31 December 2019

	Note	Year ended 31 December 2019 RMB'000	2018 RMB'000
Revenue from contracts with customers	5	**61,540**	54,436
Cost of sales	6	**(54,880)**	(58,283)
Gross profit/(loss)		**6,660**	(3,847)
Selling and marketing expenses	6	**(10,842)**	(8,895)
Administrative expenses	6	**(34,915)**	(28,084)
Research and development expenses	6	**(5,087)**	(3,740)
Net reversal of impairment losses on financial assets		**6,456**	1,517
Other gains-net	7	**607**	13
Operating loss		**(37,121)**	(43,036)
Finance income	9	**552**	3,819
Finance costs	9	**(1,816)**	–
Finance (costs)/income-net		**(1,264)**	3,819
Loss before income tax		**(38,385)**	(39,217)
Income tax expenses	10	**(656)**	(239)
Loss for the year		**(39,041)**	(39,456)
Other comprehensive income			
Items that may be reclassified to consolidated statement of comprehensive income:			
Currency translation differences	23	**1,462**	3,260
Other comprehensive income for the year		**1,462**	3,260
Total comprehensive loss for the year		**(37,579)**	(36,196)
Income/(Loss) attributable to:			
– Shareholders of the Company		**(40,058)**	(39,716)
– Non-controlling interests		**1,017**	260
		(39,041)	(39,456)
Total comprehensive income/(loss) attributable to:			
– Shareholders of the Company		**(38,596)**	(36,456)
– Non-controlling interests		**1,017**	260
		(37,579)	(36,196)
Loss per share attributable to shareholders of the Company (expressed in RMB per share)			
Basic and diluted loss per share	11	**(0.08)**	(0.08)

The notes on pages 80 to 138 are an integral part of these consolidated financial statements.

CONSOLIDATED BALANCE SHEET

As at 31 December 2019

	Note	As at 31 December 2019 RMB'000	2018 RMB'000
ASSETS			
Non-current assets			
Property, plant and equipment	12	**42,375**	47,825
Right-of-use assets	13	**17,204**	–
Land use rights	2.2	**–**	15,334
Intangible assets	14	**3,758**	12,129
Long-term prepayments	19	**140**	1,768
Restricted cash	20	**–**	1,901
Total non-current assets		**63,477**	78,957
Current assets			
Inventories	17	**59,925**	40,629
Trade receivables	18	**33,255**	49,717
Financial assets at fair value through other comprehensive income	21	**18,714**	6,569
Prepayments, deposits and other receivables	19	**9,190**	13,597
Restricted cash	20	**2,118**	889
Cash and cash equivalents	20	**125,415**	145,424
Total current assets		**248,617**	256,825
Total assets		**312,094**	335,782
LIABILITIES			
Non-current liabilities			
Lease liabilities	13	**535**	–
Deferred income	25	**–**	10
Deferred income tax liabilities	16	**1,550**	1,811
Total non-current liabilities		**2,085**	1,821
Current liabilities			
Trade payables	24	**6,849**	3,822
Lease liabilities	13	**1,045**	–
Contract liabilities	5	**23,764**	10,147
Accruals and other payables	25	**10,440**	15,009
Current income tax liabilities		**7,380**	6,511
Total current liabilities		**49,478**	35,489
Total liabilities		**51,563**	37,310
Net assets		**260,531**	298,472

CONSOLIDATED BALANCE SHEET (CONTINUED)

As at 31 December 2019

	Note	As at 31 December 2019 RMB'000	2018 RMB'000
EQUITY			
Equity attributable to shareholders of the Company			
Share capital	22	**31,506**	31,596
Treasury stock	22	**(362)**	(635)
Share premium	23	**850,103**	850,648
Capital reserves	23	**(552,410)**	(552,410)
Other reserves	23	**34,909**	33,164
Accumulated losses		**(117,577)**	(77,236)
		246,169	285,127
Non-controlling interests		**14,362**	13,345
Total equity		**260,531**	298,472
Total equity and liabilities		**312,094**	335,782

The notes on pages 80 to 138 are an integral part of these consolidated financial statements.

The consolidated financial statements on pages 74 to 138 were approved by the Board of Directors on 27 March 2020 and were signed on its behalf:

ZHAO Shu
Director

KONG Hongjun
Director

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

For the year ended 31 December 2019

	Note	Attributable to shareholders of the Company							Non-controlling interests	Total equity
		Share capital	Treasury stock	Share premium	Capital reserves	Other reserves	Accumulated losses	Total		
		RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
Balance at 1 January 2018		31,802	–	851,181	(552,410)	29,685	(38,026)	322,232	13,085	335,317
Changes in accounting policy – IFRS 9		–	–	–	–	–	725	725	–	725
Restated total equity as at 1 January 2018		31,802	–	851,181	(552,410)	29,685	(37,301)	322,957	13,085	336,042
Comprehensive loss										
Income/(Loss) for the year		–	–	–	–	–	(39,716)	(39,716)	260	(39,456)
Other comprehensive income										
Currency translation differences		–	–	–	–	3,260	–	3,260	–	3,260
Total comprehensive income		–	–	–	–	3,260	(39,716)	(36,456)	260	(36,196)
Transaction with shareholders										
Appropriation to statutory reserves	23	–	–	–	–	219	(219)	–	–	–
Repurchase of ordinary shares		–	(1,374)	–	–	–	–	(1,374)	–	(1,374)
Cancellation of treasury stock		(206)	739	(533)	–	–	–	–	–	–
Total transaction with shareholders, recognised directly in equity		(206)	(635)	(533)	–	219	(219)	(1,374)	–	(1,374)
Balance at 31 December 2018		31,596	(635)	850,648	(552,410)	33,164	(77,236)	285,127	13,345	298,472

	Note	Attributable to shareholders of the Company							Non-controlling interests RMB'000	Total equity RMB'000
		Share capital RMB'000	Treasury stock RMB'000	Share premium RMB'000	Capital reserves RMB'000	Other reserves RMB'000	Accumulated losses RMB'000	Total RMB'000		
Balance as at 1 January 2019		31,596	(635)	850,648	(552,410)	33,164	(77,236)	285,127	13,345	298,472
Comprehensive loss										
Income/(Loss) for the year		–	–	–	–	–	(40,058)	(40,058)	1,017	(39,041)
Other comprehensive income										
Currency translation differences		–	–	–	–	1,462	–	1,462	–	1,462
Total comprehensive income		–	–	–	–	1,462	(40,058)	(38,596)	1,017	(37,579)
Transaction with shareholders										
Appropriation to statutory reserves	23	–	–	–	–	283	(283)	–	–	–
Repurchase of ordinary shares	22	–	(362)	–	–	–	–	(362)	–	(362)
Cancellation of treasury stock	22	(90)	635	(545)	–	–	–	–	–	–
Total transaction with shareholders, recognised directly in equity		(90)	273	(545)	–	283	(283)	(362)	–	(362)
Balance at 31 December 2019		31,506	(362)	850,103	(552,410)	34,909	(117,577)	246,169	14,362	260,531

The notes on pages 80 to 138 are an integral part of these consolidated financial statements.

CONSOLIDATED STATEMENT OF CASH FLOWS

For the year ended 31 December 2019

	Note	Year ended 31 December 2019 RMB'000	2018 RMB'000
Cash flows from operating activities			
Cash used in operations	27(a)	**(8,291)**	(35,494)
Interest received		**797**	231
Income tax paid		**(48)**	(98)
Net cash used in operating activities		**(7,542)**	(35,361)
Cash flows from investing activities			
Payments for property, plant and equipment		**(9,899)**	(4,426)
Release of pledged deposits		**672**	1,769
Proceeds from disposal of property, plant and equipment	27(b)	**–**	32
Purchase of land use rights		**(2,573)**	–
Net cash used in investing activities		**(11,800)**	(2,625)
Cash flows from financing activities			
Dividends paid to non-controlling interests in subsidiaries		**–**	(2,201)
Repurchase of ordinary shares	22	**(362)**	(1,374)
Net cash used in financing activities		**(362)**	(3,575)
Net decrease in cash and cash equivalents		**(19,704)**	(41,561)
Cash and cash equivalents at the beginning of the financial year	20	**145,424**	180,381
Exchange (losses)/gains on cash and cash equivalents		**(305)**	6,604
Cash and cash equivalents at end of year	20	**125,415**	145,424

The notes on pages 80 to 138 are an integral part of these consolidated financial statements.

1. GENERAL INFORMATION

Denox Environmental & Technology Holdings Limited (the "**Company**") was incorporated in the Cayman Islands on 7 November 2014 as an exempted company with limited liability under the Companies Law Cap.22 (Law 3 of 1961, as consolidated and revised) of the Cayman Islands. The address of the Company's registered office is Cricket Square, Hutchins Drive, P.O. Box 2681, Grand Cayman KY1-1111, Cayman Islands.

The Company is an investment holding company and its subsidiaries (collectively, the "**Group**") are principally engaged in design, development and manufacture of DeNOx catalysts in the People's Republic of China (the "**PRC**"). The ultimate holding company of the Group is Advant Performance Limited, a company incorporated in the British Virgin Islands ("**BVI**") which is wholly-owned by Ms. Zhao Shu (the "**Controlling Shareholder**").

On 12 November 2015, the Company's shares were listed on the main board of The Stock Exchange of Hong Kong Limited.

The consolidated financial statements are presented in Renminbi ("**RMB**"), unless otherwise stated.

These consolidated financial statements of the Group have been approved for issue by the Board of Directors (the "**Board**") on 27 March 2020.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

A list of the significant accounting policies adopted in the preparation of these consolidated financial statements is set out below. These policies have been consistently applied to all the years presented, unless otherwise stated.

2.1 Basis of preparation

(i) Compliance with IFRS

The consolidated financial statements have been prepared in accordance with International Financial Reporting Standards ("**IFRS**").

(ii) Historical cost convention

The consolidated financial statements have been prepared on a historical cost convention, except for certain financial assets, which are carried at fair value.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(continued)*

2.1 Basis of preparation *(continued)*

(iii) New and amended standards adopted by the Group

The Group has applied the following standards and amendments for the first time for their annual reporting period commencing 1 January 2019.

- IFRS 16 Leases
- Prepayment Features with Negative Compensation – Amendments to IFRS 9
- Long-term Interests in Associates and Joint Ventures – Amendments to IAS 28
- Annual Improvements to IFRS Standards 2015 – 2017 Cycle
- Plan Amendment, Curtailment or Settlement – Amendments to IAS 19
- Interpretation 23 Uncertainty over Income Tax Treatments.

The Group had to change its accounting policies and made retrospective adjustments as a result of adopting IFRS 16 Leases. The impact of the adoption of the leasing standard and the new accounting policies are disclosed in Note 2.2 below. The other standards did not have any impact on the Group's accounting policies and did not require retrospective adjustments.

(iv) New standards and interpretations not yet adopted

Certain new accounting standards and interpretations have been published that are not mandatory for 31 December 2019 reporting periods and have not been early adopted by the Group. These standards are not expected to have a material impact on the entity in the current or future reporting periods and on foreseeable future transactions.

2.2 Changes in accounting policies

This note explains the impact of the adoption of IFRS 16 Leases on the Group's financial statements and discloses the new accounting policies that have been applied from 1 January 2019 in Note 2.2(a) and Note 2.2(b) below.

The Group has adopted IFRS 16 retrospectively from 1 January 2019, but has not restated comparatives for the 2018 reporting period, as permitted under the specific transitional provisions in the standard. The reclassifications and the adjustments arising from the new leasing rules are therefore recognised in the opening balance sheet on 1 January 2019.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(continued)*

2.2 Changes in accounting policies *(continued)*

(a) Adjustments Recognized on Adoption of IFRS 16

On adoption of IFRS 16, the Group recognised lease liabilities in relation to leases which had previously been classified as 'operating leases' under the principles of IAS 17 Leases. These liabilities were measured at the present value of the remaining lease payments, discounted using the lessee's incremental borrowing rate as of 1 January 2019. The weighted average lessee's incremental borrowing rate applied to the lease liabilities on 1 January 2019 was 4.75%.

The re-measurements to the lease liabilities were recognised as adjustments to the related right-of-use assets immediately after the date of initial application.

