中核集团
CNNC

# 中國同輻股份有限公司
# China Isotope & Radiation Corporation

（於中華人民共和國註冊成立的股份有限公司）
(A joint stock company incorporated in the People's Republic of China with limited liability)

股份代號 Stock Code：1763

# 2022
## ANNUAL REPORT
## 年度報告

# CONTENTS

# CORPORATE INFORMATION

## LEGAL NAME OF THE COMPANY

中國同輻股份有限公司(Abbreviation: 中國同輻)

## ENGLISH NAME OF THE COMPANY

China Isotope & Radiation Corporation*

## REGISTERED OFFICE

Room 418, South 4th Floor
Building 1, No. 66 Changwa Middle Street
Haidian District
Beijing, the PRC

## HEAD OFFICE IN THE PRC

No. 66 Changwa Middle Street
Haidian District
Beijing, the PRC

## PRINCIPAL PLACE OF BUSINESS IN HONG KONG

5/F, Manulife Place
No. 348 Kwun Tong Road
Kowloon, Hong Kong

## BOARD OF DIRECTORS

### Executive Directors

Mr. Wang Suohui *(Chairman of the Board)*
(appointed on 29 July 2022)
Mr. Xu Hongchao (appointed on 16 September 2022)
Mr. Du Jin
Mr. Meng Yanbin *(Chairman of the Board)*
(resigned on 29 July 2022)

### Non-executive Directors

Mr. Chen Shoulei
Mr. Dai Shuquan (appointed on 16 September 2022)
Ms. Chang Jinyu
Ms. Liu Xiuhong
Mr. Liu Zhonglin (resigned on 29 July 2022)

### Independent Non-executive Directors

Mr. Hui Wan Fai
Mr. Tian Jiahe
Ms. Chen Jingshan
Mr. Lu Chuang

## THE COMMITTEES UNDER THE BOARD

### Audit and Risk Management Committee

Mr. Hui Wan Fai *(Chairman)*
Mr. Chen Shoulei (appointed on 16 September 2022)
Mr. Lu Chuang
Mr. Liu Zhonglin (resigned on 29 July 2022)

### Nomination Committee

Ms. Chen Jingshan *(Chairman)*
Mr. Hui Wan Fai
Mr. Lu Chuang

### Remuneration and Appraisal Committee

Mr. Lu Chuang *(Chairman)*
Ms. Liu Xiuhong
Ms. Chen Jingshan

### Strategy Committee

Mr. Wang Suohui *(Chairman)*
(appointed on 16 September 2022)
Mr. Xu Hongchao (appointed on 16 September 2022)
Mr. Chen Shoulei
Mr. Dai Shuquan (appointed on 16 September 2022)
Mr. Tian Jiahe
Mr. Meng Yanbin *(Chairman)*
(resigned on 29 July 2022)
Mr. Liu Zhonglin (resigned on 29 July 2022)

### Legal Affairs Committee

Mr. Wang Suohui *(Chairman)*
(appointed on 16 September 2022)
Mr. Chen Shoulei (appointed on 16 September 2022)
Ms. Liu Xiuhong
Ms. Chen Jingshan
Mr. Hui Wan Fai
Mr. Meng Yanbin *(Chairman)*
(resigned on 29 July 2022)
Mr. Liu Zhonglin (resigned on 29 July 2022)

# CORPORATE INFORMATION (CONTINUED)

### Science and Technology Innovation Committee

Mr. Wang Suohui *(Chairman)*
(appointed on 23 December 2022)
Mr. Xu Hongchao (appointed on 23 December 2022)
Mr. Du Jin (appointed on 23 December 2022)
Mr. Tian Jiahe (appointed on 23 December 2022)
Mr. Lu Chuang (appointed on 23 December 2022)

## LEGAL REPRESENTATIVE

Mr. Wang Suohui

## AUTHORISED REPRESENTATIVES

Mr. Wang Suohui *(Chairman of the Board)*
Mr. Gui Youquan
Ms. Kam Mei Ha Wendy (as the alternate representative of Mr. Wang Suohui)

## SUPERVISORS

Mr. Liu Zhonglin *(Chairman)*
(appointed on 16 September 2022)
Mr. Zhang Guoping
Mr. Zhao Nanfei
Mr. Ma Fuxin (appointed on 30 August 2022)
Ms. Peng Qihui (appointed on 30 August 2022)
Mr. Zhang Qingjun *(Chairman)*
(resigned on 29 July 2022)
Mr. Li Zhenhua (resigned on 30 August 2022)
Mr. Zhang Jian (resigned on 30 August 2022)

## JOINT COMPANY SECRETARIES

Mr. Gui Youquan
Ms. Kam Mei Ha Wendy

## AUDITOR

SHINEWING (HK) CPA Limited

## LEGAL ADVISORS

*As to Hong Kong Law*
Haiwen & Partners LLP
Unit 1902, 19/F New World Tower
16-18 Queen's Road Central
Central, Hong Kong

*As to PRC Law*
Longan Law Firm Shanghai Branch
11th Floor, Office Tower 1
Grand Gateway 66
No. 1 Hongqiao Road
Xuhui District, Shanghai
PRC

## PRINCIPAL BANKS

Industrial and Commercial Bank of China, Chang'an Branch
No. Yi 6, Xuannei Street
Xicheng District
Beijing
PRC

## H SHARE REGISTRAR

Computershare Hong Kong Investor Services Limited
Shops 1712-1716, 17th Floor
Hopewell Centre
183 Queen's Road East
Wanchai
Hong Kong

## STOCK CODE

1763

## INVESTORS' ENQUIRIES

Investors' hotline: 86 10 68515220
Fax: 86 10 68512374
Website: www.circ.com.cn
E-mail: ir@circ.com.cn

## LISTING DATE

6 July 2018

# FINANCIAL HIGHLIGHTS

| (RMB' 000) | Year ended 31 December 2022 | Year ended 31 December 2021 |
|---|---|---|
| Revenue | **6,146,172** | 5,143,694 |
| Gross profit | **3,514,679** | 3,241,904 |
| Profit from operations | **912,744** | 777,821 |
| Profit before taxation | **920,511** | 802,678 |
| Profit attributable to equity shareholders of the Company | **391,605** | 335,751 |
| Basic/diluted earnings per share (RMB) | **1.22** | 1.05 |
| Profitability | | |
| Gross profit margin | **57.2%** | 63.0% |
| Operating profit margin | **14.9%** | 15.1% |
| Net profit margin | **12.3%** | 13.1% |

| | Year ended 31 December 2022 | Year ended 31 December 2021 |
|---|---|---|
| Total assets | **11,685,540** | 10,473,968 |
| Total liabilities | **5,132,257** | 4,442,580 |
| Net assets | **6,553,283** | 6,031,388 |

# GROUP PROFILE

As a leader in the nuclear technology application industry in the PRC, CIRC tapped into the field of nuclear technology application since it was established in 1983, and tilled the nuclear technology application industry for 40 years. Nuclear technology application is a comprehensive strategic industry that is closely related to nearly one-third of the industries in the manufacturing sector of the national economy and plays a pivotal role in technological innovation, economic construction, national health and national security. As China's economy continues to develop and people's living standards steadily improve, the market for nuclear technology application will continue to grow in the future and CIRC will have more room for development.

CIRC focuses on research and development, manufacturing, and sales of pharmaceuticals, and is also engaged in radioactive sources, irradiation, nuclear medical equipment and independent clinical laboratory services. The Company derives 63.83% of its revenue and 79.55% of its gross profit from the pharmaceuticals segment in the nuclear medicine industry. As a leading enterprise in the PRC nuclear medicine industry featured with huge potential, high entry barriers and strong profitability, CIRC is the largest manufacturer of imaging diagnostic and therapeutic radiopharmaceuticals, UBT kits and analyzers, and RIA kits in the PRC. In terms of radioactive source products, CIRC is the only core enterprise with industrialized and large-scale R&D and production capability in the field of research and application of radioactive sources in China. In terms of the irradiation service, CIRC is the third largest provider for irradiation service, and is the only provider which provides the services of the upstream production as well as the downstream design and installation of irradiation facilities. Two subsidiaries of CIRC are among the three qualified EPC service providers approved by the Ministry of Ecology and Environment to engage in the design, manufacturing and installation of irradiation facilities in China.

As an important member of CNNC in the nuclear technology application industry, CIRC has taken over CNNC's profound experience in the fields of isotopes, radiopharmaceuticals, radioactive sources and irradiation application, and will further cooperate with other companies under CNNC in its future development, making full use of CNNC's advantageous resources to better serve the national economy and contribute to the high quality development of nuclear technology application.

# CHAIRMAN'S STATEMENT

Dear Shareholders,

On behalf of the Board, I am pleased to present you with the annual report of the Company for the Reporting Period.

2022 was the year during which the 20th National Congress of the Communist Party of China was successfully convened and was also the year when the three-year action plan for state-owned enterprise reform ended. As a leader in the industry, we, over the past year, defy hardships, face up to challenges, temper endeavours and forge ahead bravely, taking meeting the health needs of the people as our mission and developing in a high quality manner as our fundamental requirement in coordinating epidemic prevention and control and production and operation, as a result, our annual objectives and tasks have been smoothly accomplished, and the Company's reform and development undertakings have achieved satisfactory results.

This year, we took multiple measures and achieved the best operating performance in history. We achieved an operating income of RMB6,146 million for the entire year, representing a year-on-year increase of 19.49%. Total profit was recorded at RMB921 million, representing a year-on-year increase of 14.68%. Net profit was RMB755 million, representing a year-on-year increase of 12.11%. Net profit attributable to the parent company was RMB392 million, representing a year-on-year increase of 16.64%. Total assets amounted to RMB11,686 million, net assets totaled RMB6,553 million, and the gearing ratio stood at 43.92%.

**This year, we opened up for a win-win situation and achieved remarkable results in market development.** Focusing on the "One County, One Department" nuclear medicine development goal proposed in the Medium and Long-term Development Plan for Medical Isotopes (2021-2035) (《醫用同位素中長期發展規劃(2021-2035 年)》), a nuclear medicine development center was established in a timely manner to promote the implementation of the "CNNC Solution". We successfully won the bid for the National Health Commission's centralized procurement project "Helical Tomotherapy System and Radiosurgery Robot", with the amount of the bid totalling RMB672 million, which has continued to consolidate our competitive advantages in the high-end radiation therapy equipment market. We actively carried out international cooperation, and our sodium iodine-131 oral solution was exported to Indonesia for the first time, achieving new breakthroughs by export radiopharmaceuticals abroad. Our "export of iodine-125 sealed sources products and technologies" and "irradiation device project construction in Malaysia" were selected into the China-ASEAN Cooperation Demonstration Project on the Peaceful Use of Nuclear Technology. We signed a cooperation agreement with the Argentinian company DIOXITEK on cobalt-60 products, successfully opening up channels for the import of cobalt-60 radioactive sources.

**This year, we pursued with full force and achieved fruitful results in scientific and technological innovation.** We continued to step up investment in scientific research, with the intensity of our scientific and technological investment exceeding 10% of the total investment for the first time. We successfully established high-level research and development platforms such as Asia's first Radiopharmaceuticals and Radioactive Sources Collaboration Center of International Atomic Energy Agency, the Research and Development Center of China Atomic Energy Authority, and Shenzhen Carbon Isotope Application Engineering Technology Research Center. We continued to deepen the "Small Core, Big Collaboration" model, and carried out radiopharmaceutical patents and technology transfers with Wuhan Union Hospital. We jointly built a radiopharmaceutical research and development center with Nanjing First Hospital. We established a joint venture with the scientific research team of Tsinghua University to jointly promote the localization of core components of high-end nuclear medical equipment. We successfully applied more than ten national-, provincial – and ministerial-level scientific research projects. Key achievements have been made in scientific research and innovation in fields such as radiopharmaceuticals, high-end nuclear medical equipment, and radiation applications.

# CHAIRMAN'S STATEMENT (CONTINUED)

**This year, we took bold steps and deepened reform with more substance added.** The "Three-Year Action for State-owned Enterprise Reform" achieved a high-quality conclusion. We were successfully selected into the expanded list of "Enterprises for the Demonstration of Scientific and Technological Reform" by the Office of the State Council for State-owned Enterprise Reform. We fully implemented tenure system and contractual management, strictly assessing the heads of member units and rigidly honoring their annual performance-based salary. We continued to carry out market-based recruitment and employment to further promote the ability of cadres to get up and down. We strengthened income distribution reform, becoming the first enterprise of CNNC to fully implement the payroll filing system for member units. Efforts were made to promote the establishment of high and new technology enterprises at all levels. CIRC was certified as a "high and new technology enterprise" at its own level, and five high and new technology enterprises were added during the year, bringing the total number of high and new technology enterprises at all levels to 21. Special work on the gradient cultivation of "specialized, refined, differential and innovative enterprises (SRDI)" was launched, and there was an increase of two new SRDI enterprises and six innovative small and medium-sized enterprises throughout the year, as a result, the Company's scientific and technological innovation attributes and brand reputation have been further enhanced.

**This year, we made solid and tangible efforts and accelerated the pace of building production capacity.** Seizing opportunities arising from a series of policy aiming at stabilizing the economic market, we accelerated the construction of key projects and made positive progress. Among them, the main structure of all plants of the North China medical base project was completed; construction of the radioactive source R&D and production base project, the Qinshan isotope production base project, and the Shanghai medical base project was started; solid progress in the preliminary work of the South China medical base project was made; and the Pengshan radiopharmaceuticals production base was officially put into operation. We accelerated the promotion of the national layout of pharmaceuticals centers for the production and distribution of short half-life radiopharmaceuticals. Three pharmaceuticals centers have been completed and put into operation, and the cumulative number of pharmaceuticals centers being put into operation has reached 23, of which 15 can supply positron drugs.

**This year, we upheld integrity and innovation and our management efficiency continued to improve.** With the "Year of Fine Management" of CNNC as an opportunity, we continued to deepen lean management and successfully built two lean benchmarking workshops, including CNNC Headway Carbon-13 Workshop and East China Irradiation No.1 Workshop. CNNC Headway was successfully selected as a pilot enterprise for the "Year of Fine Management" of CNNC. We did a solid job in quality management and our "Lu Li Yi Xin" (鑪力一心) QC team won the Gold Prize in the 47th International Convention on Quality Control Circles Awards. In strengthening the building of talent teams, we established and improved the system of developing scientific and technological talents, and issued the Implementation and Management Measures of CIRC for the Development of Scientific and Technological Talents (《中國同輻科技人才發展實施管理辦法》). We accelerated the promotion of digital transformation, and the CNNC Headway smart factory project was successfully included in the first batch of pilot projects for the digital transformation of CNNC. Integrated management systems for irradiation operations were officially put into use, and financial shared service centers were fully completed and put into operation. We continued to promote the platform construction of listed companies, and conducted research on and formulated the Work Plan of CIRC for Improving the Quality of Listed Companies (《中國同輻提高上市公司質量工作方案》).

# CHAIRMAN'S STATEMENT (CONTINUED)

Where there is a will, there is a way. As the main force of CNNC's technological advancement oriented towards people's lives and health and the main channel for the transformation of advanced nuclear scientific and technological achievements, CIRC shoulders the dual responsibility of building a "a strong nuclear power" and a "healthy China". We will definitely keep our mission in mind, deeply cultivate "lean, standardization, reform and efficiency" concepts, vigorously practice the CIRC speed characterized by "immediate action and rapid completion", and continue to promote the implementation of the "14th Five-Year Plan" planning tasks, contributing the efforts of CIRC to the development of the nuclear technology industry to make it bigger, stronger and better!

**Mr. Wang Suohui**
*Executive Director and Chairman of the Board*

Hong Kong, 21 April 2023

# MANAGEMENT DISCUSSION AND ANALYSIS

The Group is primarily engaged in the research, development, manufacturing and sale of diagnostic and therapeutic radiopharmaceuticals and radioactive source products for medical and industrial applications, the provision of irradiation service for sterilization purpose and engineering, procurement and construction ("EPC") service for the design, manufacturing and installation of gamma ray irradiation facilities and the provision of nuclear medical equipment and services such as independent clinical laboratory services to hospitals and other medical institutions.

## BUSINESS REVIEW

For the year ended 31 December 2022, we operated five business segments, namely pharmaceuticals, radioactive source products, irradiation, radiation therapy equipment and related services and other business. In 2022, we continued to increase our market development efforts and achieved faster growth in economic benefits. Revenue achieved for 2022 was RMB6.146 billion, representing a year-on-year increase of 19.49%. Net profit for the year was RMB755 million, representing a year-on-year increase of 12.11%, and net profit attributable to the parent company was RMB392 million, representing a year-on-year increase of 16.64%.

## BUSINESS SEGMENTS

### 1. Pharmaceuticals

The Group is a leading manufacturer of diagnostic and therapeutic radiopharmaceuticals in China, primarily engaged in the research, development, manufacturing and sale of a wide range of imaging diagnostic and therapeutic radiopharmaceuticals, UBT kits and analyzers and in vitro diagnostic reagents and kits in the domestic market.