	RMB'000
Operating lease commitments disclosed as at 31 December 2018	790
Discounted using the lessee's incremental borrowing rate at the date of initial application	698
Add: adjustments as a result of a different treatment of extension options	831
Lease liability recognised as at 1 January 2019	1,529
Of which are:	
Current lease liabilities	–
Non-current lease liabilities	1,529
Add:	
Prepaid lease payments	1,262
Reclassification of land use rights	15,334
Right-of-use assets recognised as at 1 January 2019	18,125

The associated right-of-use assets for property leases were measured at the amount equal to the lease liability, adjusted by the amount of any prepaid or accrued lease payments and reclassification of land use rights relating to that lease recognised in the balance sheet as at 31 December 2018. There were no onerous lease contracts that would have required an adjustment to the right-of-use assets at the date of initial application.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(continued)*

2.2 Changes in accounting policies *(continued)*

(a) Adjustments Recognized on Adoption of IFRS 16 *(continued)*

The change in accounting policy affected the following items in the balance sheet on 1 January 2019:

- Right-of-use assets – increase by RMB18,125,000
- Long-term prepayments – decrease by RMB651,000
- Land use rights – decrease by RMB15,334,000
- Prepayments, deposits and other receivables – decrease by RMB611,000
- Lease liabilities (non-current) – increase by RMB1,529,000

There is no impact on accumulated deficits on 1 January 2019.

Practical expedients applied

In applying IFRS 16 for the first time, the Group has used the following practical expedients permitted by the standard:

- the use of a single discount rate to a portfolio of leases with reasonably similar characteristics,
- the accounting for operating leases with a remaining lease term of less than 12 months as at 1 January 2019 as short-term leases, and
- the exclusion of initial direct costs for the measurement of the right-of-use asset at the date of initial application.

The Group has also elected not to reassess whether a contract is, or contains a lease at the date of initial application. Instead, for contracts entered into before the transition date the Group relied on its assessment made applying IAS 17 and IFRIC 4 Determining whether an Arrangement contains a Lease.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(continued)*

2.2 Changes in accounting policies *(continued)*

(b) The Group's Leasing Activities And How These Are Accounted For

The Group is a lessee of various offices. Rental contracts are typically made for fixed periods of 2 to 5 years but may have extension option as described below. Lease terms are negotiated on an individual basis and contain a wide range of different terms and conditions. The lease agreements do not impose any covenants, but leased assets may not be used as security for borrowing purposes.

Until 31 December 2018, leases of properties and vehicles were classified as operating leases. Payments made under operating leases (net of any incentives received from the lessor) were charged to consolidated comprehensive income statements on a straight-line basis over the period of the lease.

From 1 January 2019, leases are recognised as a right-of-use asset and a corresponding liability at the date at which the leased asset is available for use by the Group. Each lease payment is allocated between the liability and finance cost. The finance cost is charged to profit or loss over the lease period so as to produce a constant periodic rate of interest on the remaining balance of the liability for each period. The right-of-use asset is depreciated over the shorter of the asset's useful life and the lease term on a straight-line basis.

Assets and liabilities arising from a lease are initially measured on a present value basis. Lease liabilities include the net present value of the following lease payments:

- fixed payments (including in-substance fixed payments), less any lease incentives receivable, and
- payments of penalties for terminating the lease, if the lease term reflects the lessee exercising that option.

The lease payments are discounted using the interest rate implicit in the lease. If that rate cannot be determined, the lessee's incremental borrowing rate is used, being the rate that the lessee would have to pay to borrow the funds necessary to obtain an asset of similar value in a similar economic environment with similar terms and conditions.

Right-of-use assets are measured at cost comprising the following:

- the amount of the initial measurement of lease liability
- any lease payments made at or before the commencement date less any lease incentives received
- any initial direct costs, and
- restoration costs.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(continued)*

2.2 Changes in accounting policies *(continued)*

(b) The Group's Leasing Activities And How These Are Accounted For (continued)

Payments associated with short-term leases and leases of low-value assets are recognised on a straight-line basis as an expense in profit or loss. Short-term leases are leases with a lease term of 12 months or less.

(c) Extension and termination options

Extension and termination options are included in a number of property and equipment leases across the Group. These terms are used to maximise operational flexibility in terms of managing contracts. The majority of extension and termination options held are exercisable only by the Group and not by the respective lessor.

Critical judgements in determining the lease term

In determining the lease term, management considers all facts and circumstances that create an economic incentive to exercise an extension option, or not exercise a termination option. Extension options (or periods after termination options) are only included in the lease term if the lease is reasonably certain to be extended (or not terminated).

The assessment is reviewed if a significant event or a significant change in circumstances occurs which affects this assessment and that is within the control of the lessee. During the current financial period, the financial effect of revising lease terms to reflect the effect of exercising extension and termination options was an increase in recognised lease liabilities and right-of-use assets of RMB831,000.

2.3 Principal of consolidation

(a) Subsidiaries

Subsidiaries are all entities (including structured entities) over which the Group has control. The Group controls an entity when the Group is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power to direct the activities of the entity. Subsidiaries are fully consolidated from the date on which control is transferred to the Group. They are deconsolidated from the date that control ceases.

The acquisition method of accounting is used to account for business combinations by the Group.

Intercompany transactions, balances and unrealised gains on transactions between group companies are eliminated. Unrealised losses are also eliminated unless the transaction provides evidence of an impairment of the transferred asset. Accounting policies of subsidiaries have been changed where necessary to ensure consistency with the policies adopted by the Group.

Non-controlling interests in the results and equity of subsidiaries are shown separately in the consolidated statement of comprehensive income, statement of comprehensive income, statement of changes in equity and balance sheet respectively.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(continued)*

2.3 Principal of consolidation *(continued)*

(b) Business combinations

The acquisition method of accounting is used to account for all business combinations, regardless of whether equity instruments or other assets are acquired. The consideration transferred for the acquisition of a subsidiary comprises the:

- fair values of the assets transferred
- liabilities incurred to the former owners of the acquired business
- equity interests issued by the Group
- fair value of any asset or liability resulting from a contingent consideration arrangement, and
- fair value of any pre-existing equity interest in the subsidiary.

Identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are, with limited exceptions, measured initially at their fair values at the acquisition date. The Group recognises any non-controlling interest in the acquired entity on an acquisition-by-acquisition basis either at fair value or at the non-controlling interest's proportionate share of the acquired entity's net identifiable assets. Acquisition-related costs are expensed as incurred.

The excess of the

- consideration transferred,
- amount of any non-controlling interest in the acquired entity, and
- acquisition-date fair value of any previous equity interest in the acquired entity

Over the fair value of the net identifiable assets acquired is recorded as goodwill. If those amounts are less than the fair value of the net identifiable assets of the business acquired, the difference is recognised directly in consolidated statement of comprehensive income as a bargain purchase.

Contingent consideration is classified either as equity or a financial liability. Amounts classified as a financial liability are subsequently remeasured to fair value with changes in fair value recognised in consolidated statement of comprehensive income.

If the business combination is achieved in stages, the acquisition date carrying value of the acquirer's previously held equity interest in the acquiree is remeasured to fair value at the acquisition date. Any gains or losses arising from such remeasurement are recognised in consolidated statement of comprehensive income.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(continued)*

2.4 Separate financial statements

Investments in subsidiaries are accounted for at cost less impairment. Cost includes direct attributable costs of investment. The results of subsidiaries are accounted for by the company on the basis of dividend received and receivable.

Impairment testing of the investments in subsidiaries is required upon receiving a dividend from these investments if the dividend exceeds the total comprehensive income of the subsidiary in the period the dividend is declared or if the carrying amount of the investment in the separate financial statements exceeds the carrying amount in the consolidated financial statements of the investee's net assets including goodwill.

2.5 Segment reporting

Operating segments are reported in a manner consistent with the internal reporting provided to the chief operating decision-makers (the "**CODM**"). The CODM, who is responsible for allocating resources and assessing performance of the operating segments, has been identified as the executive directors that make strategic decisions.

The Group's business activities, for which discrete financial information is available, are regularly reviewed and evaluated by the CODM. As a result of this evaluation, the Group determined that its business, as a whole, falls into one segment.

2.6 Foreign currency translation

(a) Functional and presentation currency

Items included in the financial statements of each of the Group's entities are measured using the currency of primary economic environment in which the entity operates (the "**functional currency**"). The functional currency of the Company, Denox Investments Holdings Limited ("**BVI Denox**") and Denox Environmental & Technology (HK) Investments Co., Ltd. ("**HK Denox**") is Hong Kong dollar ("**HK$**"). The subsidiaries incorporated in the PRC use RMB as their functional currency as the major operations of the Group during the year ended 31 December 2019 and 2018 are within the PRC, the Group has determined to present its consolidated financial statements in RMB (unless otherwise stated).

(b) Transactions and balances

Foreign currency transactions are translated into the functional currency using the exchange rates prevailing at the dates of the transactions or valuation where items are remeasured. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at year-end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognised in the consolidated statement of comprehensive income.

Foreign exchange gains and losses that relate to borrowings and cash and cash equivalents are presented in the consolidated statement of comprehensive income within 'finance income/(costs)– net'. All other foreign exchange gains and losses are presented in the consolidated statement of comprehensive income within 'other gains – net'.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(continued)*

2.6 Foreign currency translation *(continued)*

(b) Transactions and balances (continued)

Translation differences on non-monetary financial assets and liabilities such as equities held at fair value through profit or loss are recognised in profit or loss as part of the fair value gain or loss. Translation differences on non-monetary financial assets, such as equities classified as available for sale, are included in other comprehensive income.

(c) Group companies

The results and financial position of all the Group entities (none of which has the currency of a hyper-inflationary economy) that have a functional currency different from the presentation currency are translated into the presentation currency as follows:

(i) assets and liabilities for each balance sheet presented are translated at the closing rate at the date of that balance sheet;

(ii) income and expenses for each statement of comprehensive income are translated at average exchange rates (unless this average is not a reasonable approximation of the cumulative effect of the rates prevailing on the transaction dates, in which case income and expenses are translated at the rate on the dates of the transactions); and

(iii) all resulting currency translation differences are recognised in other comprehensive income.

Goodwill and fair value adjustments arising on the acquisition of a foreign entity are treated as assets and liabilities of the foreign entity and translated at the closing rate. Currency translation differences arising are recognised in other comprehensive income.

2.7 Property, plant and equipment

Construction-in-progress (the "**CIP**") represents buildings, plant and machinery under construction or pending installation and is stated at cost less accumulated impairment losses, if any. Cost includes the costs of construction and acquisition. No provision for depreciation is made on CIP until such time as the relevant assets are completed and ready for intended use. When the assets concerned are available for use, the costs are transferred to property, plant and equipment and depreciated in accordance with the policy as stated below.

Property, plant and equipment, other than construction in progress, are stated at historical cost less accumulated depreciation and impairment. Historical cost includes expenditures that are directly attributable to the acquisition of the items.

Subsequent costs are included in the asset's carrying amount or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Group and the cost of the item can be measured reliably. The carrying amount of the replaced part is derecognised. All other repairs and maintenance are charged in the consolidated statement of comprehensive income during the financial year in which they are incurred.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(continued)*

2.7 Property, plant and equipment *(continued)*

Depreciation on property, plant and equipment is calculated using the straight-line method to allocate their cost to their residual values over their estimated useful lives, as follows:

–	Buildings	20 years
–	Machinery	5-10 years
–	Vehicles	4 years
–	Office equipment and others	3-5 years
–	Leasehold improvements	Shorter of remaining term of lease and the estimated useful lives of the assets

The assets' residual values and useful lives are reviewed, and adjusted if appropriate, at the end of each reporting year.

An asset's carrying amount is written down immediately to its recoverable amount if the asset's carrying amount is greater than its estimated recoverable amount (Note 2.11).

Gains and losses on disposals are determined by comparing the proceeds with the carrying amount and are recognised within 'other gains – net' in the consolidated statement of comprehensive income.

2.8 Land use rights

Land use rights represent upfront prepayments made for the land use rights at historical cost and are expensed in the consolidated statement of comprehensive income on a straight-line basis over the year of the leases or when there is impairment, the impairment is expensed in the consolidated statement of comprehensive income.

2.9 Intangible assets

(a) Goodwill

Goodwill is measured as described in Note 2.3(b). Goodwill on acquisitions of subsidiaries is included in intangible assets. Goodwill is not amortised but it is tested for impairment annually, or more frequently if events or changes in circumstances indicate that it might be impaired, and is carried at cost less accumulated impairment losses. Gains and losses on the disposal of an entity include the carrying amount of goodwill relating to the entity sold.

Goodwill is allocated to cash-generating units for the purpose of impairment testing. The allocation is made to those cash-generating units or groups of cash-generating units ("**CGUs**") that are expected to benefit from the business combination in which the goodwill arose. The units or groups of units are identified at the lowest level at which goodwill is monitored for internal management purposes, being the operating segments.

(b) Patent right

Patent right is shown at historical cost. Patent right has a finite useful life and is carried at cost less accumulated amortisation. Amortisation is calculated using the straight-line method to allocate the cost of patent right over their estimated useful lives of 10 years.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(continued)*

2.9 Intangible assets *(continued)*

(c) Technical know-how

Acquired technical know-how of manufacturing processes is shown at historical cost. Acquired technical know-how is capitalised on the basis of the costs incurred to acquire and is amortised over their estimated useful lives of 7 to 10 years.

2.10 Research and development expenditures

Research expenditure is recognised as an expense as incurred. Costs incurred on development projects (relating to the design and testing of new or improved products) are recognised as intangible assets when the following criteria are fulfilled:

(i) it is technically feasible to complete the intangible asset so that it will be available for use or sale;

(ii) management intends to complete the intangible asset and use or sell it;

(iii) there is an ability to use or sell the intangible asset;

(iv) it can be demonstrated how the intangible asset will generate probable future economic benefits;

(v) adequate technical, financial and other resources to complete the development and to use or sell the intangible asset are available; and

(vi) the expenditure attributable to the intangible asset during its development can be reliably measured.

Other development expenditures that do not meet these criteria are recognised as an expense as incurred. Development costs previously recognised as an expense are not recognised as an asset in a subsequent year. Capitalised development costs are recorded as intangible assets and amortised on a straight-line basis over its useful life.

2.11 Impairment of non-financial assets

Goodwill and intangible assets that have an indefinite useful life are not subject to amortisation and are tested annually for impairment, or more frequently if events or changes in circumstances indicate that they might be impaired. Other assets are tested for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognised for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs of disposal and value in use. For the purposes of assessing impairment, assets are grouped at the lowest levels for which there are separately identifiable cash inflows which are largely independent of the cash inflows from other assets or groups of assets (cash-generating units). Non-financial assets other than goodwill that suffered an impairment are reviewed for possible reversal of the impairment at the end of each reporting period.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(continued)*

2.12 Investments and other financial assets

2.12.1 Classification

From 1 January 2018, the Group classifies its financial assets in the following measurement categories:

- those to be measured subsequently at fair value (either through other comprehensive income, or through profit or loss), and

- those to be measured at amortised cost.

The classification depends on the entity's business model for managing the financial assets and the contractual terms of the cash flows.

For assets measured at fair value, gains and losses will either be recorded in profit or loss or other comprehensive income. For investments in equity instruments that are not held for trading, this will depend on whether the Group has made an irrevocable election at the time of initial recognition to account for the equity investment at fair value through other comprehensive income (FVOCI). The Group reclassifies debt investments when and only when its business model for managing those assets changes.

2.12.2 Recognition and derecognition

Regular way purchases and sales of financial assets are recognised on trade-date, the date on which the Group commits to purchase or sell the asset. Financial assets are derecognised when the rights to receive cash flows from the financial assets have expired or have been transferred and the Group has transferred substantially all the risks and rewards of ownership.

2.12.3 Measurement

At initial recognition, the Group measures a financial asset at its fair value plus, in the case of a financial asset not at fair value through profit or loss (FVPL), transaction costs that are directly attributable to the acquisition of the financial asset. Transaction costs of financial assets carried at FVPL are expensed in consolidated statement of comprehensive income.

Debt instruments

Subsequent measurement of debt instruments depends on the Group's business model for managing the asset and the cash flow characteristics of the asset. There are three measurement categories into which the Group classifies its debt instruments:

- Amortised cost: Assets that are held for collection of contractual cash flows where those cash flows represent solely payments of principal and interest are measured at amortised cost. Interest income from these financial assets is included in finance income using the effective interest rate method. Any gain or loss arising on derecognition is recognised directly in profit or loss and presented in 'other gains-net', together with foreign exchange gains and losses. Impairment losses are presented as separate line item in the statement of profit or loss.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(continued)*

2.12 Investments and other financial assets *(continued)*

2.12.3 Measurement *(continued)*

Debt instruments *(continued)*

- FVOCI: Assets that are held for collection of contractual cash flows and for selling the financial assets, where the assets' cash flows represent solely payments of principal and interest, are measured at FVOCI. Movements in the carrying amount are taken through other comprehensive income, except for the recognition of impairment gains or losses, interest revenue and foreign exchange gains and losses which are recognised in profit or loss. When the financial asset is derecognised, the cumulative gain or loss previously recognised in other comprehensive income is reclassified from equity to profit or loss and recognised in 'other gains-net'. Interest income from these financial assets is included in finance income using the effective interest rate method. Foreign exchange gains and losses are presented in 'other gains-net' and impairment expenses are presented as separate line item in the statement of profit or loss.

- FVPL: Assets that do not meet the criteria for amortised cost or FVOCI are measured at FVPL. A gain or loss on a debt investment that is subsequently measured at FVPL is recognised in profit or loss and presented net within 'other gains-net' in the period in which it arises.

Equity instruments

The Group subsequently measures all equity investments at fair value. Where the Group's management has elected to present fair value gains and losses on equity investments in other comprehensive income, there is no subsequent reclassification of fair value gains and losses to profit or loss following the derecognition of the investment. Dividends from such investments continue to be recognised in profit or loss as other income when the Group's right to receive payments is established. Changes in the fair value of financial assets at FVPL are recognised in 'other gains-net' in the statement of profit or loss as applicable. Impairment losses (and reversal of impairment losses) on equity investments measured at FVOCI are not reported separately from other changes in fair value.

2.12.4 Impairment

The Group assesses on a forward-looking basis the expected credit losses associated with its debt instruments carried at amortised cost and FVOCI. The impairment methodology applied depends on whether there has been a significant increase in credit risk.

For trade receivables, the Group applies the simplified approach permitted by IFRS 9, which requires expected lifetime losses to be recognised from initial recognition of the receivables.

Impairment on other receivables is measured as either 12-month expected credit losses or lifetime expected credit loss, depending on whether there has been a significant increase in credit risk since initial recognition. If a significant increase in credit risk of a receivable has occurred since initial recognition, then impairment is measured as lifetime expected credit losses.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(continued)*

2.13 Offsetting financial instruments

Financial assets and liabilities are offset and the net amount reported in the balance sheet when there is a legally enforceable right to offset the recognised amounts and there is an intention to settle on a net basis or realise the asset and settle the liability simultaneously. The legally enforceable right must not be contingent on future events and must be enforceable in the normal course of business and in the event of default, insolvency or bankruptcy of the company or the counterparty.

2.14 Inventories

Inventories are stated at the lower of cost and net realisable value. Cost is determined using the weighted average method. The cost of finished goods and work in progress comprises raw materials, direct labour, other direct costs and related production overheads (based on normal operating capacity). It excludes borrowing costs. Net realisable value is the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale. Goods in transit refer to finished goods in transit and held at customer's place.

2.15 Trade and other receivables

Trade receivables are amounts due from customers for goods sold in the ordinary course of business. If collection of trade and other receivables is expected in one year or less (or in the normal operating cycle of the business if longer), they are classified as current assets. If not, they are presented as non-current assets.

Trade receivables are recognised initially at the amount of consideration that is unconditional unless they contain significant financing components, when they are recognised at fair value. The Group holds the trade receivables with the objective to collect the contractual cash flows and therefore measures them subsequently at amortised cost using the effective interest method. See Note 18 for further information about the Group's accounting for trade receivables and Note 3.1(b) for a description of the Group's impairment policies.

2.16 Cash and cash equivalents

For the purpose of presentation in the statement of cash flows, cash and cash equivalents includes cash in hand and deposits held at call with banks.

2.17 Share capital

Ordinary shares are classified as equity.

Incremental costs directly attributable to the issuance of new shares or options are shown in equity as a deduction, net of tax, from the proceeds.

Where any group company purchases the Company's equity instruments, for example as the result of a share buy-back or a share-based payment plan, the consideration paid, including any directly attributable incremental costs (net of income taxes) is deducted from equity attributable to the owners of the Company as treasury shares until the shares are cancelled or reissued.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(continued)*

2.18 Trade payables

Trade payables are obligations to pay for goods or services that have been acquired in the ordinary course of business from suppliers. Trade payables are classified as current liabilities if payment is due within one year or less (or in the normal operating cycle of the business if longer). If not, they are presented as non-current liabilities.

Trade payables are recognised initially at fair value and subsequently measured at amortised cost using the effective interest method.

2.19 Current and deferred income tax

The income tax expense or credit for the period is the tax payable on the current period's taxable income based on the applicable income tax rate for each jurisdiction adjusted by changes in deferred tax assets and liabilities attributable to temporary differences and to unused tax losses.

(a) Current income tax

The current income tax charge is calculated on the basis of the tax laws enacted or substantively enacted at the end of the reporting period in the countries where the company's subsidiaries and associates operate and generate taxable income. Management periodically evaluates positions taken in tax returns with respect to situations in which applicable tax regulation is subject to interpretation. It establishes provisions where appropriate on the basis of amounts expected to be paid to the tax authorities.

(b) Deferred income tax

Deferred income tax is provided in full, using the liability method, on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the consolidated financial statements. However, deferred tax liabilities are not recognised if they arise from the initial recognition of goodwill. Deferred income tax is also not accounted for if it arises from initial recognition of an asset or liability in a transaction other than a business combination that at the time of the transaction affects neither accounting nor taxable consolidated statement of comprehensive income. Deferred income tax is determined using tax rates (and laws) that have been enacted or substantially enacted by the end of the reporting period and are expected to apply when the related deferred income tax asset is realised or the deferred income tax liability is settled.

Deferred tax assets are recognised only if it is probable that future taxable amounts will be available to utilise those temporary differences and losses.

Deferred income tax liabilities are recognised on deductible temporary differences arising from investments in subsidiaries only to the extent that it is probable the temporary difference will reverse in the future and there is sufficient taxable profit available against which the temporary difference can be utilised.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(continued)*

2.19 Current and deferred income tax *(continued)*

(b) Deferred income tax *(continued)*

Deferred tax liabilities and assets are not recognised for temporary differences between the carrying amount and tax bases of investments in foreign operations where the company is able to control the timing of the reversal of the temporary differences and it is probable that the differences will not reverse in the foreseeable future.

Deferred tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets and liabilities and when the deferred tax balances relate to the same taxation authority. Current tax assets and tax liabilities are offset where the entity has a legally enforceable right to offset and intends either to settle on a net basis, or to realise the asset and settle the liability simultaneously.

Current and deferred tax is recognised in consolidated statement of comprehensive income, except to the extent that it relates to items recognised in other comprehensive income or directly in equity. In this case, the tax is also recognised in other comprehensive income or directly in equity, respectively.

2.20 Employee benefits

The Group contributes on a monthly basis to various defined contribution retirement benefit plans organized by the relevant governmental authorities. The Group's liability in respect of these plans is limited to the contributions payable in each period. Contributions to these plans are expensed as incurred. Assets of the plans are held and managed by government authorities and are separate from those of the Group.

2.21 Provisions

Provisions for legal claims, service warranties and make good obligations are recognised when the Group has a present legal or constructive obligation as a result of past events, it is probable that an outflow of resources will be required to settle the obligation and the amount can be reliably estimated. Provisions are not recognised for future operating losses.

Where there are a number of similar obligations, the likelihood that an outflow will be required in settlement is determined by considering the class of obligations as a whole. A provision is recognised even if the likelihood of an outflow with respect to any one item included in the same class of obligations may be small.

Provisions are measured at the present value of management's best estimate of the expenditure required to settle the present obligation at the end of the reporting period. The discount rate used to determine the present value is a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the liability. The increase in the provision due to the passage of time is recognised as interest expense.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(continued)*

2.22 Revenue recognition

Revenue is recognized when or as the control of the goods is transferred to customer. Depending on the terms of the contract and the laws that apply to the contract, control of the goods may be transferred over time or at a point in time.

When either party to a contract has performed, the Group presents the contract in the statement of financial position as a contract asset or a contract liability, depending on the relationship between the entity's performance and the customer's payment.

If a customer pays consideration or the Group has a right to an amount of consideration that is unconditional, before the Group transfers a good or service to the customer, the Group records the payment or receivable (which is earlier) as contract liability. A contract liability is the Group's obligation to transfer goods or services to a customer for which the Group has received consideration (or an amount of consideration is due) from the customer. The Group's contract liabilities were mainly resulted from sales of plate-type DeNOx catalysts, which is recorded in contract liabilities under current liabilities before and after the adoption of IFRS 15.