During the Reporting Period, the Group adhered to the strategic development plan of each business segment. In respect of pharmaceutical segment, it provided a stable supply of radiopharmaceuticals to domestic medical institutions and strengthened the promotion of nuclear medicine diagnosis and treatment technology to clinical departments and other market development work through supporting the work of the nuclear medicine unit of the Chinese Medical Association. It continued to promote the development of the existing industry. The clinical study on the efficacy and safety evaluation of strontium-89 chloride injections was conducted to promote the application of strontium-89 chloride injections in the treatment of bone metastases for thyroid cancer, providing a safe and effective drug for clinical tumor patients and expanding the market capacity of radiopharmaceuticals. The Group further improved its competitiveness in the market by integrating the sales of Iodine-125 sealed sources products of its subsidiaries HTA and Ningbo Junan. Through academic conferences and other means, the Group promoted nuclear medicine to the general public and nuclear medicine clients, including the introduction of new products such as "therapeutic sodium iodine-131 capsule" and scientific radionuclide, thus enhancing its influence in the field of nuclear medicine. The Group vigorously promoted academic brand building of its respiratory disease testing products. It worked with the Society for Physical Examination to organize national science knowledge competition, actively participated in various academic promotion activities, and continued to promote the implementation of the "specialist outpatient" project.

# MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

During the Reporting Period, the Group recorded RMB3,923.3 million in revenue from sales of pharmaceuticals, representing a year-on-year increase of 4.5%. As for the imaging diagnostic and therapeutic radiopharmaceuticals, the Group recorded RMB1,459.3 million in revenue, representing a year-on-year increase of 0.4%. As for breath test, the Group recorded RMB2,346.7 million in revenue, representing a year-on-year increase of 9.0%.

## 2. Radioactive source products

The Group is a major manufacturer of medical and industrial radioactive source products in China and also a radioactive source producer with a most complete range of radioactive source product offerings in China, primarily engaged in the research, development, manufacturing and sale of various medical and industrial radioactive sources products as well as provision of related technical services.

During the Reporting Period, the gamma knife source achieved the best result in the past five years, and the non-destructive testing radioactive sources business remained at a historically high level; the source-related services contracts achieved a revenue of RMB30 million; the nuclear technology services of international companies were developed, and the import revenue amounted to RMB16 million; the Group was invited to participate in the Quality Development Forum for the Special Equipment Industry (特種設備行業高質量發展論壇) and joined China Association of Special Equipment Inspection, laying the foundation for the extension of the industry. The supporting radioactive source developed by the Group for the Shenzhou XIV manned spacecraft has contributed to the successful recovery of the spacecraft and ensured the successful completion of the Shenzhou XIV manned mission. The Group promoted the launch of strategic cooperation in the neutron source business in nuclear power, helping CNNC to set up its identity of "China Nuclear Power". The newly-developed Krypton-85 thickness gauge sources, which is exclusive in China, has greatly relieved the source tension in the energy storage industry. The decommissioning and reuse of medical gamma knife source has greatly reduced the volume of solid radioactive waste.

During the Reporting Period, the Group recorded RMB580.9 million in revenue from sales of radioactive source products, representing a year-on-year increase of 11.7%.

# MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

3. Irradiation

In the field of irradiation processing, the Group mainly aimed at providing the manufacturers of medical devices, food, traditional Chinese medicine and cosmetics for sterilization in China, and meanwhile EPC services related to the design, manufacturing and installation of irradiation facilities is also accessible.

The Group actively explored the irradiation product market, and achieved record sales of new irradiation products with sales revenue reaching over RMB27 million. Overcoming the impact of the COVID-19, BINE, a subsidiary of the Company, completed the installation and commissioning of the Malaysian irradiation station project as scheduled and signed another contract for the supply of cobalt source irradiation facilities design and equipment in Malaysia. The integrated management platform for irradiation operations has officially launched, enabling information-based traceability management of the entire irradiation processing and significantly improving the level of informatization and standardization of the irradiation business.

During the Reporting Period, the Group recorded RMB164.7 million in revenue from irradiation-related business, representing a year-on-year increase of 14.3%.

4. Radiation therapy equipment and related services

During the Reporting Period, the Group accelerated the nationalization of high-end radiotherapy equipment, and Tomo C, a high-end radiotherapy equipment, overcame the impact of the epidemic and obtained the Notice of Acceptance of Registration of Pharmaceutical Product from the National Medical Products Administration. The Group accelerated the research and development of two core components to make a strategic layout for the promotion of Tomo C nationalization. The Smart Cobalt-60-based Cone Beam Focused Stereotactic Therapy System project was completed with the installation of the first clinical trial equipment and successfully applied for Shaanxi Provincial Key Research and Development Program “Smart Gamma Knife” project, which was granted RMB1.5 million funding support by Science and Technology Department of Shaanxi Province. The SPECT/CT research and development project was completed with prototype development and passed third-party inspection. The Group set up a joint venture, Jiangsu Gaotong Equipment Co., Ltd., committing to technological advancement in the field of medical equipment and technology research and development in the field of high-end intelligent manufacturing and providing systematic solutions for high-end equipment and intelligent manufacturing. The Group successfully won the tender for the centralized procurement project of “Helical Tomotherapy System and Radiosurgery Robot” of the National Health Commission, including 7 sets of Category A equipment with a tender amount of nearly RMB300 million and 11 sets of Category B equipment with a tender amount of RMB385 million.

During the Reporting Period, the Group recorded RMB732.2 million in revenue from radiation therapy equipment and related services, representing a year-on-year increase of 87.7%.

5. Other businesses

In order to provide users with a full range of services, we also provide services such as trade and independent clinical laboratory services for nuclear technology industry applications and medical product applications. We primarily provide users with trade services for imported radioactive source, medical nuclides, imported radiopharmaceuticals, nuclear instruments and devices, medical equipment and other products. The Group is promoting the cooperation with international pharmaceutical companies to introduce advanced radiopharmaceuticals, intensive management services for hospital consumables, and import agency sales of medical devices.

During the Reporting Period, revenue from trade services and other businesses of the Group was RMB745.1 million, representing a year-on-year increase of 121.7%.

# MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

The table below sets forth our revenue by business segment in 2022 and 2021:

| | **Year ended 31 December 2022** | | Year ended 31 December 2021 | |
|---|---|---|---|---|
| (RMB in million, except for percentage) | **Amount** | **%** | Amount | % |
| Pharmaceuticals | **3,923.3** | **63.8** | 3,753.4 | 73.0 |
| Radioactive source | **580.9** | **9.5** | 520.2 | 10.1 |
| Irradiation | **164.7** | **2.7** | 144.1 | 2.8 |
| Radiation therapy equipment and related services | **732.2** | **11.9** | 390.0 | 7.6 |
| Other businesses | **745.1** | **12.1** | 336.0 | 6.5 |
| Total | **6,146.2** | **100.0** | 5,143.7 | 100.0 |

## Marketing

During the Reporting Period, the Group continued to promote its brand building efforts. The Group organized and held the China-ASEAN Forum for Peaceful Use of Nuclear Technology (中國-東盟和平利用核技術論壇), supported important national industry exchange events such as the 2022 China Isotope and Radiation Industry Summit, China Atomic Energy Authority's Third Quarter Nuclear Technology Forum and Carbon Emission Peak and Carbon Neutrality Yantai International Forum, as well as nearly 100 professional academic conferences and salons, and worked with industry partners to build an open and collaborative development ecosystem, promoting the popularization and application of isotopes and radiotherapy technologies and implementing the "Medium and Long-term Development Plan for Medical Isotopes (2021- 2035)" 《醫用同位素中長期發展規劃(2021-2035年)》.

Meanwhile, the Group actively promoted the marketing of products such as strontium-89 chloride injections. We hosted the "Xiangshan Forum on Targeted therapy for bone metastases (香山論道——骨轉移瘤靶向治療論壇)" to help experts from Beijing Nuclear Medicine Branch (北京核醫學分會) and CSCO Expert Committee on Nuclear Medicine (CSCO 核醫學專家委員會) to conduct academic seminars. The National Professional Quality Control Center for Health Examination and Management (國家健康體檢與管理專業質控中心) under National Health Commission and the Digestive Endoscopy Improvement System (消化內鏡專業質控中心) jointly compiled and published the Quality Control Specification for the Application of UBT Technique in Health Examination (Trial) 《健康體檢應用尿素呼氣試驗技術質控規範(試行)》. The headquarters, together with its subsidiary CNNC Headway and subsidiary joint venture CNNC Accuray continued working on online platforms such as "Isotope & Radiation Technology Lecture Hall", "Headway Health Lecture Hall" and "Accuray Lecture Hall", and invited experts of their respective fields to conduct online teaching and academic promotions activities.

The "Demonstration base construction projects for the promotion of nuclear medicine application for medical diagnosis" was launched in two medical institutions throughout the year, and the project acceptance and awarding work was completed in two other medical institutions. As of 31 December 2022, the Group and the Nuclear Medicine Branch of the Chinese Medical Association commenced the project start-up work for 65 hospitals, accelerating the popularization of nuclear medicine with the applications in clinical diagnosis and treatment, which effectively helped us to expand the market for our products.

The Group continued to promote its "Overall Nuclear Medicine Solutions", established the Nuclear Medicine Development Center, accelerated the promotion and implementation of Overall Nuclear Medicine Solutions with the Group's resources, and initiated the arrangement and construction of intelligent nuclear medicine. In 2022, a total of 12 key projects were contracted for the Overall Nuclear Medicine Solutions.

# MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

## Scientific Research and Innovation

The Group has always actively conducted research and development work on various types of imaging diagnosis and therapeutic pharmaceuticals to fill the void of various fields of medical treatment and meet the medical needs of China. As of 31 December 2022, we had a number of imaging diagnosis and therapeutic radiopharmaceuticals under research and development. Among them, sodium fluorine-18 injection was completed with clinical trials and was submitted for new drug application; iodine-131-MIBG injection was in Phase III clinical trial; technetium-99m sulfide colloidal injection, 68Ga-Dotatate injection, fluorine-18 betazine injection, fluorine-18 stamine injection, fluorine-18-L dopa injection and lutetium-177 oxyoctreotide injection were completed with pre-clinical study and awaiting approval for the clinical trial, and a variety of imaging diagnosis and therapeutic radiopharmaceuticals were in preclinical research and development stage.

## Diagnostic drugs

### *Diagnostic drugs for tumors*

1. Bone imaging drug: sodium fluorine-18 is a PET bone imaging drug used to diagnose lesions with altered bone activity, including bone metastases, incipient fracture, ostalgia, joint hyperplasia, etc. The Group's product under development, sodium fluorine-18 injection, was completed with clinical trials and has submitted the materials for the new drug application. It obtained the Notice of Acceptance of Registration of Pharmaceutical Product from the National Medical Products Administration on 28 December 2022.

2. Pheochromocytoma diagnostic drug: iodine-131-MIBG injection can be used for the diagnosis of neuroendocrine tumors such as pheochromocytoma and neuroblastoma. The Group's product under development, iodine-131-MIBG injection, was in Phase III clinical trial.

3. Prostate cancer diagnostic drug: PMSA is an ideal tumor marker for prostate cancer. The development of radioactive targeted PMSA diagnostic (therapeutic) drugs is currently a hot spot of interest that the domestic and foreign radiopharmaceutical companies concerned about and competed for. The combination of [$^{18}$F]Florastamin and PSMA has a higher specificity and a higher safety profile. The Group has signed a joint development agreement with FutureChem in Korea to obtain the exclusive rights to develop, manufacture and market [$^{18}$F]Florastamin injection in PRC. At present, the Group has completed various pre-clinical studies on [$^{18}$F]Florastamin injection and submitted the clinical trial application, which was accepted by the National Medical Products Administration on 29 December 2022.

4. Breast cancer sentinel lymph nodes imaging drug: technetium-99m sulfide colloid is the first technetium-marked radiocolloid for lympha imaging, which is used for the location and tracing of breast cancer sentinel lymph nodes. The Group's product under development, sulfide colloid kit and technetium-99m sulfide colloidal injection, was completed with various pre-clinical studies and submitted the clinical trial application, which was accepted by the National Medical Products Administration on 10 October 2022.

# MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

*Diagnostic drugs for neurodegenerative diseases*

1. Alzheimer (AD) diagnostic drug: ß-Amyloid (Aß) is an important target for early diagnosis of AD. The development of positron emission tomography (PET) imaging agents with high affinity and selectivity with Aß protein can realize early non-invasive diagnosis of such disease. [$^{18}$F]Florbetazine injection is an Aß-PET imaging agent jointly developed by the Group and the Key Laboratory of the Ministry of Education for Radiopharmaceuticals of Beijing Normal University , which has independent intellectual property rights and good imaging properties, and is a domestic Class I innovative drug. The Group's product under development, [$^{18}$F]Florbetazine injection, was completed with various pre-clinical studies and submitted the clinical trial application, which was accepted by the National Medical Products Administration on 29 December 2022.

2. Parkinsonism diagnostic drug: 6-fluorine-18-L dopa injection is used clinically for the diagnosis of nervous system diseases such as parkinsonism, schizophrenia and AD, and has clinical value for early diagnosis of disease, assessment of disease severity and cell transplantation detection. The Group's product under development, 6-fluorine-18-L dopa injection, was completed with various pre-clinical studies and the preparation of the application materials, and submitted the clinical trial application at the end of December 2022.

*Therapeutic drug for tumor*

Therapeutic drug for prostate cancer. Palladium-103 sealed source is an in vivo implant for brachytherapy, suitable for the permanent implantation of solid tumors with low to neutral sensitivity to radiation, both for superficial, intra-thoracic and intra-abdominal solid tumors such as prostate cancer, pancreatic cancer, lung cancer, head and neck cancer, as well as for residual diseases and recurrent tumors after external radiation therapy. The Group's product under development, palladium-103 sealed source, was completed with various pre-clinical studies.

*Integrated drug for diagnosis and treatment*

Integrated drug for diagnosis and treatment for neuroendocrine tumor. Internationally, the use of $^{68}$Ga-DOTATATE for PET/CT of neuroendocrine tumor has become the gold standard in imaging. $^{68}$Ga-DOTATATE can also be used to evaluate the treatment effect of patients with neuroendocrine tumor. 177Lu-DOTATATE is an effective drug in the treatment of neuroendocrine tumor. The Group's product under development, 68Ga-DOTATATE injection and kits, was completed with various pre-clinical studies and submitted the clinical trial application, which was accepted by the National Medical Products Administration on 9 December 2022. The product under development, lutetium-177 oxyoctreotide injection, was completed with various pre-clinical studies and the preparation of the application materials during the Reporting Period, and submitted the clinical trial application at the end of December 2022.

During the Reporting Period, the Group achieved remarkable results in the work on intellectual properties, with a total of 174 patents applied, 134 patent authorizations obtained, including one foreign patent authorization, achieving a breakthrough of zero overseas patent authorization for the Group. As of 31 December 2022, the Group had 678 active licensed patents, among which there were 105 invention patents, and its technological strength was continuously strengthened.

During the Reporting Period, there were 16 registered trademarks, 38 registered copyrights, 2 group standards issued, and 4 nuclear industry standards and 9 group standards under preparation.

In terms of scientific and technological awards and honors, the patent of "Components of heavy water reactor cobalt", which was jointly applied by the Group and Shanghai Nuclear Engineering Research and Design Institute, won the Silver Award of the 23rd China Patent Award, the implementation of which has filled the gap in China's technology of mass production of cobalt-60 radioactive source for heavy water reactor. The project has been exported to Canada, the United Kingdom, Thailand, Vietnam and Malaysia, with a total volume of over 10 million curies, greatly enhancing the Group's voice in the international radioisotope market.

# MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

The project "UBT[$^{13}C$/$^{14}C$] kits automatic production line" of Shenzhen Zhonghe Headway Bio-Sci & Tech Co., Ltd. won the second prize of the Science and Technology Award of the CNNC, with the overall technology of the project reaching the international advanced level and generating good social benefits.

The project "Research and development of new krypton-85 thickness gauge sources" of HTA won the third prize of the Science and Technology Award of the CNNC, with the overall technology of the project reaching the international advanced level and breaking the situation of relying on imported krypton-85 thickness gauge sources for the past ten years. It is expected to fully satisfy the demand for krypton-85 thickness gauge sources for paper, plastic film and lithium battery production lines in China in the future, and the products have been exported to open up the international market.

The project "Research on the irradiation and sterilization process standards for medical protective clothing materials" jointly conducted by China Isotope & Radiation Corporation and Beijing Atomic High-Tech Jinhui Radiation Technology Application Co., Ltd. won the third prize of the Science and Technology Award of the CNNC.

The Group has a well-developed R&D system, with the CIRC Institute established at the Group level and the "1+N" model of R&D platform construction. The Group now has five internal R&D platforms and 11 provincial and ministerial R&D platforms, with research covering in vitro diagnostics, radiopharmaceuticals, stable isotope and breath test, radioactive sources and industrial application, irradiation application, medical equipment and other industrial fields, providing technical support for industry development.