Sales of goods

The Group manufactures and sells plate-type DeNOx catalysts to coal-fired power plants (the "**Power Plants**"), certain engineering, procurement and construction (the "**EPCs**") service providers and boiler manufacturers in the PRC. The Group is responsible for the delivery of goods to customers' specified destinations after the sales contracts are signed. The customers are responsible for the test run of the function of the Group's products after installation, and will issue a preliminary acceptance certificate to the Group when the Group's products are qualified. Sales of plate-type DeNOx catalysts are recognised when control of the goods is transferred to the customers, generally coincides with the time of receipt of the preliminary acceptance certificate.

The Group also manufactures and sells DeNOx catalysts for diesel-powered vehicles. The Group normally signs the framework agreements with customers on annual basis. Selling price is negotiated and fixed at each purchase order. Revenue from the sale of DeNOx catalysts for diesel-powered vehicle is recognised at the point of time when control of the catalysts is transferred to customer, which is upon the completed delivery of the goods to the customer site.

Replacement service

The Group is engaged in providing DeNOx catalysts replacement service to the Power Plants and boiler manufacturers in the PRC. The Group is primarily responsible for the disassembly and disposal of the fully oxidated catalysts and the installation of the new DeNOx catalysts. Replacement service revenue is recognised when control of the service is transferred to the customer.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(continued)*

2.23 Earnings per share

(i) Basic earnings per share

Basic earnings per share is calculated by dividing:

- the profit attributable to owners of the company, excluding any costs of servicing equity other than ordinary shares by the weighted average number of ordinary shares outstanding during the financial year, adjusted for bonus elements in ordinary shares issued during the year and excluding treasury shares.

(ii) Diluted earnings per share

Diluted earnings per share adjusts the figures used in the determination of basic earnings per share to take into account:

- the after income tax effect of interest and other financing costs associated with dilutive potential ordinary shares, and

- the weighted average number of additional ordinary shares that would have been outstanding assuming the conversion of all dilutive potential ordinary shares.

2.24 Interest income

Interest income from financial assets at fair value through profit or loss is included in the net fair value gains/(losses) on these assets.

Interest income on financial assets at amortised cost and financial assets at fair value through other comprehensive income calculated using the effective interest method is recognised in the statement of profit or loss as part of other income.

Interest income is presented as finance income where it is earned from financial assets that are held for cash management purposes. Any other interest income is included in other gains.

Interest income is calculated by applying the effective interest rate to the gross carrying amount of a financial asset except for financial assets that subsequently become credit-impaired. For credit-impaired financial assets the effective interest rate is applied to the net carrying amount of the financial asset (after deduction of the loss allowance).

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(continued)*

2.25 Government grants

Grants from the government are recognised at their fair value where there is a reasonable assurance that the grant will be received and the Group will comply with all attached conditions.

Government grants relating to costs are deferred and recognised in the consolidated comprehensive income statements over the year necessary to match them with the costs that they are intended to compensate.

Government grants relating to property, plant and equipment are included in liabilities as deferred income and are credited to the consolidated comprehensive income statements on a straight-line basis over the expected useful lives of the related assets.

2.26 Operating leases

Leases in which a significant portion of the risks and rewards of ownership are not transferred to the Group as lessee are classified as operating leases. Payments made under operating leases (net of any incentives received from the lessor) are charged to the consolidated comprehensive income statements on a straight-line basis over the year of the lease.

2.27 Dividend distribution

Dividend distribution to the Company's shareholders is recognised as a liability in the Group's financial statements in the period in which the dividends are approved by the Company's shareholders or directors, where appropriate.

3. FINANCIAL RISK MANAGEMENT

The Group's activities expose it to a variety of financial risks: market risk (including currency risk, cash flow and fair value interest rate risk), credit risk and liquidity risk. The Group's overall risk management programme focuses on the unpredictability of financial markets and seeks to minimise potential adverse effects on the Group's financial performance. The Group currently does not use any derivative financial instruments to hedge certain risk exposures during the years ended 31 December 2019 and 2018.

3.1 Financial risk factors

(a) Market risk

(i) Foreign exchange risk

The Group is exposed to foreign exchange risk arising from various currency exposures. The Company's PRC subsidiaries' functional currency is RMB as majority of the revenues of these companies are derived from operations in the PRC. The Company and its oversea subsidiaries' functional currency is HK$ as most of the transactions of these companies are denominated and settled in HK$. Therefore, foreign exchange risk primarily arises from recognized assets and liabilities in the Group's subsidiaries incorporated in the PRC (the "**PRC Subsidiaries**") when receiving or to receive foreign currencies from counterparties. The Group does not hedge against any fluctuation in foreign currency.

3. FINANCIAL RISK MANAGEMENT *(continued)*

3.1 Financial risk factors *(continued)*

(a) Market risk *(continued)*

(i) Foreign exchange risk *(continued)*

For the PRC Subsidiaries, if US$ had weakened/strengthened by 10% against the RMB with all other variables held constant, profit before income tax for the year ended 31 December 2019 would have been lower/higher by RMB2,210,000 (2018: RMB1,405,000), mainly as a result of net foreign exchange losses on translation of US$-denominated cash and cash equivalents.

For the PRC Subsidiaries, if EUR€ had weakened/strengthened by 10% against the RMB with all other variables held constant, profit before income tax for the year ended 31 December 2019 would have been lower/higher by RMB127,000 (2018: RMB113,000), mainly as a result of net foreign exchange losses on translation of EUR€-denominated cash and cash equivalents.

For the PRC Subsidiaries, if HK$ had weakened/strengthened by 10% against the RMB with all other variables held constant, profit before income tax for the year ended 31 December 2019 would have been lower/higher by RMB3,404,000 (2018: RMB4,391,000), mainly as a result of net foreign exchange losses on translation of HK$-denominated cash and cash equivalents.

For group companies outside the PRC whose functional currency is HK$, if RMB had weakened/strengthened by 10% against the HK$ with all other variables held constant, profit before income tax for the year would have been lower/higher by RMB688,000 (2018: RMB684,000), mainly as a result of net foreign exchange losses on translation of RMB-denominated cash and cash equivalents and RMB-denominated other payable.

(ii) Cash flow and fair value interest rate risk

As the Group has no significant interest-bearing assets (other than cash and cash equivalents and restricted cash, details of which have been disclosed in Note 20), the Group's income and operating cash flows are substantially independent of changes in market interest rates.

The Group's interest rate risk primarily arises from financial assets at fair value through profit or loss (2018 – financial assets at fair value through profit or loss). During the years ended 31 December 2019 and 2018, the interest rate risk was not material to the Group.

3. FINANCIAL RISK MANAGEMENT *(continued)*

3.1 Financial risk factors *(continued)*

(b) Credit risk

Credit risk arises from cash and cash equivalents, and deposits with banks and financial institutions, as well as trade and bills receivables and other receivables.

To manage this risk, most of the Group's restricted cash and cash and cash equivalents were deposited in major financial institutions in the PRC with good credit rating. The Group categorises its major counterparties into the following groups:

- Group 1 – Top 4 banks in the PRC (China Construction Bank, Bank of China, Agricultural Bank of China, and Industrial and Commercial Bank of China) and Hong Kong and Shanghai Banking Corporation Limited in Hong Kong; and

- Group 2 – Other national and regional commercial banks in the PRC and reputable international financial institutions in Hong Kong.

Category	As at 31 December **2019** **RMB'000**	2018 RMB'000
Group 1	**88,790**	105,408
Group 2	**38,656**	40,007
	127,446	145,415

Therefore the Group expects that there is no significant credit risk associated with cash deposits at bank since they are all deposited at state-owned banks and other highly reputable financial institutions. Management does not expect that there will be any significant losses from non-performance of these counterparties.

For trade and other receivables, the Group has monitoring procedures to ensure that follow-up action is taken to recover overdue debts. In addition, the Group reviews the recoverability of these receivables at the end of each reporting period to ensure that adequate impairment losses are made for irrecoverable amounts. In this regard, the directors of the Company consider that the Group's credit risk is significantly reduced.

3. FINANCIAL RISK MANAGEMENT *(continued)*

3.1 Financial risk factors *(continued)*

(b) Credit risk *(continued)*

The Group considers the probability of default upon initial recognition of assets and whether there has been a significant increase in credit risk on an ongoing basis throughout each reporting period. To assess whether there is a significant increase in credit risk, the Group compares the risk of a default occurring on the asset as at the reporting date with the risk of default as at the date of initial recognition. It considers available reasonable and supportive forward-looking information. Especially the following indicators are incorporated:

- internal credit rating
- external credit rating
- actual or expected significant adverse changes in business, financial or economic conditions that are expected to cause a significant changes to the debtor's ability to meet its obligations
- significant changes in the expected performance or behaviour of the debtor, including changes in the payment status of the debtor

The Group applies the simplified approach to providing for expected credit losses prescribed by IFRS 9, which permits the use of the lifetime expected loss provision for all trade receivables.

To measure the expected credit losses, trade receivables have been grouped based on shared credit risk characteristics and the days past due.

The expected loss rates are based on the payment profiles of sales over a period of 36 month before 31 December 2019 or 1 January 2019 respectively and the corresponding historical credit losses experienced within this period. The historical loss rates are adjusted to reflect current and forward-looking information on macroeconomic factors affecting the ability of the customers to settle the receivables. The Group has identified the GDP and the unemployment rate of the countries in which it sells its goods and services to be the most relevant factors, and accordingly adjusts the historical loss rates based on expected changes in these factors.

3. FINANCIAL RISK MANAGEMENT *(continued)*

3.1 Financial risk factors *(continued)*

(b) ***Credit risk*** *(continued)*

On that basis, the loss allowance as at 31 December and 1 January 2019 (on adoption of IFRS 9) was determined as follows for trade receivables:

For sales of plate-type DeNOx catalysts:

31 December 2019	Current	More than 1 year	More than 2 years	More than 3 years	Total
Expected loss rate	**4.90%**	**11.05%**	**18.85%**	**32.82%**	
Gross carrying amount	**23,472**	**9,378**	**2,657**	**648**	**36,155**
Loss allowance	**1,151**	**1,036**	**501**	**212**	**2,900**

31 December 2018	Current	More than 1 year	More than 2 years	More than 3 years	Total
Expected loss rate	6.25%	12.32%	24.82%	49.15%	
Gross carrying amount	29,377	10,572	13,081	6,043	59,073
Loss allowance	1,837	1,302	3,247	2,970	9,356

The loss allowances for trade receivables as at 31 December reconcile to the opening loss allowances on 1 January as follows:

	Loss allowances for trade receivables 2019 RMB'000	Loss allowances for trade receivables 2018 RMB'000
Opening loss allowance at 1 January	**9,356**	**10,873**
Increase in loan loss allowance recognised in profit or loss during the year	**1,826**	**5,100**
Unused amount reversed	**(8,282)**	**(6,617)**
Closing loss allowance at 31 December	**2,900**	**9,356**

3. FINANCIAL RISK MANAGEMENT *(continued)*

3.1 Financial risk factors *(continued)*

(b) Credit risk (continued)

Other financial assets at amortised cost

Other financial assets at amortised cost are other receivables. In view of the history of cooperation with debtors and the sound collection history of receivable due from them, the outstanding other receivable balances due from them are considered to be low credit risk.

(c) Liquidity risk

The Group's policy is to regularly monitor current and expected liquidity requirements to ensure it maintains sufficient cash and cash equivalents and has available funding through adequate amount of committed credit facilities to meet its working capital requirements.

Maturities of financial liabilities

The tables below analyse the Group's financial liabilities into relevant maturity groupings based on their contractual maturities for all financial liabilities.

The amounts disclosed in the table are the contractual undiscounted cash flows of financial liabilities. Balances due within 12 months equal their carrying balances as the impact of discounting is not significant.

Contractual maturities of financial liabilities	Less than 1 year RMB'000	Between 1-2 years RMB'000	Between 2-3 years RMB'000	Total Contractual cash flows RMB'000	Carrying amount liabilities RMB'000
As at 31 December 2019					
Trade payables	6,849	–	–	6,849	6,849
Accruals and other payables (excluding payroll payable and tax payable)	6,622	–	–	6,622	6,622
Lease liabilities	1,146	–	53	1,199	1,580
	14,617	–	53	14,670	15,051

3. FINANCIAL RISK MANAGEMENT *(continued)*

3.1 Financial risk factors *(continued)*

(c) Liquidity risk *(continued)*

Contractual maturities of financial liabilities	Less than 1 year RMB'000
As at 31 December 2018	
Trade payables	3,822
Accruals and other payables (excluding payroll payable and tax payable)	11,770
	15,592

3.2 Capital management

The Group's objectives when managing capital are to safeguard their ability to continue as a going concern, so that they can continue to provide returns for shareholders and benefits for other stakeholders and to maintain an optimal capital structure to reduce the cost of capital.