**Internal platforms**

| **Name of platform** | **Research field** |
|---|---|
| In Vitro Diagnostic Technology R&D Center | In vitro diagnosis |
| Radiopharmaceuticals R&D Center | Radiopharmaceuticals |
| Stable Isotope and Breath Test Technology R&D Center | Stable isotope and breath test |
| Radioactive Sources and Industrial Application R&D Center | Radioactive sources and industrial application |
| Irradiation Application Technology R&D Center | Irradiation application |

**External platforms**

| **Name of platform** | **Research field** |
|---|---|
| National Atomic Energy Agency Research and Development Centre for Nuclear Technology (Radiopharmaceutical Engineering Transformation) | Radiopharmaceuticals |
| CNNC Radiopharmaceuticals Engineering and Technology Research Center | Radiopharmaceuticals |
| Key Laboratory of Quality Control of In Vitro Diagnostic Reagents of the National Medical Products Administration | In vitro diagnostic reagent |
| Sichuan Radioisotope Engineering and Technology Research Center | Radioisotopes |
| Shanxi Molecular Imaging Technology and Equipment Research and Development and Transformation Engineering Research Center | Medical equipment |
| Key Laboratory of Radiopharmaceuticals Quality Control and Evaluation of Guangdong Medical Products Administration | Radiopharmaceuticals |
| Guangdong Radioactive Isotope-labeled Drugs Engineering Technology Research Center | Radiopharmaceuticals |
| Guangdong Stable Isotope Application Engineering Technology Research Center | Stable isotope |
| Shenzhen Carbon Isotope Application Engineering Technology Research Center | Carbon isotope |
| Technology Center of Anhui Young-Hearty Medical Appliance & Equipment Co., Ltd. | Breath test |
| Shanghai Molecular Imaging Probe Engineering Technology Center | Radiopharmaceuticals |

# MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

In terms of industry-academia-research cooperation, the Group has actively established research cooperation with industry-advantaged research institutes, universities and hospitals such as National Institute of Metrology, Shanghai Institute of Materia Medica of Chinese Academy of Sciences, China Institute for Radiation Protection, Harbin Institute of Technology, Sichuan University, Beijing Normal University, Peking Union Medical College Hospital and 301 Hospital, and strengthened academic exchanges and research talent cultivation through the establishment of joint laboratories, research and development centers and collaborative innovation centers to achieve comprehensive cooperation in technological innovation.

The Group has a long-standing commitment to building a system of high-level talents, with 12 national-level talents, 14 provincial and ministerial level talents, 5 chief experts, 16 technology leaders, and a scientific research team of 538 research and development personnel focusing on extensive researching and optimizing production technologies, developing new products and the safety and efficacy upgrading of existing products to jointly promote technological innovation in various industrial fields of the Group. In addition, the Group has set up a post-doctoral research workstation of MOHRSS, a post-doctoral innovation practice base in Shenzhen, a post-graduate workstation for radiopharmaceuticals in Jiangsu Province and a post-graduate workstation for irradiation application in Suzhou University to actively develop post-doctoral and post-graduate training and continuously strengthen the construction of talent teams.

### International Business

During the Reporting Period, the Group actively explored the international market and exported cobalt sources, breath test kits, radioimmunity kits, COVID-19 test kits and other anti-epidemic materials as well as other products to dozens of countries and regions such as Indonesia, Kenya, Brazil, Peru, Colombia, Ecuador, India, Bangladesh, Singapore and Canada, realizing a total export revenue of RMB198 million. Although the demand for anti-epidemic medical supplies decreased in 2022 compared to 2020 and 2021, the international revenue of our regular products and other products still achieved significant growth. During this period, breakthroughs were made in our international business: following the export of a cobalt source irradiation station in 2013, we exported the overall solution for irradiation stations to Malaysia for the fourth time, bringing about a good brand effect in the irradiation industry in Southeast Asia. We actively explored the South American market, grasped the opportunities and successfully fulfilled the contracts and the product shipping, and expanded into new market. As the world's third largest supplier of cobalt sources, the Group continued to carry out the cobalt-60 radioactive source export business, successfully exported the domestic CN-101 type cobalt-60 radioactive source to Malaysia, achieving a breakthrough in the revenue of the export of radioactive sources, the Group signed a cooperation agreement with Argentina's leading company in nuclear technology applications, laying the foundation for deeper cooperation between both parties in the future in the field of nuclear technology. We co-organized the human resources training program of Ministry of Commerce and participated in a number of world-class industry exhibitions and academic conferences to enhance our brand awareness in overseas markets. In addition, the Group actively promoted internal and external business synergies, expanded international channels, sent staff to work at IAEA, improved export risk management mechanisms, conducted business training, and continued to strengthen internal management and business system construction, which helped the Group to further improve its internationalized operation.

# MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

## Capital Operation

During the Reporting Period, the Group has entered into agreement to acquire an enterprise with a total planned investment of RMB30.16 million.

| S/N | Acquired enterprise | Agreement Execution Date | Acquisition Completion Date | Acquisition amount (RMB in million) | Principal businesses | Shareholding percentage |
|---|---|---|---|---|---|---|
| 1 | Guangzhou HTA Pharmaceutical Technology Co., Ltd. (廣州原子高科醫藥科技有限公司, formerly known as Guangzhou Zhongda Zhongshan Medical Technology Development Co., Ltd.) (廣州中大中山醫科技開發有限公司) | 2022.7 | 2022.10 | 30.16 | Science and technology information consulting services; technology project agency services; medical research and experimental development; pharmaceutical research and development; chemical products wholesale (except hazardous chemicals); instrument wholesale; electronic components wholesale; chemical products retail (except hazardous chemicals); electronic components retail; trade agency; house leasing | 100% |

As of 31 December 2022, the Company's actual amount paid to Tongfu Fund was RMB444 million, and the total actual amount paid to the Fund was RMB1.48 billion, so the Company's proportion accounted for 29.97%. After evaluation, the net assets of Tongfu Fund measured at fair value as of 31 December 2022 are RMB1,581.9 million. The value of the Company's share of Tongfu Fund's net asset was RMB474.1 million, accounted for 4.1% of the Group's total assets. In 2022, the Company's investment income in Tongfu Fund was RMB17.5 million, and the Company received dividends of RMB4.0 million.

## Production Capacity

In order to meet the growing demand for radiopharmaceuticals in China in a timely manner, in the past year, we vigorously practiced the "CIRC speed" and accelerated the national layout of our pharmaceutical centers. In 2022, three pharmaceutical centers in Nanchang, Yichang and Taiyuan were completed and in operation, bringing the cumulative number of centers in operation to 23. Three production lines of positron drugs in Hefei, Qingdao and Nanchang were completed and in operation, bringing the cumulative number of companies that can supply positron drugs to 15. Nine pharmaceutical centers have entered the production certification stage, five were under construction and three were in the pre-project phase, gradually improving the network layout of national pharmaceutical centers.

In order to further enhance the R&D and production capacity of CIRC in the fields of radiopharmaceuticals and radioactive sources, we have been vigorously promoting the construction of R&D and production bases of isotopes and their products in recent years. At present, the diagnostic and therapeutic radiopharmaceuticals manufacturing bases were mainly located in four regions (i.e. Beijing, Ningbo, etc.), and the medical bases in North China and Shanghai that are newly planned and laid out were progressing in an orderly manner. The UBT kits and analyzers manufacturing bases were located in Shenzhen and Tongcheng. The radioactive source manufacturing bases were located in Beijing and Leshan. The newly planned research, development and production base for radioactive sources was also being actively promoted. The in vitro immunoassay diagnostic reagents and kits manufacturing bases were located in Beijing. In 2022, the CNNC Qinshan isotope production base project commenced officially, which will become the largest isotope production base in China after completion and is of great significance to enhance China's isotope nationalization capability.

# MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

## Future Development

2023 is the opening year of the comprehensive implementation of the spirit of the 20th National Congress of the CPC, the key year of the implementation of the "14th Five-Year Plan", and also the 40th anniversary of the establishment of CIRC and the 5th anniversary of its listing. Looking back at the past, CIRC has grown from scratch, from small to large, step by step to become the industry leader, and made positive contributions to the nuclear industry's strong foundation, leapfrog development, overall improvement of system capability, and accelerating catch-up from big to strong. Looking ahead, CIRC will adhere to the principle of "helping people's livelihood and benefiting society", give full play to the unique advantages of nuclear medicine in the diagnosis and treatment of major diseases such as neurodegenerative diseases, cardiovascular and cerebrovascular diseases and malignant tumors, and provide quality products, services and integrated solutions to better protect people's lives and health and facilitate the construction of "Healthy China".

In 2023, the Company will closely focus on the goals and tasks of the "14th Five-Year Plan", with standardized operation, lean management, change and innovation, high efficiency and quality. In addition, we will continue to deepen lean management, pay more attention to innovation, make every effort to stabilize growth, seek innovation, promote reform, expand market by all means, strengthen and make up for the chain and optimize the layout, build up the momentum and strengthen management, and promote the integration of Party building. Besides, we will firmly guard the bottom line of the quality of the safety and environmental protection, as well as compliance operation, and promote the development of a bigger, stronger and better business as a whole, and strive to exceed the annual target of the plan.

**All efforts are to made to stabilize growth.** Since the publication of the "Medium and Long-term Development Plan for Medical Isotopes (2021-2035)" 《醫用同位素中長期發展規劃(2021-2035年)》, there has been a significant increase in concern and awareness of medical isotopes and related industries from all walks of life, and the top echelons of our country are particularly concerned about the innovative development of radiopharmaceuticals. The Ministry of Industry and Information Technology, the State Administration of Science, Technology and Industry for National Defence, and the National Medical Products Administration and other competent departments have attached great importance to and initiated relevant policy research and formulation. China's nuclear technology application industry is set to enter the "fast lane" of development under the impetus of favorable policies. CIRC will firmly grasp the development opportunities and make every effort to maintain the good growth momentum. In 2023, we will strive to achieve new highs in operating indicators such as operating income and net profit.

**We will be determined to forge ahead for innovation.** CIRC will adhere to innovation-led development, unswervingly place scientific and technological innovation at the core of the overall development, and make every effort to promote new breakthroughs in the research and development of medical isotopes, radiopharmaceuticals, high-end nuclear medical equipment and other fields. At the same time, CIRC will continue to optimize the institutional mechanism of scientific and technological innovation, vigorously construct national technology centers, increase scientific research investment through multiple channels, continuously improve the scientific and technological innovation capacity of R&D platforms at all levels, improve incentives for major scientific and technological achievements, and strengthen medium and long-term incentives for scientific and technological innovation.

# MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

**The real deal is pushing for reform.** CIRC will not waver in its belief in reform and further release the innovative vitality and development potential of the Company through deepening reform. We will push forward the special reform of "Science and Technology Reform Demonstration Enterprise", accelerate to improve the shortcomings and weaknesses and make every effort to build a model of state-owned science and technology-based enterprise reform and a leader of independent innovation. We will deepen the special project of "upgrading management against world-class standards", successively promote the achievement and establishment of standards, accelerate the creation of leading enterprises in science and technology, high-tech enterprises and specialized, refined, special and novel enterprises, and continuously enhance the value creativity and industry competitiveness of enterprises.

**We will expand the market by all means.** CIRC will firmly grasp the development opportunities brought by the strategy of expanding domestic demand, and make full efforts in the market and investment side. We will actively implement the national plan and accelerate the implementation of the "One County, One Department" program of CNNC. We will innovate marketing models and promote sales of key products through multiple channels. We will continue to improve our investment map, use the "listed company + industry fund" model to carry out strategic mergers and acquisitions, and strive to complete a number of capital operations in medical diagnostics, irradiation applications, medical devices and other areas that are important to support the industry. We will make every effort to promote our nuclear technology products and services, focus on key projects, deeply plough key countries and promote the implementation of nuclear medicine, radiotherapy and irradiation application solutions.

**We will strengthen and make up for the chain and optimize the layout.** In order to meet the growing demand of domestic users for medical isotopes and their products in a timely manner, we will vigorously promote capacity enhancement, fully promote the construction of key projects such as medical isotopes, radiopharmaceuticals and radioactive source research and development and production bases, and promote the national layout of pharmaceutical centers in succession, striving to put into operation a total of 25 pharmaceutical centers by 2023.

**We will build up the momentum and strengthen management.** CIRC will keep pace with the times and plan for the future, carry out the mid-term evaluation and revision of the "14th Five-Year Plan", more accurately grasp the laws of the sub-sector, highlight the new journey, new starting point and new mission, and focus more on high level and quality. We will continue to deepen lean management, accelerate the establishment of lean benchmark workshops for radiopharmaceuticals, radioactive sources, irradiation applications and other business modules, and give full play to the driving effect of benchmark workshops. We will strengthen the construction of talent pool, carry out special projects to improve the quality of scientific and technological talents and skilled personnel, focus on key areas, major projects and major tasks in the near and long term, and increase the introduction of high-level talents. We will organize and carry out the work of "CIRC Work Plan for Improving the Quality of Listed Companies" (《中國同輻提高上市公司質量工作方案》), and continuously improve the core competitiveness and market influence of listed companies. We will continuously promote the development of standardized production safety and strive to improve the safety management level in key areas. We will strengthen the construction of compliance system, explore the construction of compliance management and legal, internal control and risk management synergistic operation mechanism, and improve the effectiveness of compliance management.

The "14th Five-Year Plan" is a strategic opportunity period for the development of the nuclear technology application industry. We will closely focus on the objectives of the "14th Five-Year Plan", unify our ideology and understanding, maintain our strategic determination, practice the "CIRC speed", make every effort to promote the implementation of the key tasks of the "14th Five-Year Plan", and accelerate the establishment of an internationally renowned isotope and radiation technology application products and services supply group.

# MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

## PRINCIPAL RISKS AND UNCERTAINTIES

The Group's financial condition, results of operations, and business prospects may be affected by a number of risks and uncertainties directly or indirectly pertaining to the Group's businesses. To the best of knowledge and belief of the Directors, the Directors consider that the following are the principal risks and uncertainties identified by the Group as at the date of this annual report.

### Market Risk

Market risk is the risk that deteriorates profitability or affects ability to meet business objectives arising from the movement in market prices, like foreign exchange rates and interest rates. The management of the Group manages and monitors these exposures to ensure that appropriate measures are implemented on a timely and effective manner.

### Foreign Exchange Risk

The Group mainly operates in the PRC with most of the transactions settled in Renminbi. During the year ended 31 December 2022, other than those mentioned above, the Group did not carry out any other hedging activity against foreign currency risk. Any substantial exchange rate fluctuation of foreign currencies against Renminbi is less likely to have a financial impact on the Group.

### Interest Rate Risk

For interest-sensitive products and investments, the Group analyses the interest rate exposure on a dynamic basis and considers managing this risk in a cost-effective manner when appropriate, through variety of means.

### Liquidity Risk

Liquidity risk is the potential that the Group will be unable to meet its obligations when they fall due because of an inability to obtain adequate funding or liquidate assets. In managing liquidity risk, the Group monitors cash flows and maintains an adequate level of cash and cash equivalent to ensure the ability to finance the Group's operations and reduce the effects of fluctuation in cash flows.

### Operational Risk

Operational risk is the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events. Responsibility for managing operational risks basically rests with every function at divisional and departmental levels. Key functions in the Group are guided by their standard operating procedures, limits of authority and reporting framework. The management will identify and assess key operational exposures regularly so that appropriate risk response can be taken.

# MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

### Investment Risk

Investment risk can be defined as the likelihood of occurrence of losses relative to the expected return on any particular investment. Key concern of investment framework will be balancing risk and return across different investments, and thus risk assessment is a core aspect of the investment decision process. Proper authorization system has been set up and detailed analysis will be made before approving investments. Regular updates on the progress of the investments of the Group would be submitted to the Board.

### Economic Environment

Most of the Group's facilities, operations are located in and its revenue derived from mainland China and Hong Kong. The Group's results of operations and financial condition therefore depend on the economies of mainland China and Hong Kong. The economy of Hong Kong is significantly affected by the developments in mainland China and the Asia-Pacific region. Mainland China's economy may experience negative economic developments, and other regional economies may also deteriorate.

The Group also has significant business across the PRC and one of its growth strategies is to expand into new regions. These regions have also been adversely affected by the global economic slowdown and any continued slowdown may have an adverse effect on the Group's existing operations in, and planned expansion into, these regions.

## IMPACT OF THE COVID-19

In 2022, there were cases of epidemics caused by gatherings in a number of important market areas in China, and the prevention and control of the epidemic has had a direct impact on the production, operation and marketing of CIRC. With the optimal adjustment of China's epidemic prevention and control policies and the successive liberalization of controls across the country, the impact of the epidemic on economic and social development will gradually diminish in the long run. The economic operation is expected to pick up in general in 2023, and the general environment for the development of the nuclear technology application industry is expected to continue to improve.

In the long run, the COVID-19 pandemic has also brought opportunities for the development of the nuclear technology application industry. Irradiation technology has played an irreplaceable role in fighting against the pandemic, shortening the sterilization periods of disposable medical products from 14 days originally to less than 1 day, which has been fully affirmed by all sectors of society, and China has further increased its emphasis on the nuclear technology application industry. At the same time, the outbreak of the COVID-19 pandemic has prompted the country to pay more attention to health issues, and people's demand for living in good health and preventing and treating disease has grown day by day, providing an important opportunity for the development of industries such as radiopharmaceuticals, medical diagnosis and high-end nuclear medical equipment. The Company will fully grasp the opportunities brought by the pandemic, and taking the planning initiative and following the trend, make every effort to promote the accelerated development of related industries.

# MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

## FINANCIAL REVIEW

### Revenue

We derived our revenue mainly from five major business segments: (1) pharmaceuticals; (2) radioactive source products; (3) irradiation; (4) radiation therapy equipment and related services; and (5) other businesses.

Our revenue increased by 19.5% from RMB5,143.7 million in 2021 to RMB6,146.2 million in 2022, which was mainly due to an increase in revenue from our pharmaceuticals, radiation therapy equipment and related services and other business segments.

### Cost of Sales, Gross Profit and Gross Margin

Our cost of sales increased by 38.4% from RMB1,901.8 million in 2021 to RMB2,631.5 million in 2022, which was mainly due to an increase in cost of sales of radiation therapy equipment and related services and other businesses correspondingly, resulting from the increase in revenue.

Our gross profit increased by 8.4% from RMB3,241.9 million in 2021 to RMB3,514.7 million in 2022 and our gross margin decreased from 63.0% to 57.2%. The decrease in gross profit was primarily due to the relatively significant increase in the revenue of the radiation therapy equipment and related services and other businesses, which had a lower gross margin, pulling down the overall gross profit growth.

### Other Income, Gains and Losses

Our other income increased by 48.1% from RMB61.6 million in 2021 to RMB91.2 million in 2022, mainly due to the increase in government subsidies in 2022.

### Selling and Distribution Expenses

Our selling and distribution expenses decreased by 1.8% from RMB1,820.5 million in 2021 to RMB1,788.0 million in 2022. This is mainly due to (i) the decrease in sales promotion services due to the pandemic, and (ii) the decrease in sales service fees due to the changes in pharmaceuticals sales policies.

As a percentage of revenue, selling and distribution expenses decreased from 35.4% in 2021 to 29.1% in 2022.

# MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

### Administrative Expenses and Credit Impairment Losses

Our administrative expenses and credit impairment losses increased by 28.4% from RMB705.2 million in 2021 to RMB905.2 million in 2022, mainly due to (i) the increased research and development expenses resulting from more investments in research and development, and (ii) the increased employee compensation.

As a percentage of revenue, administrative expenses and credit impairment losses increased from 13.7% in 2021 to 14.7% in 2022.

### Finance Costs

Our finance costs decreased 3.9% from RMB35.8 million in 2021 to RMB34.4 million in 2022.

### Share of Profits less Losses of Associates and Share of Profits of Joint Ventures

Our share of profits less losses of associates increased by 23.8% from RMB7.0 million in 2021 to RMB8.6 million in 2022. Our share of profits of joint ventures decreased by 37.5% from RMB53.7 million in 2021 to RMB33.5 million in 2022, mainly due to (i) the decrease in profit of our joint venture, Shanghai GMS Pharmaceutical Co., Ltd.* (上海欣科醫藥有限公司), and (ii) the year-on-year decrease in the appreciation of the investment projects of our joint venture, Tongfu Innovation Fund (同輻創新基金).

* *For identification purposes only*

### Profit before Tax

As a result of the foregoing, our profit before tax increased by 14.7% from RMB802.7 million in 2021 to RMB920.5 million in 2022.

### Income Tax Expense

Our income tax expense increased by 28.0% from RMB129.6 million in 2021 to RMB165.9 million in 2022.

Our effective tax rate was 16.2% and 18.0% in 2021 and 2022, respectively.

### Profit for the Year

As a result of the foregoing, our profit for the year increased by 12.1% from RMB673.0 million in 2021 to RMB754.6 million in 2022.

# MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

## FINANCIAL POSITION

### Overview

For the year ended 31 December 2022, the total assets of the Group increased. The total assets, the total liabilities and the total equity were RMB11,685.5 million, RMB5,132.3 million and RMB6,553.2 million, respectively.

### Net Current Assets

The table below sets forth our current assets, current liabilities and net current assets as at the dates indicated:

*RMB in million*

| | **31 December 2022** | 31 December 2021 |
|---|---|---|
| Inventories | **677.6** | 691.9 |
| Contract assets | **27.4** | 29.4 |
| Trade and bill receivables | **3,501.3** | 2,821.2 |
| Deposits and other receivables | **146.5** | 153.7 |
| Prepayments | **236.7** | 212.4 |
| Cash at bank and on hand | **2,923.2** | 2,748.2 |
| **Total Current Assets** | **7,512.7** | 6,656.8 |
| Bank loans | **18.2** | 118.1 |
| Corporate bond | **–** | 500.0 |
| Trade payables | **488.3** | 337.9 |
| Accruals and other payables | **3,270.7** | 2,816.4 |
| Lease liabilities | **28.5** | 53.4 |
| Provisions | **86.3** | 76.5 |
| Income tax payable | **95.8** | 69.4 |
| **Total Current Liabilities** | **3,987.8** | 3,971.7 |
| **Net Current Assets** | **3,524.9** | 2,685.1 |

Our net current assets increased by 31.3% from RMB2,685.1 million as of 31 December 2021 to RMB3,524.9 million as of 31 December 2022, which was mainly due to the increase in the Company's trade receivables.

### Adjusted Net Gearing Ratio and Quick Ratio

Our adjusted net gearing ratio (adjusted net debt (interest-bearing debt plus unaccrued proposed dividends) divided by adjusted equity (total equity attributable to equity shareholders of the Company less unaccrued proposed dividends)) was 24.1% and 23.7% as of 31 December 2021 and 31 December 2022, respectively.

Our quick ratio (total current assets excluding inventories divided by total current liabilities as of the same date) was 1.5 times and 1.7 times as of 31 December 2021 and 31 December 2022, respectively.

# MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

## ANALYSIS OF CASH FLOWS

The following table sets forth the cash flows of the Group:

*RMB in million*

| | 2022 | 2021 |
|---|---|---|
| Net cash generated from operating activities | **862.7** | 794.3 |
| Net cash used in investing activities | **(506.6)** | (907.3) |
| Net cash (used in)/generated from financing activities | **(291.5)** | (97.4) |
| Net (decrease)/increase in cash and cash equivalents | **64.5** | (210.4) |
| Cash and cash equivalents at the beginning of the year | **2,141.5** | 2,351.6 |
| Effect of changes in foreign exchange rate | **–** | 0.3 |
| Cash and cash equivalents at the end of the year | **2,206.0** | 2,141.5 |

### Trade and Other Receivables

Trade and other receivables are stated at amortized cost using the effective interest method less allowance for credit losses. As of 31 December 2022, our trade and other receivables (net of bad debt allowance of RMB195.8 million) were RMB3,647.8 million.

### Trade and Other Payables

Our trade and other payables mainly consist of trade payables and accruals and other payables, which include receipts in advance, other taxes payables, deposits from promoters, payables to promoters, payables for staff-related costs, dividends payables and other accruals and payables. As of 31 December 2022, our trade and other payables were RMB3,759.0 million.

### Bank Loans and Pledge of Assets

As of 31 December 2022, the unsecured long-term bank loans mainly included:

(i) A loan principal of RMB500.0 million borrowed by the Group in 2022 at an interest rate of 2.7%.

(ii) A loan principal of RMB95.0 million borrowed by a subsidiary of the Group in 2022 at an interest rate of 2.7%.

(iii) A loan principal balance of RMB1.5 million of a subsidiary of the Group in 2022 at an interest rate of 3.9%.

(iv) A loan principal balance of RMB5.3 million of a subsidiary of the Group in 2022 at an interest rate of 4.8%, which was guaranteed by Chengdu Gaotong Isotope Co., Ltd (成都中核高通同位素股份有限公司).

# MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

As of 31 December 2022, the secured long-term bank loans mainly included:

(i) A loan principal of RMB6.7 million borrowed by a subsidiary of the Group at an interest rate of 5.1%, with a carrying amount of RMB6.4 million in 2022, and the assets with total carrying amount of RMB16.4 million were pledged.

As of 31 December 2022, the unsecured short-term bank loans mainly included:

(i) A loan principal of RMB8.0 million borrowed by a subsidiary of the Group in 2022 at an interest rate of 3.9%, which was guaranteed by a financing guarantee company.

## Capital Expenditures

Our capital expenditures mainly comprise additions to plant and equipment and intangible assets. In 2022, our capital expenditures were RMB530.1 million.

## Contingent Liabilities

As of 31 December 2022, we did not have any material contingent liabilities.

## Foreign Exchange and Foreign Exchange Risk

During the year ended 31 December 2022, the Group was exposed to currency risk primarily through bank deposits denominated in foreign currency, which were primarily Hong Kong dollars. The Group monitors foreign exchange movements and determines exchange when necessary. The Group currently has no foreign exchange hedging policy.

## Credit Risk

In order to minimize the credit risk, we have policies in place to monitor the exposures to these credit risks on an ongoing basis. Before accepting any new customer requiring credit over a certain credit amount, we carry out research into their creditability and assess their credit quality and define credit limits for that customer. Our individual credit evaluations focus on the customer's historical payment records, and take into account information specific to the customer as well as pertaining to the economic environment in which the customer operates.

We normally do not require collateral from customers. Therefore, our exposure to credit risk is influenced mainly by the individual characteristics of each customer rather than the industry in which the customer operates. The significant concentration of credit risk primarily arises when we rely heavily on individual customers. We will, however, perform periodic credit evaluation on our customers and monitor the compliance of credit terms by them. We believe we do not have any significant concentration of credit risk as the trade and bill receivables involve a large number of customers across diverse industries and geographical areas.

# MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

### Liquidity Risk

Our policy is to regularly monitor current and expected liquidity requirements to ensure that we maintain sufficient reserves of cash and adequate commitment funds from major financial institutions to meet both short-term and long-term liquidity requirements. Our Directors believe that there is no significant liquidity risk, as we have sufficient monetary capital to fund our operations.

## DIVIDEND POLICY

When the Board recommends the declaration of cash dividends to shareholders of the Company (the "**Shareholder(s)**") at a general meeting, the decision to declare any dividends and the amount of dividends will depend on, among other things:

- our results of operations and cash flows;
- our financial position;
- overall performance;
- our future prospects;
- statutory, regulatory and contractual restrictions on the payment of dividends by us; and
- other factors that the Board deems relevant.

## NO MATERIAL ADVERSE CHANGE

The Directors have confirmed that there was no material adverse change in our financial and trading position or prospects as of 31 December 2022.

## SUBSEQUENT EVENTS

Save as disclosed above, there were no significant subsequent events to be disclosed after the Reporting Period to the date of this annual report.

## USE OF PROCEEDS FROM THE INITIAL PUBLIC OFFERING

On 6 July 2018, H shares of the Company became listed on the Main Board of the Stock Exchange of Hong Kong Limited (the "**Stock Exchange**") (stock code: 1763). Based on the offer price of HKD21.60 per H share and upon the partial exercise of the over-allotment option (100 Shares), the net proceeds that the Group received from the Global Offering were approximately HKD1,690.0 million after deduction of the underwriting commissions and other estimated expenses in relation to the Global Offering. As at 31 December 2022, current assets of approximately RMB268.1 million were used and approximately RMB536.1 million was used in selective mergers and acquisitions.

# MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

In accordance with the requirements of paragraph 11(8) of Appendix 16 of the Rules Governing the Listing of Securities on the Stock Exchange (the "**Listing Rules**"), the use of proceeds will be updated to provide the use of proceeds from the initial public offering for 2022 (including the expected timeline of full utilisation of the balance), which is set out below:

*RMB in million*

| Use | Initial Allocation of the net proceeds | Revised Allocation of the net proceeds | Amount Utilised as of 31 December 2018 | Amount Utilised as of 31 December 2019 | Amount Utilised as of 31 December 2020 | Amount Utilised as of 31 December 2021 | Amount Utilised as of 31 December 2022 | Balance as of 31 December 2022 | Expected time of full utilisation of balance |
|---|---|---|---|---|---|---|---|---|---|
| Investment in imaging diagnostic and therapeutic radiopharmaceuticals manufacturing and research and development bases | 597.3 | 460.0 | 0.0 | 29.5 | 200.0 | 251.5 | 427.0 | 33.0 | In 2023 |
| Establishment of production and distribution subsidiaries | 67.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Establishment of new production facilities | 84.5 | 50.0 | 0.0 | 50.0 | 50.0 | 50.0 | 50.0 | 0.0 | |
| Investment in the research and development of various imaging diagnostic and therapeutic radiopharmaceuticals, raw materials of radioactive source products, medical radioisotopes, and UBT products and related raw materials | 253.6 | 118.3 | 0.0 | 76.6 | 101.2 | 105.4 | 105.5 | 12.8 | In 2023 |
| Investments/selective (mergers) acquisitions | 286.5 | 536.1 | 51.4 | 529.9 | 536.1 | 536.1 | 536.1 | 0.0 | |
| Working capital and general corporate purposes | 143.3 | 268.1 | 71.7 | 232.5 | 268.1 | 268.1 | 268.1 | 0.0 | |
| Total | 1,432.5 | 1,432.5 | 123.1 | 918.5 | 1,155.4 | 1,211.2 | 1,386.7 | 45.8 | |

Note: The investment in the research and development in the use of proceeds is under preparation due to certain research and development projects to be newly launched. There may be differences between the actual and expected timeline for utilising the proceeds for investment in research and development. The specific timeline of utilisation of the proceeds for the investment in the research and development is subject to the actual timeline of utilisation of the projects. The Company will fulfill the disclosure obligations in accordance with the relevant requirements according to the progress of the projects.

# MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

## EMPLOYEES AND REMUNERATION POLICY

The Group had a total of 3,366 (as at 31 December 2021: 3,120) employees as at 31 December 2022. During the year ended 31 December 2022, our staff costs were approximately RMB795.7 million (for the year ended 31 December 2021: RMB 663.4 million). The remuneration policy of the Group is to motivate and retain excellent staff so as to realize the long-term enterprise goals and objectives of the Group. The employee remuneration policy of the Group is determined after taking into account the overall salary level in the industry, employees' performance and other factors. The management regularly reviews the employee remuneration policy and arrangement of the Group.

We provide our employees with salaries and bonuses, as well as employee benefits, including employee retirement benefit schemes, medical and vocational injury insurance schemes and housing provident fund schemes. Our employees located in China are covered by the mandatory social security schemes defined by PRC local practice and regulations, which are essentially defined contribution schemes.

We provide training to all of our employees to have them equipped with the necessary skills to perform their jobs competently and to give them the opportunities to realize their personal career goals and aspirations. We are also committed to providing individuals with management and leadership training that will improve our capability to achieve our vision, mission and growth objectives. We realize the importance of developing individual career paths that will help employees develop their full potential. Development opportunities are provided as a result of on-the-job training and formal training programs.

## HEDGING ACTIVITIES

During the year ended 31 December 2022, the Group had not entered into any hedging transaction in relation to foreign exchange risks or interest risks.

## SIGNIFICANT INVESTMENTS, ACQUISITIONS AND DISPOSALS OF SUBSIDIARIES, ASSOCIATES AND JOINT VENTURES, AND FUTURE PLANS FOR MATERIAL INVESTMENTS OR ACQUISITIONS OF CAPITAL ASSETS

The Group will actively explore investment opportunities in and outside the PRC to diversify its source of income, which may or may not include any acquisition or disposal of assets and/or business by the Group. Any such plans will comply with the applicable requirements under the Listing Rules (where appropriate).

Save as disclosed in this annual report, the Company had no other significant investment, acquisition and disposal of subsidiaries, associates and joint ventures during the year ended 31 December 2022 and, as at the date of this annual report, has no specific plans for significant investment or acquisition of material capital assets in the future.

# CORPORATE GOVERNANCE REPORT

The Board of Directors is pleased to report to the shareholders on the corporate governance of the Company for the year ended 31 December 2022.

## CORPORATE GOVERNANCE CULTURE

The Company is committed to ensuring that its affairs are conducted in accordance with high ethical standards. This reflects its belief that, in the achievement of its long-term objectives, it is imperative to act with probity, transparency and accountability. By so acting, the Company believes that the Shareholders' benefits will be maximised in the long term and that its employees, those with whom it does business and the communities in which it operates will all benefit.

Corporate governance is the process by which the Board instructs management of the Group to conduct its affairs with a view to ensuring that its objectives are met. The Board is committed to maintaining and developing robust corporate governance practices that are intended to ensure:

– satisfactory and sustainable returns to Shareholders;

– that the interests of those who deal with the Company are safeguarded;

– that overall business risks are understood and managed appropriately;

– the delivery of high-quality products and services to the satisfaction of customers; and

– that high standards of ethics are maintained.

# CORPORATE GOVERNANCE REPORT (CONTINUED)

## CORPORATE GOVERNANCE PRACTICES

The Board of the Company is committed to maintaining high corporate governance standards.

The Board believes that high corporate governance standards are essential in providing a framework for the Group to safeguard the interests of shareholders, enhance corporate value, formulate its business strategies and policies, and enhance its transparency and accountability.

The Company has adopted the principles and code provisions of the Corporate Governance Code (the "**CG Code**") set out in Appendix 14 of the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited (the "**Stock Exchange**") (the "**Listing Rules**") as the basis of the Company's corporate governance practices.

The Company has in place a corporate governance framework and has established a set of policies and procedures based on the CG Code. Such policies and procedures provide the infrastructure for enhancing the Board's ability to implement governance and exercise proper oversight on business conduct and affairs of the Company.

The Board is of the view that throughout the year ended 31 December 2022, the Company has complied with all the code provisions as set out in the CG Code.

The Company has also put in place certain recommended best practices as set out in the CG Code.

## MODEL CODE FOR SECURITIES TRANSACTIONS

The Group has adopted a set of code with the standard no less favorable than that of the Model Code as set out in Appendix 10 of the Listing Rules (the "**Customised Code**") as its own code of conduct regarding securities transaction by all Directors, Supervisors and the relevant employees of the Company.

Having made specific enquiry by the Directors and Supervisors, all Directors and Supervisors confirmed that they had complied with the required standards as set out in the Customised Code during the Reporting Period. No incident of non-compliance with the Customised Code by such employees was noted by the Company.

## BOARD OF DIRECTORS

The Company is headed by an effective Board which assumes responsibility for its leadership and control and takes collective responsibility for promoting the Company's success by directing and supervising the Company's affairs. Directors make decisions objectively in the best interests of the Company.

The Board has a balance of skills, experience and diversity of perspectives appropriate to the requirements of the Company's business and regularly reviews the contribution required from a Director to perform his responsibilities to the Company and whether the Director is spending sufficient time performing them that are commensurate with their role and the Board responsibilities. The Board includes a balanced composition of executive Directors and non-executive Directors so that there is a strong independent element on the Board, which can effectively exercise independent judgement.

### Board Composition

The Board currently comprises 11 Directors, consisting of three executive Directors, namely Mr. Wang Suohui, Mr. Xu Hongchao and Mr. Du Jin; four non-executive Directors, namely Mr. Chen Shoulei, Mr. Dai Shuquan, Ms. Chang Jinyu and Ms. Liu Xiuhong; four independent non-executive Directors, namely Mr. Hui Wan Fai, Mr. Tian Jiahe, Ms. Chen Jingshan and Mr. Lu Chuang.

The biographical information of the Directors are set out in the section headed "Biographical Details of Directors, Supervisors and Senior Management" on pages 50 to 60 of this annual report.

Save as disclosed in the biographies of Directors set out in the section "Biographical Details of Directors, Supervisors and Senior Management" in this annual report, none of the Directors had any personal relationships (including financial, business, family or other material/relevant relationships) with any other Directors, Supervisors or senior management members.

### Attendance Records of Directors and Board Committee Members

The attendance records of each Director at the Board and Board committee meetings and the general meeting of the Company held during the year ended 31 December 2022 is set out below:

| | Attendance/Number of Meetings | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Directors | Board | Audit and Risk Management Committee | Nomination Committee | Remuneration and Appraisal Committee | Strategy Committee | Legal Affairs Committee | Science and Technology Innovation Committee[7] | Annual General Meeting | Extraordinary General Meeting |
| Mr. Meng Yanbin[1] | 3/3 | | | | 1/1 | 1/1 | | 1/1 | |
| Mr. Wang Suohui[2] | 7/7 | | | | 1/1 | | | 1/1 | 1/1 |
| Mr. Xu Hongchao[3] | 2/2 | | | | | | | | |
| Mr. Du Jin | 7/7 | | | | | | | 1/1 | 1/1 |
| Mr. Liu Zhonglin[4] | 3/3 | 5/5 | | | 1/1 | 1/1 | | 1/1 | |
| Mr. Chen Shoulei[5] | 7/7 | | | | 1/1 | | | 1/1 | 0/1 |
| Mr. Dai Shuquan[6] | 2/2 | | | | | | | | |
| Ms. Chang Jinyu | 7/7 | | | | | | | 1/1 | 0/1 |
| Ms. Liu Xiuhong | 7/7 | | | 3/3 | | 1/1 | | 1/1 | 1/1 |
| Mr. Hui Wan Fai | 7/7 | 5/5 | 2/2 | | | 1/1 | | 1/1 | 1/1 |
| Mr. Tian Jiahe | 7/7 | | | | 1/1 | | | 1/1 | 1/1 |
| Ms. Chen Jingshan | 7/7 | | 2/2 | 3/3 | | 1/1 | | 1/1 | 1/1 |
| Mr. Lu Chuang | 7/7 | 5/5 | 2/2 | 3/3 | | | | 1/1 | 1/1 |

1 Mr. Meng Yanbin resigned as an executive Director on 29 July 2022

2 Mr. Wang Suohui was appointed as the chairman of the Strategy Committee and the Legal Affairs Committee on 16 September 2022

3 Mr. Xu Hongchao was appointed as an executive Director and a member of the Strategy Committee on 16 September 2022

# CORPORATE GOVERNANCE REPORT (CONTINUED)

4 Mr. Liu Zhonglin resigned as a non-executive Director, member of Audit and Risk Management Committee, member of Strategy Committee and member of Legal Affairs Committee on 29 July 2022

5 Mr. Chen Shoulei was appointed as a member of the Audit and Risk Management Committee and the Legal Affairs Committee on 16 September 2022

6 Mr. Dai Shuquan was appointed as a non-executive Director and a member of the Strategy Committee on 16 September 2022

7 Science and Technology Innovation Committee was established on 23 December 2022. Meanwhile, Mr. Wang Suohui, Mr. Xu Hongchao, Mr. Du Jin, Mr. Tian Jiahe and Mr. Lu Chuang were appointed as members of Science and Technology Innovation Committee, and Mr. Wang Suohui was appointed as the chairman.

Apart from regular Board meetings, the Chairman also held a meeting with the independent non-executive Directors without the presence of other directors on 23 December 2022. All the relevant Directors attended this meeting.

## Chairman and Chief Executive Officer

Mr. Wang Suohui, an executive Director, is the Chairman of the Board while Mr. Xu Hongchao, an executive Director and general manager, assumes the role of the Chief Executive Officer of the Company. The Chairman of the Board provides leadership and is responsible for the effective functioning and leadership of the Board. The Chief Executive Officer focuses on the Company's business development and daily management and operations generally.

## Independent Non-executive Directors

During the year ended 31 December 2022, the Board at all times met the requirements of the Listing Rules relating to the appointment of at least three independent non-executive Directors, representing one-third of the Board, with one of whom possessing appropriate professional qualifications or accounting or related financial management expertise.

The Company has received written annual confirmation from each of the independent non-executive Directors in respect of his independence in accordance with the independence guidelines set out in Rule 3.13 of the Listing Rules. The Company is of the view that all independent non-executive Directors are independent.

## Board Independence Evaluation

The Company has established a Board Independence Evaluation Mechanism during the year which sets out the processes and procedures to ensure a strong independent element on the Board, which allows the Board to effectively exercise independent judgment to better safeguard Shareholders' interests.

The objectives of the evaluation are to improve Board effectiveness, maximise strengths, and identify the areas that need improvement or further development. The evaluation process also clarifies what actions the Company needs to take to maintain and improve the Board performance, for instance, addressing individual training and development needs of each Director.

# CORPORATE GOVERNANCE REPORT (CONTINUED)

Pursuant to the Board Independence Evaluation Mechanism, the Board will conduct annual review on its independence. The Board Independence Evaluation Report will be presented to the Board which will collectively discuss the results and the action plan for improvement, if appropriate.

During the year ended 31 December 2022, all Directors have completed the independence evaluation in the form of a questionnaire individually, which was supplemented by individual interviews. The Board Independence Evaluation Report was presented to the Board and the evaluation results were satisfactory.

During the year ended 31 December 2022, the Board reviewed the implementation and effectiveness of the Board Independence Evaluation Mechanism and the results were satisfactory.

## Appointment and Re-election of Directors

Pursuant to the Articles of Association, the Directors shall be elected at the general meetings with a term of office of three years, renewable upon re-election. The Company has implemented a set of effective procedures for appointment of new Directors. Nomination of new Directors shall be first considered by the nomination committee whose recommendations will then be put forward to the Board for consideration. All newly nominated Directors are subject to election and approval at general meetings.

The Company has entered into service contracts with each of the Directors (including non-executive Directors). Such service contracts are for a term commencing from the date of appointment to the expiry of the current session of the Board.

## Responsibilities, Accountabilities and Contributions of the Board and Management

The Board should assume responsibility for leadership and control of the Company; and is collectively responsible for directing and supervising the Company's affairs.

The Board directly, and indirectly through its committees, leads and provides direction to management by laying down strategies and overseeing their implementation, monitors the Group's operational and financial performance, and ensures that sound internal control and risk management systems are in place. The Board of Directors of the Company has discharged its duties in relation to corporate governance in accordance with Rule A.2.1 of Appendix 14 to the Listing Rules: (1) to develop and review the Company's corporate governance policies and practices and make recommendations to the Board; (2) to review and monitor the training and continuous professional development of Directors and senior management; (3) to review and monitor the Company's policies and practices in relation to compliance with legal and regulatory requirements; (4) to develop, review and monitor the code of conduct and compliance manual (if any) for employees and directors; and (5) to review the Company's compliance with the CG Code and disclosure in the Corporate Governance Report.

During the Reporting Period, the Board of Directors of the Company reviewed and amended a series of corporate governance systems related to the work of the Board, internal control and budget management, organized Directors and senior management to participate in various training that facilitated their continuous professional development, reviewed the Company's compliance management, reviewed the Company's compliance with the CG Code and approved disclosure in the "Corporate Governance and Corporate Governance Report" of this report.

# CORPORATE GOVERNANCE REPORT (CONTINUED)

All Directors, including non-executive Directors and independent non-executive Directors, have brought a wide spectrum of valuable business experience, knowledge and professionalism to the Board for its efficient and effective functioning. The independent non-executive Directors are responsible for ensuring a high standard of regulatory reporting of the Company and providing a balance in the Board for bringing effective independent judgement on corporate actions and operations.

All Directors have full and timely access to all the information of the Company and may, upon request, seek independent professional advice in appropriate circumstances at the Company's expenses for discharging their duties to the Company.

The Directors shall disclose to the Company details of other offices held by them.

The Board reserves for its decision on all major matters relating to policy matters, strategies and budgets, internal control and risk management, material transactions (in particular those that may involve conflict of interests), financial information, appointment of directors and other significant operational matters of the Company. Responsibilities relating to implementing decisions of the Board, directing and coordinating the daily operation and management of the Company are delegated to the management.

## Continuous Professional Development of Directors

Directors shall keep abreast of regulatory developments and changes in order to effectively perform their responsibilities and to ensure that their contribution to the Board remains informed and relevant.

Every newly appointed Director has received a formal and comprehensive induction on the first occasion of his/her appointment to ensure appropriate understanding of the business and operations of the Company and full awareness of Director's responsibilities and obligations under the Listing Rules and relevant statutory requirements. Such induction shall be supplemented by visits to the Company's key plant sites and meetings with senior management of the Company.

Directors should participate in appropriate continuous professional development to develop and refresh their knowledge and skills. Internally-facilitated briefings for Directors would be arranged and reading material on relevant topics would be provided to Directors where appropriate.

The Company will organize relevant training courses for all Directors in due course at the Company's expenses.

During the year ended 31 December 2022, the Company organized training sessions conducted by the legal advisers for all Directors. The training sessions covered a wide range of relevant topics including directors' duties and responsibilities, corporate governance and regulatory updates. In addition, relevant reading materials including compliance manual/legal and regulatory updates/seminar handouts have been provided to the Directors for their reference and studying.

# CORPORATE GOVERNANCE REPORT (CONTINUED)

The training records of the Directors during the year ended 31 December 2022 are summarized as follows:

| Directors | Type of Training[Note] |
|---|---|
| ***Executive Directors*** | |
| Mr. Meng Yanbin (resigned on 29 July 2022) | A, B |
| Mr. Wang Suohui | A, B |
| Mr. Du Jin | A, B |
| Mr. Xu Hongchao (appointed on 16 September 2022) | A, B |
| ***Non-executive Directors*** | |
| Mr. Liu Zhonglin (resigned on 29 July 2022) | A, B |
| Mr. Chen Shoulei | A, B |
| Ms. Chang Jinyu | A, B |
| Ms. Liu Xiuhong | A, B |
| Mr. Dai Shuquan (appointed on 16 September 2022) | A, B |
| ***Independent Non-executive Directors*** | |
| Mr. Hui Wan Fai | A, B |
| Mr. Tian Jiahe | A, B |
| Ms. Chen Jingshan | A, B |
| Mr. Lu Chuang | A, B |

Note:

Types of Training

A: Attending training sessions, including but not limited to, briefings, seminars, conferences and workshops
B: Reading relevant news alerts, newspapers, journals, magazines and relevant publications

# CORPORATE GOVERNANCE REPORT (CONTINUED)

## BOARD COMMITTEES

The Board has established six committees, namely, the Audit and Risk Management Committee, Nomination Committee, Remuneration and Appraisal Committee, Strategy Committee, Legal Affairs Committee and Science and Technology Innovation Committee for overseeing particular aspects of the Company's affairs. All Board committees of the Company are established with specific written terms of reference which deal clearly with their authority and duties. The terms of reference of the Audit and Risk Management Committee, Nomination Committee, Remuneration and Appraisal Committee, Strategy Committee, Legal Affairs Committee and Science and Technology Innovation Committee are posted on the Company's website and/or the Stock Exchange's website and are available to shareholders upon request.

The list of the chairman and members of each Board committee is set out under "Corporate Information" on page 2 to 3.

### Audit and Risk Management Committee

The Audit and Risk Management Committee consists of two independent non-executive Directors and one non-executive Director, namely Mr. Hui Wan Fai (Chairman), Mr. Lu Chuang and Mr. Chen Shoulei.

The terms of reference of the Audit and Risk Management Committee are of no less exacting terms than those set out in the CG Code. The main duties of the Audit and Risk Management Committee are to assist the Board in reviewing the financial information and reporting process, risk management and internal control systems, effectiveness of the internal audit function, scope of audit and appointment of external auditors, and arrangements to enable employees of the Company to raise concerns about possible improprieties in financial reporting, internal control or other matters of the Company.

During the year ended 31 December 2022, the Audit and Risk Management Committee held five meetings to review annual financial results and report in respect of the year ended 31 December 2021, interim financial results and report in respect of the six months ended 30 June 2022, significant issues on the financial reporting, operational and compliance controls, the effectiveness of the risk management and internal control systems and internal audit function, appointment of external auditors, audit planning, engagement of non-audit services, continuing connected transactions and relevant scope of works and arrangements for employees to raise concerns about possible improprieties.

The Audit and Risk Management Committee also met the external auditors twice without the presence of the executive Directors.

The attendance of the Audit and Risk Management Committee meetings is set out under "Attendance Records of Directors and Board Committee Members" on page 32.

### Nomination Committee

The Nomination Committee consists of three independent non-executive Directors, namely Ms. Chen Jingshan (Chairman), Mr. Hui Wan Fai and Mr. Lu Chuang.

# CORPORATE GOVERNANCE REPORT (CONTINUED)

The terms of reference of the Nomination Committee are of no less exacting terms than those set out in the CG Code. The principal duties of the Nomination Committee include the structure, size and composition of the Board, the Board Diversity Policy and Nomination Policy of the Company, developing and formulating relevant procedures for the nomination and appointment of Directors, making recommendations to the Board on the appointment and succession planning of Directors, and assessing the independence of independent non-executive Directors.

In assessing the Board composition, the Nomination Committee would take into account various aspects as well as factors concerning Board diversity as set out in the Company's Board Diversity Policy. The Nomination Committee would discuss and agree on measurable objectives for achieving diversity on the Board, where necessary, and recommend them to the Board for adoption.

In identifying and selecting suitable candidates for directorships, the Nomination Committee would consider the candidate's relevant criteria as set out in the Director Nomination Policy that are necessary to complement the corporate strategy and achieve Board diversity, where appropriate, before making recommendation to the Board.

During the year ended 31 December 2022, the Nomination Committee held two meetings to review the structure, size and composition of the Board and the independence of the independent non-executive Directors and to consider and recommend to the Board on the appointment of non-executive and independent non-executive Directors. The Nomination Committee considered an appropriate balance of diversity perspectives of the Board is maintained.

The attendance records of the Nomination Committee are set out under "Attendance Records of Directors and Board Committee Members" on page 32.

## Board Diversity Policy

The Company has adopted a Board Diversity Policy which sets out the approach to achieve diversity of the Board. The Company recognizes and embraces the benefits of having a diverse Board and sees increasing diversity at the Board level as an essential element in maintaining the Company's competitive advantage.

Pursuant to the Board Diversity Policy, the Nomination Committee will review annually the structure, size and composition of the Board and where appropriate, make recommendations on changes to the Board to complement the Company's corporate strategy and to ensure that the Board maintains a balanced diverse profile. In relation to reviewing and assessing the Board composition, the Nomination Committee is committed to achieving diversity at all levels and will consider a number of aspects, including but not limited to gender, age, cultural and educational background, ethnicity, professional experience, skills, knowledge and term of service. The above factors are all the consideration factors of measurable objectives. In addition, the consideration factors of measurable objectives also include the rich experience in different business areas of a Director with technical, legal, financial, managerial and audit background. Meanwhile, the Company will consider the above factors according to its own business model and specific needs and finally determine a candidate by combination of his or her specialties, value and the contribution that can be made to the Board.