The Group considers its capital structure as the aggregate of total equity and long-term debt less cash and short-term deposits. The Group manages its capital structure and makes adjustments to it in order to have funds available to support the business activities which the Board of Directors intends to pursue in addition to maximising the return to shareholders. The Board of Directors does not establish quantitative return on capital criteria for management, but rather relies on the expertise of the Group's management to sustain future development of the business. Management reviews its capital management approach on an on-going basis and believes that this approach, given the relative size of the Group, is reasonable.

3.3 Fair value estimation

(i) Fair value hierarchy

This section explains the judgements and estimates made in determining the fair values of the financial instruments that are recognised and measured at fair value in the financial statements. To provide an indication about the reliability of the inputs used in determining fair value, the Group has classified its financial instruments into the three levels prescribed under the accounting standards. An explanation of each level follows underneath the table.

3. FINANCIAL RISK MANAGEMENT *(continued)*

3.3 Fair value estimation *(continued)*

(i) *Fair value hierarchy* *(continued)*

At 31 December 2019	Level 1 RMB'000	Level 2 RMB'000	Level 3 RMB'000	Total RMB'000
Financial assets				
– Financial assets at fair value through other comprehensive income	**–**	**–**	**18,714**	**18,714**

At 31 December 2018	Level 1 RMB'000	Level 2 RMB'000	Level 3 RMB'000	Total RMB'000
Financial assets				
– Financial assets at fair value through other comprehensive income	–	–	6,569	6,569

The Group's policy is to recognise transfers into and transfers out of fair value hierarchy levels as at the end of the reporting period.

Level 1: The fair value of financial instruments traded in active markets (such as publicly traded derivatives, and trading and available-for-sale securities) is based on quoted market prices at the end of the reporting period. The quoted market price used for financial assets held by the Group is the current bid price. These instruments are included in level 1.

Level 2: The fair value of financial instruments that are not traded in an active market (for example, over-the-counter derivatives) is determined using valuation techniques which maximise the use of observable market data and rely as little as possible on entity-specific estimates. If all significant inputs required to fair value an instrument are observable, the instrument is included in level 2.

Level 3: If one or more of the significant inputs is not based on observable market data, the instrument is included in level 3. This is the case for unlisted equity securities.

3. FINANCIAL RISK MANAGEMENT *(continued)*

3.3 Fair value estimation *(continued)*

(ii) Valuation techniques used to determine fair values

Specific valuation techniques used to value financial instruments include:

- the use of quoted market prices or dealer quotes for similar instruments
- discounted cash flow analysis

All of the resulting fair value estimates are included in level 2 except for unlisted equity securities, a contingent consideration receivable and certain derivative contracts, where the fair values have been determined based on present values and the discount rates used were adjusted for counterparty or own credit risk.

(iii) Fair value measurements using significant unobservable inputs (level 3)

The following table presents the changes in level 3 items for the year ended 31 December 2019 and 2018:

	Financial assets at fair value through other comprehensive income RMB'000
Beginning balance at 1 January 2018	–
Acquisitions	50,756
Disposals	(44,187)
Closing balance at 31 December 2018	6,569
Acquisitions	86,503
Disposals	(74,358)
Closing balance at 31 December 2019	**18,714**

4. CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS

The preparation of financial statements requires the use of accounting estimates which, by definition, will seldom equal the actual results. Management also needs to exercise judgement in applying the Group's accounting policies.

Estimates and judgements are continually evaluated. They are based on historical experience and other factors, including expectations of future events that may have a financial impact on the entity and that are believed to be reasonable under the circumstances.

(a) Useful lives of property, plant and equipment

The Group determines the estimated useful lives for its property, plant and equipment based on the historical experience of the actual useful lives of property, plant and equipment of similar nature and functions. The Group will revise the depreciation charges where useful lives are different from previously estimated, or it will write off or write down technically obsolete or non-strategic assets that have been abandoned or sold.

(b) Useful lives of intangible assets

The Group determines the estimated useful lives for its intangible assets based on the historical experience, the duration of patent rights, and the estimated life span of the technical know-how. The Group will revise the amortisation charges where useful lives are different from previously estimated, or it will write off or write down technically obsolete or non-strategic assets that have been abandoned or sold.

(c) Impairment of property, plant and equipment, land use rights and intangible assets

Impairment losses for property, plant and equipment, land use rights and intangible assets are recognised for the amount by which the carrying amount exceeds its recoverable amount in accordance with the accounting policy stated in Note 2.11. The recoverable amounts, being the higher of fair value less costs to sell or value in use, are determined with reference to the best information available at each of the balance sheet date. Changing the assumptions selected by the Group's management in assessing impairment, including the discount rates, the sales growth rates and gross profit margin rates assumptions within the forecast period, could materially affect the recoverable amount and as a result affect the Group's financial position and results of operations. Details of the key assumptions and inputs used are disclosed in Note 12.

(d) Net realizable value of inventories

Net realizable value of inventories is the estimated selling price in the ordinary course of business, less estimated selling expenses. These estimates are based on the current market condition and the historical experience of selling products of similar nature. It could change significantly as a result of changes in customer taste and competitor actions in response to severe industry cycle. Management reassesses these estimates at each balance sheet date.

4. CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS *(continued)*

(e) Impairment of financial assets

The loss allowances for financial assets are based on assumptions about risk of default and expected loss rates. The Group uses judgement in making these assumptions and selecting the inputs to the impairment calculation, based on the Group's past history, existing market conditions as well as forward looking estimates at the end of each reporting period. Details of the key assumptions and inputs used are disclosed in the tables in Note 3.1(b).

(f) Income taxes and deferred income tax

The Group is subject to income taxes in different locations in the PRC. Judgement is required in determining the provision for income taxes in each of these jurisdictions. There are certain transactions and calculations during the ordinary course of business for which the ultimate tax determination is uncertain. Where the final tax outcome of these matters is different from the amounts that were initially recorded, such differences will impact the income tax and deferred income tax provisions in the year in which such determination is made.

Deferred income tax assets relating to certain temporary differences and tax losses are recognized when management considers it is probable that future taxable profits will be available against which the temporary differences or tax losses can be utilized. When the expectation is different from the original estimate, such differences will impact the recognition of deferred income tax assets and taxation charges in the year in which such estimate is changed.

(g) Warranty Provision

The Group usually provides a warranty year of one year from the issuance of the preliminary acceptance certificate. Management estimates the related provision for future warranty claims based on the past experiences as well as the best information available at each of the balance sheet date. If the actual claims costs differ from the estimated provision being provided for, this will have an impact on selling expenses in future year.

5. REVENUE FROM CONTRACTS WITH CUSTOMERS

	Year ended 31 December	
	2019	2018
	RMB'000	RMB'000
Sales of plate-type DeNOx catalysts	**53,894**	54,280
Sales of DeNOx catalysts for diesel-powered vehicles	**5,829**	156
Replacement services	**1,749**	–
Others	**68**	–
	61,540	54,436
Timing of revenue recognition		
– At a point in time	**61,540**	54,436

For the years ended 31 December 2019 and 2018, revenue from certain individual customer accounted for 10 percent or more of the Group's total revenue for the respective year. The revenue of these customers are summarised below:

	Year ended 31 December	
	2019	2018
Customer A	**23.16%**	n.a.
Customer B	**13.05%**	14.76%
Customer C	**10.72%**	n.a.

The Group has recognised following liabilities related to contracts with customers:

	As at 31 December 2019	As at 31 December 2018
Advances from customers – sale of plate-type DeNOx catalysts	**23,764**	10,147

The following table shows how much of the revenue recognised for the year ended 31 December 2019 related to carried-forward contract liabilities:

	Year ended 31 December 2019
Advances from customers – sale of plate-type DeNOx catalysts	**6,850**

6. EXPENSES BY NATURE

	Year ended 31 December	
	2019	2018
	RMB'000	RMB'000
Changes in work in progress, finished goods and goods in transit	**(20,512)**	(7,808)
Raw materials consumed and consumable used	**57,092**	47,278
Employee benefit expenses (Note 8)	**17,898**	15,395
Impairment losses of property, plant and equipment (Note 12)	**9,146**	6,046
Impairment losses of intangible assets (Note 14)	**5,737**	4,240
Depreciation and amortisation (Notes 12,13,14)	**9,026**	7,649
Research and development expenses	**5,087**	3,740
Utilities charges and office expenses	**3,909**	4,022
Professional service fees	**3,741**	2,250
Transportation and warehouse expense	**3,556**	3,742
Consulting service fees	**3,159**	2,020
Travelling, communication and entertainment expenses	**2,828**	2,485
Auditor's remuneration	**1,700**	1,650
Stamp duty, property tax and other surcharges	**1,016**	928
Bidding service expenses	**794**	830
Operating lease rentals	**215**	904
Conference fee	**90**	30
Provision for warranty	**521**	428
Inventory write-down (Note 17)	**(361)**	1,748
Others	**1,082**	1,425
	105,724	99,002

7. OTHER GAINS – NET

	Year ended 31 December	
	2019	2018
	RMB'000	RMB'000
Government grants (a)	**721**	164
Net foreign exchange losses	**(86)**	(115)
Losses on disposal of property, plant and equipment	**–**	(30)
Others	**(28)**	(6)
	607	13

(a) This amount represented the subsidy income granted to the Company by the government in Hebei, the PRC.

8. EMPLOYEE BENEFIT EXPENSES

	Year ended 31 December	
	2019	2018
	RMB'000	RMB'000
Wages, salaries and bonuses	**14,824**	12,510
Social welfare pension	**1,016**	1,072
Other social insurance and housing funds	**1,227**	1,049
Other welfare and allowance	**831**	764
	17,898	15,395

8. EMPLOYEE BENEFIT EXPENSES *(continued)*

(a) Five highest paid individuals

The five individuals whose emoluments were the highest in the Group for the year include three (2018: three) directors whose emoluments are reflected in the analysis shown in Note 32. The emoluments payable to the remaining two (2018: two) individuals during the year are as follows:

	Year ended 31 December	
	2019	2018
	RMB'000	RMB'000
Basic salaries and allowances	**1,262**	1,217
Discretionary bonuses	**126**	104
Social security insurance	**85**	79
	1,473	1,400

The emoluments of the remaining two highest paid individuals fell within the following bands:

	Year ended 31 December	
	2019	2018
Emolument band:		
Nil to HK$1,000,000	**1**	1
HK$1,000,001 to HK$1,500,000	**1**	1
	2	2

9. FINANCE (COSTS)/INCOME – NET

	Year ended 31 December	
	2019	2018
	RMB'000	RMB'000
Finance income		
Interest income on cash and cash equivalents and restricted cash	**552**	472
Net foreign exchange gains on financing activities	**–**	3,347
	552	3,819
Finance costs		
Net foreign exchange losses on financing activities	**(1,765)**	–
Interest expenses on lease liabilities	**(51)**	–
	(1,816)	–
Finance (costs)/income – net	**(1,264)**	3,819

10. INCOME TAX EXPENSES

	Year ended 31 December	
	2019	2018
	RMB'000	RMB'000
Current tax		
Current income tax expenses	**917**	793
Total current tax expenses	**917**	793
Deferred income tax		
Decrease in deferred tax liabilities (Note 16)	**(261)**	(554)
Total deferred tax benefits	**(261)**	(554)
Income tax expenses	**656**	239

10. INCOME TAX EXPENSES *(continued)*

The tax on the Group's loss before tax differs from the theoretical amount that would arise using the weighted average tax rate applicable to profits of the consolidated entities as follows:

	Year ended 31 December	
	2019	2018
	RMB'000	RMB'000
Loss before income tax	**(38,385)**	(39,217)
Tax calculated at domestic tax rate applicable to profits in the PRC (25%)	**(9,596)**	(9,804)
Tax effects of:		
Different tax rates applicable to different tax jurisdiction	**1,341**	1,244
Preferential tax benefits in the PRC	**3,433**	3,631
Tax losses for which no deferred income tax asset was recognised	**4,815**	5,447
Utilisation of previously unrecognised deductible temporary difference	**(2,294)**	(1,806)
Deductible temporary difference for which no deferred income tax asset was recognised	**2,795**	1,431
Expenses not deductible for tax purpose – Entertainment	**162**	96
Income tax expenses	**656**	239

(a) Cayman Islands income tax

The Company was incorporated in the Cayman Islands as an exempted company with limited liability under the Companies Law of Cayman Islands and, accordingly, is exempted from payment of Cayman Islands income tax.

(b) Hong Kong profits tax

Enterprises incorporated in Hong Kong are subject to profits tax rates of 16.5% for all the years presented. No Hong Kong tax was provided for as there was no estimated assessable profit that was subject to Hong Kong profits tax during the years ended 31 December 2019 and 2018.