# CORPORATE GOVERNANCE REPORT (CONTINUED)

The Company aims to maintain an appropriate balance of diversity perspectives that are relevant to the Company's business growth and is also committed to ensuring that recruitment and selection practices at all levels (from the Board downwards) are appropriately structured so that a diverse range of candidates are considered.

The Board has set measurable objectives to implement the Board Diversity Policy and will review such objectives from time to time to ensure their appropriateness and ascertain the progress made towards achieving those objectives.

For the purpose of implementation of the Board Diversity Policy, the following measurable objectives were adopted:

(A) at least one of the members of the Board shall be female;

(B) at least one-third of the members of the Board shall be non-executive Directors or independent non-executive Directors;

(C) at least one-third of the members of the Board shall be independent non-executive Directors;

(D) at least one of the members of the Board shall have obtained accounting or other professional qualifications;

(E) at least two of the members of the Board shall have more than five years of experience in the industry he/she is specialised in;

(F) at least one of the members of the Board shall have China-related work experience.

At present, the Nomination Committee considered that the Board is sufficiently diverse and confirmed that the measurable objectives have been achieved.

The Nomination Committee will review the Board Diversity Policy, as appropriate, to ensure its effectiveness.

### Gender Diversity

The Company values gender diversity across all levels of the Group. The following table sets out the gender ratio in the workforce of the Group, including the Board and senior management as at the date of this annual report:

| | Female | Male |
|---|---|---|
| Board | 27.27% (3) | 72.73% (8) |
| Senior management(excluding directors) | – | 100.00% (6) |
| Other employees | 34.85% (1,171) | 65.15% (2,189) |

The Board had targeted to achieve and had achieved the goal of at least one female Director and 30.00% of female employees of the Group and considers that the above current gender diversity is satisfactory.

# CORPORATE GOVERNANCE REPORT (CONTINUED)

The Board is committed to improving the gender diversity among the senior management as and when suitable candidates are identified for the appointment of senior management.

Details on the gender ratio of the Group together with relevant data can be found in the Environmental, Social and Governance Report for 2022 of the Company.

## Director Nomination Policy

The Board has delegated its responsibilities and authority for selection and appointment of Directors to the Nomination Committee of the Company.

The Company has adopted a Director Nomination Policy which sets out the selection criteria and process and the Board succession planning considerations in relation to nomination and appointment of Directors of the Company and aims to ensure that the Board has a balance of skills, experience and diversity of perspectives appropriate to the Company and the continuity of the Board and appropriate leadership at Board level.

The Director Nomination Policy sets out the factors for assessing the suitability and the potential contribution to the Board of a proposed candidate, including but not limited to the following:

- Character and integrity;
- Qualifications including professional qualifications, skills, knowledge and experience that are relevant to the Company's business and corporate strategy;
- Diversity in all aspects, including but not limited to gender, age (18 years or above), cultural and educational background, ethnicity, professional experience, skills, knowledge and length of service;
- Requirements of Independent Non-executive Directors on the Board and independence of the proposed Independent Non-executive Directors in accordance with the Listing Rules; and
- Commitment in respect of available time and relevant interest to discharge duties as a member of the Board and/or Board committee(s) of the Company.

# CORPORATE GOVERNANCE REPORT (CONTINUED)

The Director Nomination Policy also sets out the procedures for the selection and appointment of new Directors and re-election of Directors at general meetings. During the year ended 31 December 2022, the Nomination Committee recommended to the Board the appointment of a new executive Director and a new non-executive Director, namely Mr. Xu Hongchao and Mr. Dai Shuquan, respectively.

The Nomination Committee will review the Director Nomination Policy, as appropriate, to ensure its effectiveness. The Nomination Committee will also review at least annually the structure, size and composition (including skills, knowledge and experience) of the Board and diversity of the Board to ensure that it has a balance of expertise, skills, experience and diversity of perspectives appropriate to complement the Company's corporate strategy.

## Remuneration and Appraisal Committee

The Remuneration and Appraisal Committee consists of two independent non-executive Directors and one non-executive Director, namely Mr. Lu Chuang (Chairman), Ms. Chen Jingshan and Ms. Liu Xiuhong.

The terms of reference of the Remuneration and Appraisal Committee are of no less exacting terms than those set out in the CG Code. The primary functions of the Remuneration and Appraisal Committee include reviewing and making recommendations to the Board on the remuneration packages of individual Directors and senior management, the remuneration policy and structure for all Directors and senior management; and establishing transparent procedures for developing such remuneration policy and structure to ensure that no Director or any of his/her associates will participate in deciding his/her own remuneration.

During the year ended 31 December 2022, the Remuneration and Appraisal Committee held three meetings during the year to review and make recommendation to the Board on the remuneration policy and the remuneration packages of the Directors and senior management.

Details of the emoluments of Directors for the Reporting Period are set out in note 9 in the Notes to the Audited Financial Statements for the year ended 31 December 2022.

The emoluments of senior management (exclusive of Directors) for the Reporting Period are within the following bands:

| **Emoluments Band (RMB)** | **2022 Number of Individuals** | 2021 Number of Individuals |
|---|---|---|
| Less than 500,000 | **1** | – |
| 500,000-800,000 | **–** | 2 |
| More than 800,000 | **4** | 1 |
| Total | **5** | 3 |

The Remuneration and Appraisal Committee also made recommendations to the Board on the terms of service contracts or letters of appointment of the new Directors appointed during the year.

# CORPORATE GOVERNANCE REPORT (CONTINUED)

The attendance records of the Remuneration and Appraisal Committee are set out under "Attendance Records of Directors and Board Committee Members" on page 32.

## Strategy Committee

The Strategy Committee consists of two executive Directors, two non-executive Directors and one independent non-executive Director, namely Mr. Wang Suohui (Chairman), Mr. Xu Hongchao, Mr. Chen Shoulei, Mr. Dai Shuquan and Mr. Tian Jiahe.

The principal duties of the Strategy Committee include considering various special development strategies and plans of the Company and to make recommendations to the Board and assisting with other matters specified by laws, administrative rules, regulations and the rules of the securities supervision and administration authority of the place where the shares of the Company are listed and authorized by the Board.

During the year ended 31 December 2022, the Strategy Committee held one meeting.

## Legal Affairs Committee

The Legal Affairs Committee consists of one executive Director, two non-executive Directors and two independent non-executive Directors, namely Mr. Wang Suohui (Chairman), Mr. Chen Shoulei, Ms. Liu Xiuhong, Mr. Hui Wan Fai and Ms. Chen Jingshan.

The principal duties of the Legal Affairs Committee include performing the duties and responsibilities of promoting the law-based and law-compliant construction, researching and formulating the plan for implementing the law-based and law-compliant construction and reporting it to the Board for consideration and approval, considering the overall objectives for the law-based administration and law-compliant administration and the basic system of the Company, and to advise thereon, considering the system of the law-based and law-compliant administration, the setup of authorities and their duties and responsibilities and to advise thereon, supervising and evaluate the law-based and law-compliant administration of the Company, and to check the implementation by the Company in the compliance with laws and regulatory requirements and assisting other matters specified by the Articles of Association and authorized by the Board.

During the year ended 31 December 2022, the Legal Affairs Committee held one meeting.

## Science and Technology Innovation Committee

The Science and Technology Innovation Committee consists of three executive Directors and two independent non-executive Directors, namely Mr. Wang Suohui (Chairman), Mr. Xu Hongchao, Mr. Du Jin, Mr. Tian Jiahe and Mr. Lu Chuang.

The principal duties of the Science and Technology Innovation Committee include conducting research on the direction of the Company's scientific and technological development, major new products research and development and innovation programs, providing advice and recommendations to the Board, and advising and supporting the Board in major decisions relating to science and technology and innovation.

# CORPORATE GOVERNANCE REPORT (CONTINUED)

During the year ended 31 December 2022, the Science and Technology Innovation Committee did not convene any meetings.

## BOARD OF SUPERVISORS

The Board of Supervisors is responsible for supervising the legality of the performance of duties by the Directors and senior management members of the Company, thus to protect the overall benefits of the Company and shareholders.

As at 31 December 2022, the Board of Supervisors comprised 5 Supervisors, namely Mr. Liu Zhonglin (Chairman), Mr. Zhao Nanfei, Mr. Zhang Guoping, Mr. Ma Fuxin and Ms. Peng Qihui. The biographical information of the Supervisors are set out in the section headed "Biographical Details of Directors, Supervisors and Senior Management" on pages 50 to 60 of this annual report.

Mr. Ma Fuxin and Ms. Peng Qihui were appointed as Supervisors on 30 August 2022 for a term from 30 August 2022 to the date on which the term of office of the third session of the Board of Supervisors of the Company expires.

Mr. Liu Zhonglin was appointed as Supervisor of the third session of the Board of Supervisors on 16 September 2022 for a term from 16 September 2022 to the date on which the term of office of the third session of the Board of Supervisors of the Company expires.

Save as disclosed in the biographies of Supervisors set out in the section "Biographical Details of Directors, Supervisors and Senior Management" in this annual report, none of the Supervisors had any personal relationships (including financial, business, family or other material/relevant relationships) with any other Directors, Supervisors or senior management members.

The Board of Supervisors held six meetings during the year to consider and approve the interim and annual results announcement, the interim and annual report and other resolutions.

The attendance records of the members of the Board of Supervisors are as follows:

| **Supervisors** | **Number of meetings attended** |
|---|---|
| Mr. Zhang Qingjun (resigned on 29 July 2022) | 3/3 |
| Mr. Liu Zhonglin (appointed on 16 September 2022) | 1/1 |
| Mr. Zhao Nanfei | 6/6 |
| Mr. Zhang Guoping | 6/6 |
| Mr. Li Zhenhua (resigned on 30 August 2022) | 4/4 |
| Mr. Zhang Jian (resigned on 30 August 2022) | 4/4 |
| Mr. Ma Fuxin (appointed on 30 August 2022) | 2/2 |
| Ms. Peng Qihui (appointed on 30 August 2022) | 2/2 |

# CORPORATE GOVERNANCE REPORT (CONTINUED)

## RISK MANAGEMENT AND INTERNAL CONTROLS

The Board acknowledges its responsibility for the risk management and internal control systems and reviewing their effectiveness. Such systems are designed to manage rather than eliminate the risk of failure to achieve business objectives and can only provide reasonable and not absolute assurance against material misstatement or loss. The Board has the overall responsibility for evaluating and determining the nature and extent of the risks it is willing to take in achieving the Company's strategic objectives, and establishing and maintaining appropriate and effective risk management and internal control systems. The Audit and Risk Management Committee assists the Board in leading the management and overseeing their design, implementation and monitoring of the risk management and internal control systems.

The Company has developed and adopted various risk management procedures and guidelines with defined authority for implementation by key business processes and office functions, including project management, sales and leasing, financial reporting, human resources and information technology.

The Company's risk management and internal control systems have been developed with the following principles, features and processes:

The principles of the overall risk management work of CIRC: the strategy-oriented principle, the principle of significance and importance, the principle of participation by all, the internal control principle, the principle of comprehensiveness, the principle of significance and the principle of objectiveness.

All departments conducted internal control assessment regularly to identify risks that potentially impact the business of the Group and various aspects including key operational and financial processes, regulatory compliance and information security.

Self-evaluation has been conducted annually to confirm that control policies are properly complied with by each department.

The management, in coordination with department heads, assessed the likelihood of risk occurrence, provided treatment plans, and monitored the risk management progress, and reported to the Audit and Risk Management Committee and the Board on all findings and the effectiveness of the systems.

The management has confirmed to the Board and the Audit and Risk Management Committee on the effectiveness of the risk management and internal control systems from the Listing Date to 31 December 2022.

The Board, as supported by the Audit and Risk Management Committee as well as the management report and the internal audit findings, reviewed the risk management and internal control systems, including the financial, operational and compliance controls, during the year ended 31 December 2022, and considered that such systems are effective and adequate. The annual review also covered the financial reporting and internal audit function and staff qualifications, experiences and relevant resources.

# CORPORATE GOVERNANCE REPORT (CONTINUED)

The Company has developed its disclosure policy which provides a general guide to the Company's Directors, Supervisors, senior management and relevant employees in handling confidential information, monitoring information disclosure and responding to enquiries. Control procedures have been implemented to ensure that unauthorized access and use of inside information are strictly prohibited.

The Company has an internal audit function to carry out independent reviews of the adequacy and effectiveness of its risk management. The risk management and internal controls are self-assessed by the management and reviewed by the Board on an on-going basis.

The Company has in place the Whistleblowing Policy and has made channels of communication available to receive and deal with reports in accordance with the prescribed procedures, and allows employees of the Company and those who deal with the Company to raise concerns with the Department of Discipline Inspection and Supervision about possible improprieties in any matters related to the Company.

The Company has also in place the Anti-Corruption Policy to safeguard against corruption and bribery within the Company. The Company has an internal reporting channel that is open and available for employees of the Company to report any suspected corruption and bribery. Employees can also make anonymous reports to the Department of Discipline Inspection and Supervision, which is responsible for investigating the reported incidents and taking appropriate measures. The Company continues to carry out anti-corruption and anti-bribery activities to cultivate a culture of integrity, and actively organizes anti-corruption training and inspections to ensure the effectiveness of anti-corruption and anti-bribery.

In 2022, the Company held 61 anti-corruption trainings and education briefings to all employees. There were no non-compliance cases in relation to bribery and corruption.

## DIRECTORS' RESPONSIBILITY IN RESPECT OF THE FINANCIAL STATEMENTS

The Directors acknowledge their responsibility for preparing the financial statements of the Company for the year ended 31 December 2022. The Directors are not aware of any material uncertainties relating to events or conditions that may cast significant doubt upon the Company's ability to continue as a going concern. The statement of the independent auditors of the Company about their reporting responsibilities on the financial statements is set out in the Independent Auditors' Report on pages 93 to 97.

## AUDITORS' REMUNERATION

The remuneration payable to the Company's external auditors in respect of audit services and non-audit services for the year ended 31 December 2022 amounted to RMB1.95 million, and RMB0.6 million is outstanding. An analysis of the remuneration paid to the external auditors of the Company, SHINEWING (HK) CPA Limited, in respect of audit services and non-audit services for the year ended 31 December 2022 is set out below:

# CORPORATE GOVERNANCE REPORT (CONTINUED)

| Service Category | Fees Paid<br>RMB |
|---|---|
| Audit Services | 1,350,000 |
| Non-audit Services | – |
| **Total** | **1,350,000** |

## JOINT COMPANY SECRETARIES

Mr. Gui Youquan and Ms. Kam Mei Ha Wendy have been appointed as the Company's joint company secretaries. Ms. Kam Mei Ha Wendy is an executive director of the Corporate Services Division of Tricor Services Limited, a global professional services provider specializing in integrated business, corporate and investor services. She is a fellow member of the Hong Kong Chartered Governance Institute and the Chartered Governance Institute in the United Kingdom.

All Directors have access to the advice and services of the joint company secretaries on corporate governance and board practices and matters. Mr. Gui Youquan, the chief accountant and joint company secretary of the Company, has been designated as the primary contact person at the Company which would work and communicate with Ms. Kam Mei Ha Wendy on the Company's corporate governance and secretarial and administrative matters.

For the year ended 31 December 2022, Mr. Gui Youquan and Ms. Kam Mei Ha Wendy have undertaken not less than 15 hours of relevant professional training respectively in compliance with Rule 3.29 of the Listing Rules.

## GENERAL MEETING

In 2022, the Company convened two general meetings.

On 23 May 2022, the 2022 AGM was held on-site and Shareholders holding an aggregate of 264,283,602 Shares, representing 82.620925% of the Company's total issued shares, attended the meeting.

On 16 September 2022, an extraordinary general meeting of the Company was held on-site and Shareholders holding an aggregate of 286,126,582 Shares, representing 89.449526% of the Company's total issued shares, attended the meeting.

The convening, notifying, holding and voting procedures of the meetings are in compliance with the relevant provisions of the Company Law and the Articles of Association.

# CORPORATE GOVERNANCE REPORT (CONTINUED)

## SHAREHOLDERS' RIGHTS

The Company engages with shareholders through various communication channels.

To safeguard shareholder interests and rights, separate resolution should be proposed for each substantially separate issue at general meetings, including the election of individual Director. All resolutions put forward at general meetings will be voted on by poll pursuant to the Listing Rules and poll results will be posted on the websites of the Company and of the Stock Exchange after each general meeting.

### Convening a General Meeting

According to the Articles of Association, to convene an extraordinary general meeting or a shareholders' class meeting, the shareholders shall follow the following procedures:

(I) The shareholders individually or jointly holding more than 10% of the voting shares at the meeting sought to be held (hereinafter referred to as the "**Proposing Shareholders**") may sign one or several written requests of identical form of content requesting the Board of Directors to convene an extraordinary general meeting or a class meeting and stating the subject of the meeting. The abovementioned shareholding shall be calculated as of the day on which the written request is made. The Board of Directors shall, in accordance with laws, administrative regulations and the Articles, provide a written feedback on whether to agree or not to convene such extraordinary general meeting within ten (10) days upon receipt of such proposal.

(II) In the event that the Board of Directors agrees to convene the extraordinary general meeting, a notice on the convocation of such meeting shall be given within five (5) days after the resolution being made by the Board of Directors. Changes made to the original proposal in the notice shall be approved by relevant shareholders.