(c) PRC corporate income tax

Enterprises incorporated in the PRC are generally subject to income tax rates of 25% throughout all the years presented except for enterprises with approval for preferential rate.

Beijing Denox and Gu'an Denox qualified as "New High-tech Enterprise" under the CIT Law in 2018. Accordingly, they were entitled to a preferential EIT rate of 15% for a three-year period since the qualification day. The applicable EIT rate of both entities was 15% in 2019.

10. INCOME TAX EXPENSES *(continued)*

(d) PRC withholding income tax

Pursuant to the applicable PRC tax regulations, a 10% withholding tax is levied on the dividends declared to foreign investors from the foreign investment enterprises established in the PRC. The requirement is effective from 1 January 2008 and applies to earnings after 31 December 2007. A lower withholding tax rate may be applied if there is a tax treaty between the PRC and the jurisdiction of the foreign investors. The Group has not provided for these withholding income taxes on the profit generated from the PRC Subsidiaries during the year ended 31 December 2019 as the directors have confirmed that the Group will reinvest the retained earnings of the PRC Subsidiaries in the foreseeable future.

11. LOSS PER SHARE

(a) Basic loss per share

Basic loss per share is calculated by dividing:

- the loss attributable to shareholders of the company
- by the weighted average number of ordinary shares outstanding during the financial year.

	Year ended 31 December	
	2019	2018
Loss attributable to shareholders of the Company (RMB'000)	**(40,058)**	(39,716)
Weighted average number of ordinary shares in issue (thousand shares)	**495,303**	498,978
Basic loss per share attributable to the shareholders of the Company (cents)	**(8)**	(8)

(b) Diluted loss per share

Diluted loss per share adjusts the figures used in the determination of basic loss per share to take into account:

- the after income tax effect of interest and other financing costs associated with dilutive potential ordinary shares, and
- the weighted average number of additional ordinary shares that would have been outstanding assuming the conversion of all dilutive potential ordinary shares.

The Group had no dilutive potential ordinary shares in issue during the years ended 31 December 2019 and 2018.

12. PROPERTY, PLANT AND EQUIPMENT

	Buildings RMB'000	Machinery RMB'000	Vehicles RMB'000	Office equipment and others RMB'000	Leasehold improvements RMB'000	Construction -in-progress ("CIP") RMB'000	Total RMB'000
Year ended 31 December 2018							
Opening net book value	31,797	8,504	358	682	62	15,232	56,635
Additions	–	638	105	16	–	219	978
Transfer from CIP	–	2,855	–	–	–	(2,855)	–
Disposals	–	(48)	(6)	(8)	–	–	(62)
Depreciation charge	(2,254)	(979)	(151)	(254)	(42)	–	(3,680)
Impairment (i)	–	(1,993)	–	–	–	(4,053)	(6,046)
Closing net book value	29,543	8,977	306	436	20	8,543	47,825
At 31 December 2018							
Cost	39,153	47,694	1,603	1,773	423	12,596	103,242
Accumulated depreciation and impairment	(9,610)	(38,717)	(1,297)	(1,337)	(403)	(4,053)	(55,417)
Net book value	29,543	8,977	306	436	20	8,543	47,825
Year ended 31 December 2019							
Opening net book value	**29,543**	**8,977**	**306**	**436**	**20**	**8,543**	**47,825**
Additions	**525**	**5,097**	**111**	**93**	**–**	**3,341**	**9,167**
Transfer from CIP	**–**	**11,381**	**–**	**–**	**–**	**(11,381)**	**–**
Depreciation charge	**(2,268)**	**(2,863)**	**(81)**	**(259)**	**–**	**–**	**(5,471)**
Impairment (i)	**–**	**(9,146)**	**–**	**–**	**–**	**–**	**(9,146)**
Closing net book value	**27,800**	**13,446**	**336**	**270**	**20**	**503**	**42,375**
At 31 December 2019							
Cost	**39,678**	**64,172**	**1,714**	**1,866**	**423**	**503**	**108,356**
Accumulated depreciation and impairment	**(11,878)**	**(50,726)**	**(1,378)**	**(1,596)**	**(403)**	**–**	**(65,981)**
Net book value	**27,800**	**13,446**	**336**	**270**	**20**	**503**	**42,375**

12. PROPERTY, PLANT AND EQUIPMENT *(continued)*

(i) Following the accounting policies stated in Note 2.11, the Group performs impairment testing on property, plant and equipment and intangible assets as the Group's continued loss from operations and delay in realisation of revenue generated from the sale of DeNOx catalysts for vehicles and vessels indicate that the carrying amount may not be recoverable. In 2019, the Group purchased various equipment so as to develop catalyst products for diesel-powered vehicles, natural gas-powered vehicles and other vehicles under China VI standards, and the CGU in relation to catalyst products for diesel-powered vehicles and vessels (the ''Diesel-powered Vehicle and Vessels CGU") was therefore changed to a CGU in relation to catalyst products for vehicles (the ''vehicles CGU") and a CGU in relation to catalyst products for vessels (the ''Vessels CGU"). For the year ended 31 December 2019, impairment of RMB9,146,000 and RMB5,737,000 has been provided for property, plant and equipment and intangible assets, respectively (2018: RMB6,046,000 and RMB4,240,000 for property, plant and equipment and intangible assets, respectively).

The Group's property, plant and equipment and intangible assets has been allocated to the following product lines or business process as cash-generating units for impairment testing. The following is a summary the carrying amount of property, plant and equipment and intangible assets included in each of the cash-generating units:

	As at 31 December	
	2019	2018
	RMB'000	RMB'000
Property, plant and equipment		
– Wuxi Denox stainless mesh production ("**Wuxi CGU**")	**5,882**	3,967
– Plate-type DeNOx catalysts production ("**Plate-type CGU**")	**2,301**	2,530
– Diesel-powered Vehicle and Vessels CGU	**–**	17,069
– DeNOx catalysts for vehicles ("**Vehicles CGU**")	**4,913**	–
– DeNOx catalysts for vessels ("**Vessels CGU**")	**9,999**	–
Total carrying amount	**23,095**	23,566
Intangible assets		
– Wuxi CGU	**3,622**	5,212
– Plate-type CGU	**133**	306
– Diesel-powered Vehicle and Vehicles CGU	**–**	10,847
– Vehicles CGU	**983**	–
– Vessels CGU	**4,754**	–
Total carrying amount	**9,492**	16,365

12. PROPERTY, PLANT AND EQUIPMENT *(continued)*

(i) *(continued)*

The recoverable amounts of the above cash-generating units have been determined based on their value in use. These calculations use pre-tax cash flow projections based on financial budgets approved by management covering the remaining useful lives period.

For each of the CGUs, the key assumptions used for the value-in-use calculations in 2019 and 2018 are as follows. In addition, where there has been an impairment loss in CGUs, the recoverable amount is also disclosed in below.

2019	**Vehicle CGU**	**Vessels CGU**
Pre-tax discount rate (%)	**20.25%**	**16.98%**
Sales growth rate (%)	**0%~653.86%**	**0%~143.17%**
Gross profit margin (%)	**14.16%~28.69%**	**-19.83%~23.32%**
Recoverable amount of CGU (RMB'000)	**N/A**	**854**

2018	Wuxi CGU	Plate-type CGU	Diesel-powered Vehicle and Vessels CGU
Pre-tax discount rate (%)	24.16%	19.04%	17.77%
Sales growth rate (%)	4.85%~12.23%	7.46%~30.94%	0.00%~370.59%
Gross profit margin (%)	21.21%~23.95%	8.17%~23.17%	-19.21%~18.25%
Recoverable amount of CGU (RMB'000)	7,859	N/A	18,950

12. PROPERTY, PLANT AND EQUIPMENT *(continued)*

(ii) Impact of possible changes in assumptions

With all other variables held constant, increasing the pre-tax discount rate by 1% from management's original estimates will not give rise to any further impairment.

With all other variables held constant, decreasing the sales quantity by 1% from management's original estimates will not give rise to any further impairment.

(iii) Depreciation and impairment expenses have been charged to the consolidated statement of comprehensive income as follows:

	Year ended 31 December	
	2019	2018
	RMB'000	RMB'000
Cost of sales	**2,214**	3,163
Administrative expenses	**12,403**	6,563
	14,617	9,726

As at 31 December 2019, the Group is in the process of applying for registration of the ownership certificates for certain of its buildings with an aggregate net book value of RMB5,947,000 (2018: RMB6,207,000).

13. RIGHT-OF-USE ASSETS

	Land use rights (i) RMB'000	Properties RMB'000	Vehicles RMB'000	Total RMB'000
At 1 January 2019	15,334	2,675	116	18,125
Depreciation	(350)	(535)	(36)	(921)
At 31 December 2019	**14,984**	**2,140**	**80**	**17,204**

(i) The Group's land use rights are located in Gu'an and Wuxi, the PRC, with an original lease term of 50 years.

The following is the lease liabilities recognised after the date of initial application:

	31 December 2019 RMB'000	1 January 2019 RMB'000
Lease liabilities		
Current	**1,045**	–
Non-current	**535**	1,529
	1,580	1,529

Interest expenses related to these lease liabilities were RMB51,000 for the year ended 31 December 2019, and the total cash outflow for leases in 2019 was Nil.

The Group is a lessee of various offices. Rental contracts are typically made for fixed periods of 2 to 5 years but may have extension option as described below. Lease terms are negotiated on an individual basis and contain a wide range of different terms and conditions. The lease agreements do not impose any covenants other than the security interests in the leased assets that are held by the lessor. Leased assets may not be used as security for borrowing purposes.

Extension and termination options

Extension and termination options are included in a number of property and equipment leases across the Group. These terms are used to maximise operational flexibility in terms of managing contracts. The majority of extension and termination options held are exercisable only by the Group and not by the respective lessor.

14. INTANGIBLE ASSETS

	Goodwill RMB'000	Patent rights RMB'000	Technical know-how RMB'000	Software RMB'000	Total RMB'000
Year ended 31 December 2018					
Opening net book value	–	271	19,711	5	19,987
Amortisation charge	–	(135)	(3,482)	(1)	(3,618)
Impairment (Note 12)	–	–	(4,240)	–	(4,240)
Closing net book value	–	136	11,989	4	12,129
As at 31 December 2018					
Cost	7,262	8,124	31,640	7	47,033
Accumulated amortisation and impairment	(7,262)	(7,988)	(19,651)	(3)	(34,904)
Net book value	–	136	11,989	4	12,129
Year ended 31 December 2019					
Opening net book value	**–**	**136**	**11,989**	**4**	**12,129**
Amortisation charge	**–**	**(124)**	**(2,509)**	**(1)**	**(2,634)**
Impairment (Note 12)	**–**	**–**	**(5,737)**		**(5,737)**
Closing net book value	**–**	**12**	**3,743**	**3**	**3,758**
As at 31 December 2019					
Cost	**7,262**	**8,124**	**31,640**	**7**	**47,033**
Accumulated amortisation and impairment	**(7,262)**	**(8,112)**	**(27,897)**	**(4)**	**(43,275)**
Net book value	**–**	**12**	**3,743**	**3**	**3,758**

14. INTANGIBLE ASSETS *(continued)*

Amortisation and impairment charge of intangible assets has been charged to the consolidated statement of comprehensive income as follows:

	Year ended 31 December	
	2019	2018
	RMB'000	RMB'000
Cost of sales	**3,422**	3,885
Administrative expenses	**4,949**	3,973
	8,371	7,858

15. SUBSIDIARIES

The following is a list of the principal subsidiaries at 31 December 2019:

Company Name	Jurisdiction and Date of Incorporation/ Establishment	Issued and Fully Paid Share Capital/ Registered Capital	Equity Interest Held	Principal Activities and Place of Operation
Directly held by the Company				
Denox Investments Holdings Limited	BVI/ 12 November 2014	US$1/US$1	100%	Investment holding, BVI
Indirectly held by the Company				
Denox Environmental & Technology (HK) Investments Co., Ltd.	Hong Kong/ 21 November 2014	HK$1/HK$1	100%	Investment holding, Hong Kong
Beijing Denox Environmental & Technology Co., Ltd. ("**Beijing Denox**") (北京迪諾斯環保科技有限公司)	Beijing, the PRC/ 30 September 2010	RMB250,000,000/ RMB250,000,000	100%	Plate-type DeNOx catalysts design, distribution and selling, the PRC
Gu'an Denox Environmental Equipment Manufacturing Co., Ltd. ("**Gu'an Denox**") (固安迪諾斯環保設備製造有限公司)	Gu'an, the PRC/ 27 August 2010	RMB250,000,000/ RMB250,000,000	100%	Plate-type DeNOx catalysts production, the PRC
Wuxi Denox Environmental & Technology Co., Ltd. ("**Wuxi Denox**") (無錫迪諾斯環保科技有限公司)	Wuxi, the PRC/ 19 June 2012	RMB250,000,000/ RMB250,000,000	51%	Stainless steel mesh production, the PRC

15. SUBSIDIARIES *(continued)*

The total comprehensive income attributable to the non-controlling interest is summarized as follows:

	For the year ended 31 December	
	2019	2018
	RMB'000	RMB'000
Wuxi Denox Environmental& Technology Co., Ltd.	**1,017**	260

(a) Significant restrictions

Cash and cash equivalents and restricted cash of the Group, amounting to approximately RMB65,065,000, are held in Mainland China and are subject to local exchange control regulations. These local exchange control regulations provide for restrictions on payment of dividends, share repurchase and offshore investments, etc.

(b) Summarised financial information on subsidiaries with material non-controlling interests

The directors of the Company does not considered that the non-controlling interests of Wuxi Denox is significant to the Group, therefore, no summarised financial information of the relevant subsidiaries is presented separately.

16. DEFERRED INCOME TAX

Deferred tax liabilities

	As at 31 December	
	2019	2018
	RMB'000	RMB'000
The balance comprises temporary differences attributable to:		
Valuation adjustment resulting from acquisition of a subsidiary	**1,550**	1,811
Total deferred tax liabilities	**1,550**	1,811

16. DEFERRED INCOME TAX *(continued)*

Deferred tax liabilities *(continued)*

Movement	Valuation adjustments resulting from acquisition of a subsidiary RMB'000
As at 1 January 2018	2,365
Charged to the consolidated statement of comprehensive income	(554)
As at 31 December 2018	1,811
Charged to the consolidated statement of comprehensive income	(261)
At 31 December 2019	1,550

Deferred income tax assets are recognized for tax loss and deductible temporary difference carry-forwards to the extent that the realization of related tax benefits through future taxable profits is probable. As at 31 December 2019, the Group did not recognise deferred income tax assets of RMB33,194,000 (31 December 2018: RMB27,649,000) in respect of tax losses amounting to RMB146,595,000 (31 December 2018: RMB114,358,000) and deductible temporary differences for which no deferred tax assets was recognised of RMB62,088,000 (31 December 2018: RMB60,084,000), respectively that can be carried forward against future taxable income. Estimated tax losses of RMB140,027,000 (31 December 2018: RMB106,386,000) will expire within 5 years from 31 December 2019 respectively. The remaining portion of the tax losses, mainly relating to Hong Kong company, can be carried forward indefinitely.

17. INVENTORIES

	As at 31 December	
	2019	2018
	RMB'000	RMB'000
Raw materials	**14,675**	14,534
Work-in-progress	**818**	4,716
Finished goods	**17,510**	10,814
Goods in transit	**26,922**	10,565
	59,925	40,629

Inventories recognised as cost of sales during the year ended 31 December 2019 amounted to RMB54,682,000 (2018: RMB56,165,000).

Reversal of write-downs of inventories to net realisable value amounted to RMB361,000 for the year ended 31 December 2019 (2018: provision for inventories write-down: RMB1,748,000). These were recognised as cost of sales in consolidated statement of comprehensive income.

18. TRADE RECEIVABLES

	As at 31 December	
	2019	2018
	RMB'000	RMB'000
Trade receivables	**36,155**	59,073
Less: allowance (Note 3.1)	**(2,900)**	(9,356)
	33,255	49,717

Trade receivables are denominated in the following currencies:

	As at 31 December	
	2019	2018
	RMB'000	RMB'000
RMB	**35,926**	56,329
US$	**49**	2,564
EUR€	**180**	180
	36,155	59,073

(a) Ageing analysis of gross trade receivables based on the date of revenue recognition at the respective balance sheet dates is as follows:

	As at 31 December	
	2019	2018
	RMB'000	RMB'000
Within 1 year	**23,472**	29,377
1 year to 2 years	**9,378**	10,572
2 years to 3 years	**2,657**	13,081
Over 3 years	**648**	6,043
	36,155	59,073

(b) Fair values of trade receivables

Due to the short-term nature of the current receivables, their carrying amount is considered to be the same as their fair value.

(c) Impairment and risk exposure

Information about the impairment of trade receivables and the group's exposure to credit risk, foreign currency risk and interest rate risk can be found in Note 3.1.

19. PREPAYMENTS, DEPOSITS AND OTHER RECEIVABLES

	As at 31 December	
	2019	2018
	RMB'000	RMB'000
Included in non-current assets		
Prepayments for acquisition of property, plant and equipment	**55**	902
Long-term prepaid expenses	**85**	866
	140	1,768
Included in current assets		
Value-added tax recoverable	**6,263**	7,543
Deposits	**1,287**	1,461
Prepayments to suppliers	**591**	1,105
Staff advance	**313**	388
Export tax refund	**50**	503
Prepayment for professional service fee	**75**	199
Prepaid employees' housing subsidy	**–**	146
Prepayment for marketing service fee	**–**	–
Amount due from a third party agent	**–**	927
Prepayments for rental of office	**–**	575
Others	**611**	750
	9,190	13,597
Total	**9,330**	15,365

As at 31 December 2019 and 2018, the carrying amounts of prepayments, deposits and other receivables approximated their fair values. As at 31 December 2019 and 2018, there were no significant balances that were past due.

The maximum exposure to credit risk at each of the reporting date is the carrying value of each class of prepayments, deposits and other receivables mentioned above.

19. PREPAYMENTS, DEPOSITS AND OTHER RECEIVABLES *(continued)*

Prepayments, deposits and other receivables are denominated in the following currencies:

	As at 31 December	
	2019	2018
	RMB'000	RMB'000
RMB	**9,255**	15,058
HK$	**–**	258
US$	**75**	49
	9,330	15,365

20. CASH AND BANK BALANCES

	As at 31 December	
	2019	2018
	RMB'000	RMB'000
Current		
Cash at bank and in hand	**125,415**	145,424
Restricted cash (a)	**2,118**	889
	127,533	146,313
Non-current		
Restricted cash (a)	**–**	1,901
Total cash and cash equivalents and restricted cash	**127,533**	148,214

(a) Restricted bank deposits were held as guarantee for bidding, product quality and performance of the Group's sales contracts.

Cash and cash equivalents are denominated in the following currencies:

	As at 31 December	
	2019	2018
	RMB'000	RMB'000
RMB	**70,112**	32,018
HK$	**34,463**	80,896
US$	**21,921**	34,315
EUR€	**1,037**	985
	127,533	148,214

21. FINANCIAL ASSETS AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME

The Group holds the following financial instruments:

	As at 31 December	
	2019	2018
	RMB'000	RMB'000
Bill receivables	**18,714**	6,569

As at 31 December 2019 and 2018, financial assets at fair value through other comprehensive income represented bills receivable where the contractual cash flows are solely principal and interest and the objective of the Group's business model is achieved both by collecting contractual cash flows and selling financial assets.

22. SHARE CAPITAL AND TREASURY STOCK

	Number of shares of US$0.01 each issued	Share capital	Treasury stock
		RMB'000	RMB'000
As at 31 December 2018	496,758,000	31,596	(635)
Cancellation of ordinary shares	(1,409,000)	(90)	635
Repurchase of ordinary shares	–	–	(362)
As at 31 December 2019	495,349,000	31,506	(362)

During the year ended 31 December 2018, the Company repurchased in aggregate 4,651,000 ordinary shares on the Stock Exchange of Hong Kong Limited, out of which 3,242,000 repurchased ordinary shares had been cancelled and the remaining 1,409,000 repurchased ordinary shares were recorded as treasury stock as at 31 December 2018 and were cancelled and deducted from share capital and share premium in 2019.

In December 2019, the Company repurchased in aggregate 1,312,000 ordinary shares of the Company on the Stock Exchange of Hong Kong Limited. The total amount paid to repurchase of these ordinary shares was HK$402,239 (approximately RMB361,628). These shares had not been cancelled in 2019, and were recorded as treasury stock as at 31 December 2019.

23. SHARE PREMIUM AND CAPITAL AND OTHER RESERVES

	Share premium RMB'000	Capital reserves RMB'000	Statutory reserves RMB'000	Share-based compensation reserve RMB'000	Currency translation differences RMB'000	Total RMB'000
At 1 January 2018	851,181	(552,410)	12,665	10,214	6,806	328,456
Appropriation to statutory reserves	–	–	219	–	–	219
Currency translation differences	–	–	–	–	3,260	3,260
Repurchase and cancellation of ordinary shares	(533)	–	–	–	–	(533)
At 31 December 2018	850,648	(552,410)	12,884	10,214	10,066	331,402
Appropriation to statutory reserves	–	–	283	–	–	283
Currency translation differences	–	–	–	–	1,462	1,462
Repurchase and cancellation of ordinary shares (Note 22)	(545)	–	–	–	–	(545)
At 31 December 2019	850,103	(552,410)	13,167	10,214	11,528	332,602

In accordance with the respective articles of association and board resolutions, the PRC Subsidiaries appropriate certain percentage of the annual statutory net profits, after offsetting any prior year losses as determined under the PRC accounting standards, to the statutory surplus reserve fund before distributing any dividends. The statutory surplus reserve fund can be used to offset prior year losses, if any, and may be converted into paid-in capital. For the years ended 31 December 2019 and 2018, RMB283,000 and RMB219,000 were appropriated from retained earnings to the statutory surplus reserve fund.

24. TRADE PAYABLES

	As at 31 December	
	2019	2018
	RMB'000	RMB'000
Third party	**6,849**	3,822

24. TRADE PAYABLES *(continued)*

Ageing analysis of trade payables based on invoice date as at 31 December 2019 and 2018 was as follows:

	As at 31 December	
	2019	2018
	RMB'000	RMB'000
Within 6 months	**6,698**	3,558
6 months to 1 year	**39**	–
1 to 2 years	**–**	124
Over 2 years	**112**	140
	6,849	3,822

As at 31 December 2019 and 2018, all trade payables were denominated in RMB.

25. ACCRUALS AND OTHER PAYABLES

	As at 31 December	
	2019	2018
	RMB'000	RMB'000
Included in current liabilities		
Payables for purchases of property, plant and equipment and CIP	**2,785**	4,285
Payroll and welfare payables	**3,683**	3,121
Payables for purchases of land use rights	**–**	2,573
Payables for consulting service fee	**897**	1,352
Amount due to non-controlling interest (Note 29(c))	**610**	830
Accruals and payables for utilities and transportation fee	**755**	826
Accrual for audit fees	**615**	600
Warranty provision	**653**	621
Value-added and other taxes payables	**135**	118
Others	**307**	683
	10,440	15,009
Included in non-current liabilities		
Deferred government grants	**–**	10
	10,440	15,019

26. DIVIDENDS

No dividend has been declared or paid by the Group during the years ended 31 December 2019 and 2018.

27. NOTES TO CONSOLIDATED STATEMENT OF CASH FLOWS

(a) Reconciliation of loss before income tax to net cash generated from operations

	Year ended 31 December 2019 RMB'000	2018 RMB'000
Loss before income tax	**(38,385)**	(39,217)
Adjustments for:		
– Depreciation and impairment of property, plant and equipment (Note 12)	**14,617**	9,726
– Amortisation of land use rights	**–**	351
– Amortisation of right-of-use assets (Note 13)	**921**	–
– Amortisation and impairment of intangible assets (Note 14)	**8,371**	7,858
– Loss on disposal of property, plant and equipment (Note 7)	**–**	30
– Reversal of impairment of receivables	**(6,456)**	(1,517)
– Write-down of inventories (Note 17)	**(361)**	1,748
– Foreign exchange (gain)/loss (Note 9)	**1,765**	(3,347)
– Interest income (Note 9)	**(552)**	(472)
– Interest expense (Note 9)	**51**	–
Operating loss before working capital changes	**(20,029)**	(24,840)
Change in operating assets and liabilities:		
– Inventories	**(18,935)**	(6,799)
– Trade receivables	**22,918**	2,240
– Financial assets at fair value through other comprehensive income	**(12,145)**	(7,869)
– Prepayments, deposits and other receivables	**3,760**	(1,261)
– Trade payables	**3,027**	(2,158)
– Contract Liabilities	**13,617**	4,436
– Accruals and other payables	**(504)**	757
Cash flow used in operations	**(8,291)**	(35,494)

(b) In the consolidated cash flow statements, proceeds from disposal of property, plant and equipment comprise:

	Year ended 31 December 2019 RMB'000	2018 RMB'000
Net book amount disposed (Note 12)	**–**	62
Loss on disposal of property, plant and equipment (Note 7)	**–**	(30)
Proceeds from disposal of property, plant and equipment	**–**	32

28. COMMITMENTS

(a) Capital commitments

As at 31 December 2019 and 2018, the Group's capital expenditure commitment is shown below:

	As at 31 December	
	2019	2018
	RMB'000	RMB'000
Commitment in respect of an associate:		
Commitment to provide funding for an associate's capital commitment, if called (i)	**2,000**	–
Capital expenditure contracted for but not provided in the consolidated financial statement in respect of:		
Acquisition of property, plant and equipment	**–**	642
	2,000	642

(i) In February 2019, Gu'an Denox, a subsidiary of the Company, and two third party individuals established Langfang Denox Environmental & Technology Co., Ltd., a company planned to engage in development and manufacture of DeNOx catalysts for vehicles. In which the Group will make a capital contribution of RMB2,000,000 and hold 40% of its total equity interests. No operation activities had been carried out in this entity in 2019.