(III) In the event that the Board of Directors refuses to convene the extraordinary general meeting, or gives no feedback within ten (10) days after receiving the proposal, the proposing shareholders shall have the right to propose, in written form, the convocation of an extraordinary general meeting to the Board of Supervisors.

(IV) In the event that the Board of Supervisors agrees to convene the extraordinary general meeting, a notice on the convocation of such meeting shall be given within five (5) days after receiving the proposal. Changes made to the original proposal in the notice shall be approved by relevant shareholders.

(V) If the Board of Supervisors fails to give a notice on the convocation of extraordinary general meeting within time limit, it shall be deemed having no intention to convene and preside over the meeting. In this case, the shareholders individually or jointly holding more than 10% of the Company's shares for more than ninety consecutive days shall have the right to convene and preside over the meeting by themselves. The convocational procedure shall, to the extent possible, be identical to procedures according to which meeting is to be convened by the Board of Directors.

All reasonable expenses incurred for such meeting convened by the shareholders as a result of the failure of the Board of Directors and the Board of Supervisors to convene a meeting at the above requests shall be borne by the Company and deducted from the amount owned by the Company to the delinquent directors and supervisors.

# CORPORATE GOVERNANCE REPORT (CONTINUED)

### Putting Forward Proposals at General Meetings

According to the Articles of Association, to convene the shareholders' general meeting, the shareholders individually or jointly holding more than 3% of the total voting shares shall be entitled to propose new resolutions in writing to the Company. The Company shall incorporate the matters falling within the scope of duties of the shareholders' general meeting into the agenda of such meeting for the consideration.

The contents of the aforesaid proposal shall be in conformity with relevant laws, administrative regulations and the Articles, within the scope of duties of the shareholders' general meeting and with a clear agenda and specific resolutions.

### Putting Forward Enquiries to the Board

For enquiries about shareholdings, Shareholders shall direct their enquiries to the Company's H Share registrar, Computershare Hong Kong Investor Services Limited and the contact details are set out as follows:

| | |
|---|---|
| Address: | Shops 1712-1716, 17th Floor, Hopewell Centre, 183 Queen's Road East, Wanchai, Hong Kong |
| Telephone: | (852) 2862 8555 |
| Fax: | (852) 2865 0990/(852) 2529 6087 |

For enquiries about corporate governance or other matters to be brought to the attention of the Board, Shareholders shall send their written enquiries to the Company either via mail or email. The mail address and email address are set out in the subsection headed "Contact Details" below.

The Company will not normally deal with verbal or anonymous enquiries.

### Contact Details

Shareholders may send their enquiries or requests as mentioned above to the following:

| | |
|---|---|
| Address: | Room 418, South 4th Floor, Building 1, No. 66 Changwa Middle Street, Haidian District, Beijing, China<br>(For the attention of the Joint Company Secretary) |
| Fax: | +86 10 68512374 |
| Email: | ir@circ.com.cn |

For the avoidance of doubt, shareholder(s) must deposit and send the original duly signed written requisition, notice or statement, or enquiry (as the case may be) to the above address and provide their full name, contact details and identification in order to give effect thereto. Shareholders' information may be disclosed as required by law.

# CORPORATE GOVERNANCE REPORT (CONTINUED)

## INVESTOR RELATIONS

The Company considers that effective communication with Shareholders is essential for enhancing investor relations and investor understanding of the Group's business performance and strategies.

The Company endeavours to maintain an on-going dialogue with shareholders and in particular, through AGM and other general meetings. At the AGM, directors (or their delegates as appropriate) are available to meet shareholders and answer their enquiries.

In 2022, the Company did not amend the Articles of Association.

### Policies Related to Shareholders

The Company has in place a Shareholders' Communication Policy to ensure that shareholders' views and concerns are appropriately addressed. The Board has reviewed the implementation and effectiveness of the Shareholders' Communication Policy during the year ended 31 December 2022 and the results were satisfactory.

The Company has adopted a Dividend Policy on payment of dividends. The Company does not have any pre-determined dividend payout ratio. Depending on the financial conditions of the Company and the Group and the conditions and factors as set out in the Dividend Policy, dividends may be proposed and/or declared by the Board during a financial year and any final dividend for a financial year will be subject to the Shareholders' approval. Such details have been disclosed in the section "Management Discussion and Analysis — Dividend Policy" of the annual report of the Company.

# BIOGRAPHICAL DETAILS OF DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT

## EXECUTIVE DIRECTORS

**Mr. Wang Suohui** (王鎖會), aged 48, is the executive director, chairman of the Board and secretary of the party committee of the Company. Before joining the Company, from July 1997 to March 1999, Mr. Wang served as assistant engineer of the Fourth Research and Design Engineering Corporation of CNNC. From March 1999 to June 2002, he served as supervising engineer of CNNC Star Construction Project Management Co, Ltd. From June 2002 to December 2007, he successively served as a designer, director of the equipment room of the medical office and general manager assistant of the equipment supervision department of the Fourth Research and Design Engineering Corporation of CNNC. From October 2006 to March 2008, he worked at the construction division of the Comprehensive Planning Department of CNNC (中核集團公司綜合計劃部建設處) (on secondment). From March 2008 to March 2011, he served as the principal staff member of construction division of the Comprehensive Planning Department of CNNC and from March 2011 to January 2017, he served as a deputy chief of the ability construction session and chief of business planning session of division of plan and development of CNNC. Mr. Wang served as deputy general manager of the Company from January 2017 to October 2020. He served as the deputy general manager of China Isotope & Radiation Corporation (presiding over the work) from November 2020 to February 2021. He served as the general manager and executive director of the Company from February 2021 to July 2022 and served as chairman of the Board and executive director of the Company since July 2022. From December 2020 to April 2022, Mr. Wang worked as deputy secretary of the party committee of China Isotope & Radiation Corporation and as secretary of the party committee of China Isotope & Radiation Corporation since April 2022. Mr. Wang also served as the chairman of the board of directors of CNNC Tongxing (Beijing) Nuclear Technology Co., Ltd. (中核同興(北京)核技術有限公司) from May 2017 to January 2021. From May 2017 to April 2019, he also served as the chairman of the board of directors of BINE High-Tech Co., Ltd.(中核比尼(北京)核技術有限公司). From January 2018 to April 2019, he served as a director of CNNC (Taizhou) Irradiation Technology Co. Ltd. (中核(泰州)輻照科技有限公司). Since May 2018, he has been serving as the director and vice chairman of CNNC Nuclide Medical Investment Co., Ltd. (中核核素醫療投資有限公司). In March 2019, he has also served as the director and chairman of CNNC Accuray (Tianjin) Medical Technology Co., Ltd. (中核安科鋭(天津)醫療科技有限責任公司). Mr. Wang served as the director and vice chairman of Nanjing Clinical Nuclear Medicine Center from March 2021 to August 2022.

Mr. Wang obtained a Bachelor's Degree in Chemical Equipment and Mechanisms from College of Mechanical Engineering of Hebei University of Science and Technology in June 1997. He received a Master's Degree in Nuclear Energy and Nuclear Technology Engineering from Tsinghua University in December 2009. Mr. Wang is a professorship senior engineer. From May 2019 to August 2022, he served as the deputy chairman of the Radioactive Medicine and Radiation Protection Branch (放射醫學與輻射防護分會) (the Radioactive Medicine and Radiation Protection Alliance (放射醫學與輻射防護聯盟)) of China Isotope and Radiation Industry Association. Mr. Wang has been serving as the executive vice president of the Seventh Council of the China Isotope & Radiation Association since June 2021 and the legal representative of the Seventh Council of the China Isotope & Radiation Association since November 2021. Since November 2021, Mr. Wang has been the chairman of the board of directors of CNNC Radiopharmaceutical Engineering and Technology Research Center (放射性藥物工程技術研究中心) and since December 2021, Mr. Wang has been the chairman of the standardization working committee of China Isotope and Radiation Industry Association (中國同位素與輻射行業協會). From January 2022 to August 2022, he was a director of Branch Council of Nuclear Power Operation and Application Technology Association of Chinese Nuclear Society (中國核學會核電運行及應用技術分會), a director of National Engineering Research Centre for Isotopes and Pharmaceuticals since March 2022, a director of the Tenth Council of Chinese Nuclear Society since April 2022 and a standing member of the Sixth Council of China Nuclear Industry Education Society (中國核工業教育學會) since June 2022.

# BIOGRAPHICAL DETAILS OF DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT (CONTINUED)

**Mr. Xu Hongchao** (許紅超), aged 52, is currently a general manager and a deputy secretary of the party committee of the Company. Before joining the Company, from July 1993 to July 1994, he worked as a trainee of CNNC Sichuan Environmental Protection Engineering Co., Ltd. (中核四川環保工程有限公司). From July 1994 to July 1999, he served as senior staff member and principal staff member of the funding division of the finance bureau of China National Nuclear Company (中國核工業總公司). From July 1999 to November 2008, he successively served as deputy chief of the asset management division of the Investment Operation and Management Department, chief of the general management division of the Policy Research and Reform Department, and chief of the investment division of the Asset Management Department of CNNC. From November 2008 to January 2013, he served as the executive director of CNNC International Limited (中核國際有限公司). He was also the deputy general manager and vice president of China Uranium Corporation Limited (中國國核海外鈾業公司) between August 2010 and January 2013. From January 2013 to July 2016, Mr. Xu served as the deputy general manager of China Nuclear Exchange Energy Co., Ltd. (中核匯能有限公司). From July 2016 to March 2018, he was the deputy general manager of CNNC Baoyuan Asset Holdings Limited (中國中核寶原資產控股有限公司). Mr. Xu served as the deputy general manager of China Baoyuan Investment Co., Ltd. (中國寶原投資有限公司) from March 2018 to May 2022. He has been serving as the deputy secretary of the party committee of the Company since May 2022 and general manager of the Company since July 2022. He also served as the chairman of the board of Hunan Baisha Lvdao Investment Development Co., Ltd. (湖南白沙綠島投資開發有限公司) and director of SDIC Baoyuan Health Service Co., Ltd (國投寶原建康服務有限公司) since May 2020. He has also been serving as the director and vice chairman of Nanjing Clinical Nuclear Medicine Center since August 2022.

Mr. Xu received a Bachelor's Degree in Industrial Management Engineering from Hengyang Institute of Technology, Faculty of Industrial Management Engineering in June 1993, and a Master's Degree in Business Administration from Tsinghua University in June 2001. Mr. Xu is qualified as a senior accountant. He has been serving as the deputy chairman of the Radioactive Medicine and Radiation Protection Branch (放射醫學與輻射防護分會) (the Radioactive Medicine and Radiation Protection Alliance (放射醫學與輻射防護聯盟)) of China Isotope and Radiation Industry Association and a director of Branch Council of Nuclear Power Operation and Application Technology Association of Chinese Nuclear Society (中國核學會核電運行及應用技術分會) since August 2022. He has been serving as a director of the CNNC Nuclear Medicine Engineering Technology Research Center (中核核醫療工程技術研究中心) since October 2022.

# BIOGRAPHICAL DETAILS OF DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT (CONTINUED)

**Mr. Du Jin** (杜進), aged 57, is currently an executive Director and chief engineer of the Company. Before joining the Company, from August 1986 to May 1997, Mr. Du served as engineer and deputy director of Section 51 of the Isotope Department of CIAE. From May 1995 to August 1995, he studied at MAP Medical Technologies, Finland. From March 1996 to September 1996, as a visiting scholar, he worked at the Isotope Department of Japan Atomic Energy Research Institute. From June 1997 to January 2002, Mr. Du worked as senior researcher at MAP Medical Technologies Oy, Finland. From February 2002 to June 2006, he served as researcher at the Isotope Department of CIAE, and as a professor of the Joint Radiopharmaceutical Laboratory of Peking University Health Science Center. Mr. Du served as researcher, deputy chief engineer and manager of the technical development division of the Company and its predecessor, China Isotope, from June 2006 to May 2016. He has served as the chief engineer of the Company since May 2016, and served as executive director of the Company since February 2017. From January 2017 to June 2018, Mr. Du served as a director of Shanghai GMS Pharmaceutical, and a director of HTA from April 2016 to April 2019. Since April 2021, Mr. Du has been a director and the chairman of the Board of HTA.

Mr. Du received a Bachelor's Degree in Organic Chemistry Engineering from Wuhan Institute of Technology in July 1986 and a master's degree in inorganic and analytical chemistry from University of Jyvaskyla in Finland in December 1998. He received a doctorate in inorganic and analytical chemistry from University of Jyvaskyla in Finland in August 2001. Mr. Du worked as a senior researcher at MAP Medical Technologies in Finland from June 1996 to January 2002. Mr. Du was awarded second prize in the National Defense Science and Technology Award in November 2002. In 2016, he was awarded the Special Allowance Expertise from the State Council. Mr. Du served as the deputy director of the Isotope Specialty Committee of the China Isotopes and Radiation Industry Association from June 2012 to March 2023 and an adjunct researcher with the Isotope Institute of China Institute of Atomic Energy since January 2013. He has been a member of the Eighth Committee and a standing committee member of the Ninth Committee of the Nuclear Chemistry and Radiochemistry Chapter of the Chinese Nuclear Society from March 2013 to August 2018 and since September 2018 respectively. Mr. Du has been a member of the Editorial Board of Nuclear Chemistry and Radiochemistry since November 2013 and has served as deputy editor-in-chief of the Fifth and Sixth Editorial Board of Isotope since October 2014. Since October 2014, he has also served as deputy director of the Sixth Council of the Isotope Branch of Chinese Nuclear Society. From May 2015 to November 2017, Mr. Du served as the deputy leader of the radiopharmaceutical group of the 10th Committee of the nuclear medicine unit of Chinese Medical Association. Since December 2015, he has been a standing member of the First and Second Cancer Nuclear Medicine Professional Committee of Chinese Anti-cancer Association. He has also been a member of the National Technical Committee for Nuclear Energy Standardization (SAC/TC58) and vice committee director of the Radioisotope Technical Committee (SAC/TC58/SC4) since July 2015. From December 2016 to January 2021, he has been a member of the Fourth Committee on Science and Technology of CNNC and a deputy director of the Specialized Committee of Nuclear Technology Industrialization. Since January 2021, he has served as a committee member of the Fifth Committee on Science and Technology of CNNC. Since August 2018, he was the member of the executive committee of the World Isotope Council. Since September 2018, he has been a vice president of the first Council of the Radiopharmaceuticals Branch of Chinese Nuclear Society. Since January 2019, he has been a deputy leader of the nuclear professional group of the nuclear technology application of the China Commission of Science, Technology and Industry for National Defense (中國國防科技工業科學技術委員會核領域核技術應用專業組). Since April 2019, he has been a member of the tenth Editorial Board of the Chinese Journal of Nuclear Medicine and Molecular Imaging. He was a member of the Group Standardization Committee of the China Nuclear Energy Association since August 2020. Since November 2021, he has served as the a vice president of the Council of CNNC Radiopharmaceutical Engineering Technology Research Center. Since January 2022, he has been the director of the National Atomic Energy Agency Research and Development Centre for Nuclear Technology (Radiopharmaceutical Engineering Transformation). Since March 2022, he has been a member of the Expert Committee of National Engineering Research Centre for Isotopes and Pharmaceuticals (同位素及藥物國家工程研究中心). Since April 2022, he has been a member of the Industry Advisory Committee of the Beijing Stock Exchange. Since November 2022, he has been a member of the Technical Committee for Nuclear Industry Standardization of the CNNC.

# BIOGRAPHICAL DETAILS OF DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT (CONTINUED)

## NON-EXECUTIVE DIRECTORS

**Mr. Chen Shoulei** (陳首雷), aged 57, is currently a non-executive director and vice chairman of the Company. Before joining the Company, from October 1986 to December 2007, Mr. Chen served as assistant accountant, accountant of the finance division, vice section chief of the finance section, acting deputy chief, deputy chief, chief of the finance division, and director of the financial assets division in the Fifth Institute of the Nuclear Industry. From January 2008 to January 2013, Mr. Chen served as deputy director and senior accountant in the financial division of China Nuclear Power Engineering. From January 2013 to March 2016, Mr. Chen served as director of the supervision and audit division of China Nuclear Power Engineering. From March 2016 to May 2021, Mr. Chen has been the chief accountant of Nuclear Power Institute of China. From May 2021, he has served as chief accountant of CIAE. From February 2017 to March 2019, Mr. Chen was a shareholder representative supervisor of the Company. Since June 2019, he has been a Director of the Company.

Mr. Chen received a Bachelor's Degree in Auditing (Accounting) from Wuhan University in July 1986. Mr. Chen was qualified as an assistant accountant in October 1989 and was certified as an accountant in November 1993 and a senior accountant on March 2000.