(b) Operating lease commitments

The future aggregate minimum lease payments under non-cancellable operating leases for the Group's rented premises are as follows:

	As at 31 December	
	2019	2018
	RMB'000	RMB'000
Over 1 year	**–**	790

29. RELATED PARTY TRANSACTIONS

Parties are considered to be related if one party has the ability, directly or indirectly, control the other party or exercise significant influence over the other party in making financial and operation decisions. Parties are also considered to be related if they are subject to common control. Members of key management and their close family member of the Group are also considered as related parties.

The Controlling Shareholder of the Company is Zhao Shu who directly and indirectly holds 33.88% of the Company's shares as at 31 December 2019 (the percentage is calculated based on 459,349,000 shares in issue as at 31 December 2019).

The related party transactions undertaken during the year ended 31 December 2019 as set out in this note constituted continuing connected transactions as defined in Chapter 14A of the Listing Rules. The Company has complied with all disclosure requirements as set out in Chapter 14A of the Listing Rules.

29. RELATED PARTY TRANSACTIONS *(continued)*

(a) The following companies and persons are related parties of the Group during the years ended 31 December 2019 and 2018:

Names of the related parties	Nature of relationship
Mr. Chen Qizhao	Close family member of the Controlling Shareholder
Zhongyu Environmental Engineering (Beijing) Co., Ltd. (中禹環境工程（北京）有限公司)	Controlled by a director of the the Company
Mr. Chen Zhengfang	Non-controlling shareholder of Wuxi Denox

(b) Transactions with related parties

Save as disclosed elsewhere in the financial statements, the Group has the following transactions with related parties, which are all discontinued transactions except for operating lease expenses and rental fee as disclosed in Note 29(b) below:

	Year ended 31 December	
	2019	2018
	RMB'000	RMB'000
Operating lease expenses charged by related parties:		
Mr. Chen Qizhao	**313**	313
Zhongyu Environmental Engineering (Beijing) Co., Ltd.	**42**	36
	355	349

(c) Balance with related parties

	As at 31 December	
	2019	2018
	RMB'000	RMB'000
(i) Prepayment for operating leases:		
Mr. Chen Qizhao	**313**	626
Zhongyu Environmental Engineering (Beijing) Co., Ltd.	**80**	116
	393	742
(ii) Payable to related parties:		
Shareholder loan		
– Mr. Chen Zhengfang	**610**	830

Mr. Chen Zhengfang provided shareholder loans to Wuxi Denox. These loans were unsecured, interest free, and with no fixed payment term.

29. RELATED PARTY TRANSACTIONS *(continued)*

(d) Key management compensation

Key management includes directors and top management. The compensation paid or payable to key management for employee services is shown below:

	Year ended 31 December	
	2019	2018
	RMB'000	RMB'000
Basic salaries and allowances	**2,219**	2,133
Discretionary bonuses	**234**	158
Other benefits including pension	**243**	226
	2,696	2,517

30. SUBSEQUENT EVENTS

Upon the outbreak of Coronavirus Disease 2019 ("COVID-19 outbreak") in early 2020 in the PRC, a series of precautionary and control measures have been and continued to be implemented across the country/region. As at the date of these financial statements were authorised to issue, the Group has resumed its operations, no customers of the Group have cancelled their orders and raw materials supply resumes to normal level, and the Group was not aware of any material adverse effects on the financial statements as a result of COVID-19 outbreak. The Group will pay close attention to the development of the COVID-19 outbreak and evaluate its impact on the financial position and operating results of the Group.

31. BALANCE SHEET AND RESERVE MOVEMENT OF THE COMPANY

	Note	As at 31 December 2019 RMB'000	 2018 RMB'000
ASSETS			
Non-current assets			
Amounts due from a subsidiary		**191,755**	288,490
Total non-current assets		**191,755**	288,490
Current assets			
Cash and cash equivalents		**62,031**	65,477
Prepayments, deposits and other receivables		**75**	334
Total current assets		**62,106**	65,811
Total assets		**253,861**	354,301
EQUITY AND LIABILITIES			
Equity attributable to shareholders of the Company			
Share capital		**31,506**	31,596
Share premium		**850,103**	850,648
Other reserves	a	**46,215**	38,006
Accumulated losses	a	**(686,217)**	(578,142)
Total Equity		**241,607**	342,108
LIABILITIES			
Current liabilities			
Payroll payable		**209**	204
Accruals and other payables		**187**	183
Amount due to subsidiaries		**11,858**	11,806
Total current liabilities		**12,254**	12,193
Total liabilities		**12,254**	12,193
Total equity and liabilities		**253,861**	354,301

The balance sheet of the Company was approved by the Board of Directors on 27 March 2020 and was signed on its behalf:

ZHAO Shu
Director

KONG Hongjun
Director

31. BALANCE SHEET AND RESERVE MOVEMENT OF THE COMPANY *(continued)*

(a) Reserve movement of the Company

	Accumulated losses RMB'000	Other reserves RMB'000
At 1 January 2018	(390,090)	17,819
Loss for the year	(188,052)	–
Currency translation differences	–	20,187
At 31 December 2018	(578,142)	38,006
At 1 January 2019	**(578,142)**	**38,006**
Loss for the year	**(108,075)**	**–**
Currency translation differences	**–**	**8,209**
At 31 December 2019	**(686,217)**	**46,215**

32. BENEFITS AND INTERESTS OF DIRECTORS

(a) Directors' emoluments

For the year ended 31 December 2019:

Emoluments paid or receivable in respect of a person's services as a director, whether of the company or its subsidiary undertaking:

Name	Salary RMB'000	Discretionary bonuses RMB'000	Social security insurance RMB'000	Total RMB'000
Executive Directors				
Ms. Zhao Shu (i)	**238**	**36**	**53**	**327**
Mr. Kong Hongjun (i)	**199**	**36**	**53**	**288**
Mr. Li Ke (i)	**200**	**36**	**53**	**289**
Non-executive Directors				
Mr. Li Xingwu (ii)	**–**	**–**	**–**	**–**
Mr. Teo Yi-Dar (ii)	**–**	**–**	**–**	**–**
Independent Non-executive Directors				
Mr. Li Min (iii)	**106**	**–**	**–**	**106**
Mr. Lam Yiu Por (iii)	**106**	**–**	**–**	**106**
Mr. Ong Chor Wei (iii)	**106**	**–**	**–**	**106**

32. BENEFITS AND INTERESTS OF DIRECTORS *(continued)*

(a) Directors' emoluments *(continued)*

For the year ended 31 December 2018:

Emoluments paid or receivable in respect of a person's services as a director, whether of the company or its subsidiary undertaking:

Name	Salary RMB'000	Discretionary bonuses RMB'000	Social security insurance RMB'000	Total RMB'000
Executive Directors				
Ms. Zhao Shu (i)	229	18	49	296
Mr. Kong Hongjun (i)	190	18	49	257
Mr. Li Ke (i)	190	18	49	257
Non-executive Directors				
Mr. Li Xingwu (ii)	–	–	–	–
Mr. Teo Yi-Dar (ii)	–	–	–	–
Independent Non-executive Directors				
Mr. Li Min (iii)	103	–	–	103
Mr. Lam Yiu Por (iii)	103	–	–	103
Mr. Ong Chor Wei (iii)	103	–	–	103

(i) On 7 November 2014, 9 February 2015 and 9 February 2015, Ms. Zhao Shu, Mr. Kong Hongjun and Mr. Li Ke were appointed as the executive directors of the Company, respectively. No director has waived or agreed to waive any emoluments during the years ending 31 December 2019 and 2018.

(ii) On 7 November 2014, and 9 February 2015, Mr. Li Xingwu, and Mr. Teo Yi-Dar were appointed as the non-executive directors of the Company, respectively. They had not received any emoluments during the years ending 31 December 2019 and 2018.

(iii) On 18 October 2015, Mr. Li Junhua, Mr. Lam Yiu Por, and Mr. Ong Chor Wei were appointed as the independent non-executive directors of the Company, respectively. On 1 November 2017, Mr. Li Ming was appointed as the independent non-executive directors of the Company, Mr. Li Junhua resigned as non-executive director of the Company.

32. BENEFITS AND INTERESTS OF DIRECTORS *(continued)*

(b) Directors' retirement benefits

During the year ended 31 December 2019, no retirement benefits were paid to or receivable by the directors in respect of their other services in connection with the management of the affairs of the Company or its subsidiary undertaking (2018: same).

(c) Directors' termination benefits

During the year ended 31 December 2019, none of the directors received any emolument from the Group as leave the Group or as compensation for loss of office (2018: same).

(d) Consideration provided to third parties for making available directors' services

During the year ended 31 December 2019, no consideration has been provided to third parties for making available directors' services (2018: same).

(e) Directors' material interests in transactions, arrangements or contracts

No significant transactions, arrangements and contracts in relation to the Group's business to which the Company was a party and in which a director of the Company had a material interest, whether directly or indirectly, subsisted at 31 December 2019 and 2018 or at any time during the years ended 31 December 2019 and 2018.

RESULTS

	Year ended 31 December				
	2015 RMB'000	2016 RMB'000	2017 RMB'000	2018 RMB'000	**2019** **RMB'000**
Revenue	149,604	69,780	48,351	54,436	**61,540**
Gross profit/(loss)	48,744	(23,337)	(13,392)	(3,847)	**6,660**
Operating profit/(loss)	(7,548)	(57,354)	(71,327)	(43,036)	**(37,121)**
Profit/(loss) before income tax	31,213	(59,313)	(73,567)	(39,217)	**(38,385)**
Profit/(loss) for the year attributable to shareholders of the Company	25,546	(60,416)	(72,999)	(39,716)	**(40,058)**

ASSETS AND LIABILITIES

	As at 31 December				
	2015 RMB'000	2016 RMB'000	2017 RMB'000	2018 RMB'000	**2019** **RMB'000**
Total assets	494,365	456,337	375,930	335,782	**312,094**
Total liabilities	45,035	41,212	40,613	37,310	**51,563**
Total equity	449,330	415,125	335,317	298,472	**260,531**

GLOSSARY

"CG Code"	Corporate Governance Code and Corporate Governance Report contained in Appendix 14 of the Listing Rules
"China" or the "PRC"	the People's Republic of China and, except where the context requires and only for the purpose of this annual report, references in this annual report to China and the PRC exclude Taiwan, Macau Special Administrative Region and Hong Kong Special Administrative Region
"DeNOx"	the process of reducing the NOx concentration in industrial flue gas emissions
"DeNOx catalyst"	a kind of chemical substance which is the core component of SCR, and acts by producing the chemical reaction to convert NOx into N2 and H2O. The basic element of the catalyst mainly includes TiO 2 and V2O5
"Listing Date"	12 November 2015, being the date on which dealing in the Shares first commenced on the main board of the Stock Exchange
"Listing Rules"	the Rules Governing the Listing of Securities on the Hong Kong Stock Exchange
"Model Code"	the Model Code for Securities Transactions by Directors of Listed Issuers contained in Appendix 10 of the Listing Rules
"plate-type DeNOx catalyst"	a plate-type DeNOx catalyst takes metal as the carrier. Surface coating is composed of active ingredient
"Reporting Period"	the year ended 31 December 2019
"SFO"	the Securities and Futures Ordinance (Chapter 571 of the Laws of Hong Kong), as amended, supplemented or otherwise modified from time to time
"Shares"	the shares of the Company
"Shareholders"	the holder of Shares
"Stock Exchange"	The Stock Exchange of Hong Kong Limited