**Mr. Dai Shuquan** (代樹權), aged 56, is currently a member to the Party Committee, chief accountant and general legal counsel of Nuclear Power Institute of China since June 2021. Mr. Dai was an accountant of Hebei Cangzhou Hydrographic Four Team (河北滄州水文四隊) during July 1989 to September 1994. Mr. Dai was an accountant of onsite finance section of the finance division of 812 Plant (八一二廠) from September 1994 to January 1996. Mr. Dai successively served as the vice section chief of finance management section of the finance division of 812 Plant from January 1996 to August 1999; the section chief of onsite finance section of the finance division of 812 Plant from August 1999 to September 2000; the section chief of the planning section of the finance division of 812 Plant from September 2000 to October 2004. He served as the deputy director of the finance and accounting department of CNNC Jianzhong Nuclear Fuel Co., Ltd. from October 2004 to November 2011. From November 2011 to March 2013, Mr. Dai served as the director of the finance and accounting department of the South Branch of CNNC Jianzhong Nuclear Fuel Co., Ltd. Mr. Dai served as the director of finance and accounting department of CNNC Jianzhong Nuclear Fuel Co., Ltd. from March 2013 to July 2015. Mr. Dai worked as chief accountant of CNNC Sichuan Environmental Protection Engineering Co., Ltd. from July 2015 to June 2021.

Mr. Dai received a Bachelor's Degree in Finance and Accounting from Hebei GEO University (formerly known as Hebei Geography Institute) in June 1989. Mr. Dai is qualified as a senior accountant.

# BIOGRAPHICAL DETAILS OF DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT (CONTINUED)

**Ms. Chang Jinyu** (常晉峪), aged 51, is a non-executive Director of the Company. She served as an engineer of the Structural Design Department of Hangzhou Dongfang Communication Metalworking Factory (杭州東方通信金工分廠) from July 1994 to January 1997. She acted as the deputy general manager of the Project Department of Shanghai Galaxy Digital Investment Co., Ltd. (上海星河數碼投資有限公司) from June 2000 to April 2005. She was the senior manager of the Investment Planning Department of SIIC (上實集團) from April 2005 to April 2006, the assistant supervisor and supervisor of the Business Administration Department of SIIC Management (Shanghai) Limited (上實管理(上海)有限公司) from April 2006 to April 2010, the supervisor of the Investment Department of SIIC Management (Shanghai) Limited (上實管理(上海)有限公司) from April 2010 to March 2013, and the assistant general manager of SIIC Management (Shanghai) Limited (上實管理(上海)有限公司) from March 2013 to March 2014. Since March 2014, she has been the executive deputy general manager (part-time) of Shanghai Road and Bridge Development Co., Ltd. (上海路橋發展有限公司). Since August 2017, she has been the deputy general manager (part-time) of SIIC Management (Shanghai) Limited (上實管理(上海)有限公司). Since September 2018, she has been the deputy general manager of Shanghai Galaxy Digital Investment Co., Ltd. (上海星河數碼投資有限公司) as well as the chairperson of SIIC Aerospace Galaxy Energy Co., Ltd (上實航天星河能源有限公司).

In July 1994, Ms. Chang graduated from Shanghai Jiao Tong University majoring in mechanical design and process and obtained a bachelor's degree in Engineering. In June 2000, she graduated from Shanghai University of Finance and Economics majoring in money and banking and obtained a master's degree in Finance.

**Ms. Liu Xiuhong** (劉修紅), aged 55, is currently a non-executive director of the Company. From 1997 to 1999, she served as deputy chief of the infrastructure finance section of the finance bureau of the headquarters of CNNC. From 1999 to December 2004, she served as chief of the financial management section and deputy director of the finance division of China Nuclear Engineering and Construction Corporation (CNEC). From January 2005 to September 2014, she served as chief financial officer of China Nuclear Energy Technology Corporation Limited. From October 2014 to July 2018, she served as director of the audit division of CNEC. From August 2018 to November 2019, she served as secretary and deputy director of the system engineering division of CNNC. Since November 2019, she has been serving as full-time director of CNNC, and director of CNNC SUFA Technology Industry Co., Ltd. (Shenzhen Stock Exchange: 000777). Since December 2022, She has been the director of China Nuclear Energy Corp.* (中國原子能有限公司).

Ms. Liu graduated from the Department of Investment Economics of the Dongbei University of Finance and Economics and obtained a bachelor's degree in infrastructure finance and credit in July 1989. In June 2011, she graduated from the School of Economics and Management of the Tsinghua University with a master's degree in business administration for senior management. Ms. Liu is qualified as a senior accountant, ACCA and a national accounting leader.

# BIOGRAPHICAL DETAILS OF DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT (CONTINUED)

## INDEPENDENT NON-EXECUTIVE DIRECTORS

**Mr. Hui Wan Fai** (許雲輝), aged 46, is currently an independent non-executive Director of the Company. Before joining the Company, Mr. Hui acted as an auditor in PricewaterhouseCoopers from 1998 to 2000; a global management trainee in Hutchison Whampoa Limited from 2000 to 2001; bond market manager of ICEA FINANCE Capital Limited (工商東亞資本有限公司) from 2001 to 2003; head of specific investment division (China) of Mellon HBV Alternative Strategies LLC from 2005 to 2006. From August 2006 to July 2010, Mr. Hui served as a managing director of Pacific Alliance Group, and from June 2010 to March 2012, he served as a managing director of The Blackstone Group (HK) Limited. Mr. Hui has been an independent non-executive director of the Greentown China Holdings Limited (Hong Kong Stock Exchange Stock Code: 3900) since April 2012. Mr. Hui has been the managing partner of PAG Consulting Ltd since March 2012. Mr. Hui obtained a Bachelor's Degree in Business Administration from The University of Hong Kong in 1998 and a Master's Degree in International and Public Affairs from The University of Hong Kong in 2002. He also obtained a Master's Degree in Business Administration from Institut Européen d'Administration des Affaires (INSEAD) in 2004.

Mr. Hui is a member of the Association of Chartered Certified Accountants, United Kingdom and holds the qualifications of the Chartered Financial Analyst from the Association for Investment Management and Research as well as the Associate of HKICS from the Hong Kong Institute of Company Secretaries. Mr. Hui is a permanent resident of Hong Kong and is now ordinarily resident in Hong Kong.

**Mr. Tian Jiahe** (田嘉禾), aged 72, is an independent non-executive Director of the Company. Before joining the Company, he was a resident physician of the Radiology Department of The General Hospital of the People's Liberation Army (解放軍總醫院) from January 1976 to October 1976, a physician-in-charge and associate chief physician of the Isotopes Office of the Radiology Department of The General Hospital of the People's Liberation Army (解放軍總醫院) from October 1976 to June 1987, a chief physician and professor of the Nuclear Medicine Department of The General Hospital of the People's Liberation Army (解放軍總醫院) from June 1987 to November 2000, and a chief physician of the Medical Imaging Centre of The General Hospital of the People's Liberation Army (解放軍總醫院) from November 2000 to December 2017. Since December 2017, he has been a deputy chief of the Professor Board of the Nuclear Medicine Department, member of the Party Committee and head of the Medical Imaging Centre of The General Hospital of the People's Liberation Army (解放軍總醫院).

In December 1975, Mr. Tian Jiahe graduated from School of Radiology of the Medical School of Jilin University (吉林醫科大學) and obtained a bachelor's degree in Medicine. In December 1980, he graduated from The University of New South Wales, Australia (澳大利亞新南威爾士大學) with a master's degree in Medicine.

# BIOGRAPHICAL DETAILS OF DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT (CONTINUED)

**Ms. Chen Jingshan** (陳景善), aged 53, is an independent non-executive Director of the Company. Before joining the Company, Ms. Chen was a staff in Beijing Foreign Trade Import and Export Corporation from October 1992 to December 1995; from January 1996 to February 1998, she was a legal assistant in Beijing Jingrong Law Company (北京市京融律師事務所); from April 2005 to November 2007, she acted as tutor in Law School of Waseda University in Japan; from October 2007 to August 2014, she acted as an assistant professor in China University of Political Science and Law; since September 2014, she has been acting as a professor and PhD Tutor in China University of Political Science and Law.

Ms. Chen obtained a Bachelor's Degree in Law Profession from Law School of China University of Political Science and Law in July 1992, a Master's Degree in Law Profession in Law School of Waseda University in Japan in April 2002, and a PhD in Law Profession in Law School of Waseda University in Japan in November 2007.

**Mr. Lu Chuang** (盧闖), aged 43, is an independent non-executive Director of the Company. Before joining the Company, Mr. Lu was a teacher in the School of Accounting of Central University of Finance and Economics from July 2007 to March 2008; from March 2008 to May 2010, he was a teacher in the School of Accounting and a laboratory director in the School of Accounting of Central University of Finance and Economics; from May 2010 to November 2015, he acted as the deputy director of Finance Department of Central University of Finance and Economics; since November 2015, he has been acting as a professor of the School of Accounting, Central University of Finance and Economics.

In June 2001, Mr. Lu obtained a Bachelor's Degree in Specialization of Certified Public Accountants from the School of Accounting of Beijing Technology and Business University; in June 2004, he obtained a Master's Degree in Accounting from the Department of Accounting of Renmin University of China; in June 2007, he obtained a PhD in Financial Management from the Department of Finance of Renmin University of China.

# BIOGRAPHICAL DETAILS OF DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT (CONTINUED)

## SUPERVISORS

### Chairman of the Board of Supervisors

**Mr. Liu Zhonglin** (劉忠林), aged 54, is currently a non-executive director of the Company. Before joining the Company, Mr. Liu served as accountant, certified public accountant, deputy chief, chief of the finance division, director of finance and auditing division, deputy chief accountant and chief accountant of the Sixth Design and Research Institute of China Weapon Industry (中國兵器工業第六設計研究院) from July 1990 to November 2010. From November 2010 to July 2012, he served as the chief accountant of China Weapon Industry Northern Engineering Design Institute Co., Ltd. (中國兵器工業北方工程設計研究院有限公司). From July 2012 to July 2015, he served as the chief accountant of Shandong Special Industrial Group (山東特種工業集團有限公司). From July 2015 to May 2021, he served as the chief accountant of CIAE. From May 2021 to March 2022, Mr. Liu served as a member of the Party Committee of CIAE. Mr. Liu has been a Supervisor of the Company from February 2017 to February 2021. From February 2021, he has been a director of the Company. From May 2021, Mr. Liu has been a full-time director and supervisor of China National Nuclear Corporation. Mr. Liu received a bachelor's degree in Financial Accounting from Shenyang Institute of Technology in July 1990. Mr. Liu is a senior accountant at researcher level, and a PRC certified public accountant.

### Supervisors

**Mr. Zhang Guoping** (張國平), aged 51, is a Supervisor of the Company. Before joining the Company, Mr. Zhang graduated from Zhejiang University in July 1992 with a bachelor's degree in thermal energy and power engineering. Since then until April 2001, he worked with the Second Institution of Nuclear Power Institute of China (中國核動力研究設計院二所), specialising in the experiment and research of power equipment. From May 2001 to September 2017, Mr. Zhang worked at the scientific technology office of the Second Institution of Nuclear Power Institute of China (中國核動力研究設計院二所), specialising in the management of scientific research projects, and as director of the scientific technology office from June 2009 to September 2017. From October 2017 to November 2020, Mr. Zhang has been the deputy director of the asset operation and management office of Nuclear Power Institute of China. He has been the deputy director of Business Development Division of Nuclear Power Institute of China since November 2020.

**Mr. Zhao Nanfei** (趙南飛), aged 44, is currently a Supervisor of the Company. Before joining the Company, Mr. Zhao worked in Beijing Chaoneng Yuheng Group Co., Ltd. from 2001 to 2007; from 2007 to 2008, he worked in HTA Co., Ltd.; from 2009 to 2018, he acted as chief officer of Project Section of Industrial Development Division in China Institute of Atomic Energy; from 2018 to April 2021, he has worked as deputy chief of Industrial Development Division in China Institute of Atomic Energy. Since April 2021, he has served as the director of the Industrial Development Department in China Institute of Atomic Energy. Mr. Zhao obtained a bachelor's degree in Materials Physics Profession from Beijing University of Science and Technology in 2001. Mr. Zhao is a senior engineer.

# BIOGRAPHICAL DETAILS OF DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT (CONTINUED)

**Ms. Peng Qihui** (彭啟慧), aged 30, was appointed as an employee representative supervisor of the Company on 30 August 2022. Before joining the Company, Ms. Peng engaged in project planning and other work in the procurement department of China Nuclear Power Engineering Co., Ltd. from March 2015 to June 2018. During the period, from January 2016 to July 2017, she was seconded to the Nuclear Power Division of China National Nuclear Corporation, and from August 2017 to June 2018, she was seconded to the Nuclear Technology Application Industry Division of China National Nuclear Corporation, engaging in international market development and other work. Since June 2018, she has been the supervisor of the strategic planning department of the Company, in charge of performance appraisal, corporate management, strategic planning and other work. Ms. Peng graduated from the University of Science and Technology Beijing with a bachelor's degree in engineering in June 2013, majoring in information security, and obtained a master's degree in engineering of engineering enterprise management from the Hong Kong University of Science and Technology in November 2014. Ms. Peng is also an engineer.

**Mr. Ma Fuxin** (麻付新), aged 32, was appointed as an employee representative supervisor of the Company on 30 August 2022. Since August 2017, Mr. Ma has successively served as a legal officer, supervisor and senior supervisor in the legal compliance department of the Company. Mr. Ma graduated from Nanchang University with a bachelor's degree in arts in June 2014, majoring in English, and obtained a master's degree in laws from China University of Political Science and Law in June 2017.

## SENIOR MANAGEMENT

**Mr. Xu Hongchao** (許紅超), aged 52, was appointed as the executive director and general manager of the Company on 29 July 2022. Please refer to the section above headed "Biographical Details of Directors, Supervisors and Senior Management – Executive Directors" for details of his biography.

**Mr. Du Jin** (杜進), aged 57, is an executive Director and chief engineer of the Company. Please refer to the section above headed "Biographical Details of Directors, Supervisors and Senior Management – Executive Directors" for details of his biography.

# BIOGRAPHICAL DETAILS OF DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT (CONTINUED)

**Mr. Fan Guomin** (范國民), aged 52, is a deputy general manager of the Company. Before joining the Company, Mr. Fan served as the team leader of the fire source team in Section 52 at the Isotope Department of CIAE from July 1995 to July 2001. He served as director of the sales division in the Isotope Department of CIAE from July 2001 to March 2003, and as the director of the marketing division, assistant president and vice president of Isotope Division of HTA from March 2003 to June 2012. He also served as the deputy general manager of Headway from June 2012 to September 2012. From September 2012 to May 2016, he served as the general manager of Headway. Mr. Fan has served as the deputy general manager of the Company since May 2016. Mr. Fan served as the chairman of the board of directors of HTA from June 2017 to April 2019, and the chairman of the board of directors of CNGT from July 2017 to April 2019. From March 2017 to March 2018, he served as the chairman of the board of directors of Headway. From March 2016 to April 2020, he has been the deputy chairman of Beijing Ciaeriar Rediosotope Technique Co., Ltd. (北京雙原同位素技術有限公司). Since January 2017, he has been the deputy chairman of Shanghai GMS Pharmaceutical. Since April 2017, he has been the deputy chairman of Shenzhen CICAM. Since October 2021, he has served as the deputy chairman of Beijing Ciaeriar Rediosotope Technique Co., Ltd. Since December 2021, he has served as the chairman of CNNC Qinshan Isotope Co., Ltd.

Mr. Fan received a Bachelor's Degree in Science (Radiochemistry) from College of Chemistry of Sichuan University (formerly known as Sichuan United University) in July 1995. Mr. Fan is a senior engineer. Since May 2018, he has been the vice president of Beijing Radiation Safety Research Association (北京市輻射安全研究會). Since November 2020, he has been a council member of Nuclear Medicine of Chinese Nuclear Society. Since June 2021, he has been a director of the Nuclear Environmental Protection Branch of the Chinese Nuclear Society (中國核學會核環保分會).

**Mr. Gui Youquan** (桂友泉), aged 48, is the chief accountant, chief legal officer, secretary of the board and joint company secretary of the Company. Before joining the Company, Mr. Gui worked in the audit section of Nuclear Power Qinshan Joint Venture Company Limited from July 1996 to May 2001. From May 2001 to August 2001, he worked in the finance division of Ningbo Bird Co., Ltd. From June 2004 to January 2008, he served as project manager and supervisor of the general system section of the finance division of China Netcom Group Corporation Limited. From January 2008 to October 2008, he served as senior supervisor (deputy-section-head level) and assistant manager of the general system section of the finance division of China Netcom Group Corporation Limited. From October 2008 to June 2009, he served as assistant manager (deputy-section-head level) of the general budget section of the finance division of China United Network Communications Corporation Limited. From June 2009 to July 2014, he served as deputy chief and chief of the finance section of Hainan Nuclear Power Co., Ltd. From July 2014 to February 2017, he served as chief accountant of Jiangsu Nuclear Power Corporation. From February 2017 to November 2020, he served as chief accountant of CNNC Medical Industry Management Company. Mr. Gui has served as the Company's chief accountant and joint company secretary since November 2020. He has served as the secretary of the board of the Company since February 2021 and served as the chief legal officer of the Company since March 2021.

Mr. Gui obtained a master's degree in accounting from the Renmin University of China in June 2004. Mr. Gui is a senior accountant, CPA, and ACCA. Since November 2020, he has been a member of the investment decision committee of Beijing Tongfu Innovation Industrial Investment Fund Partnership Enterprise (Limited Partnership).

# BIOGRAPHICAL DETAILS OF DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT (CONTINUED)

**Mr. Huang Li** (黃立), aged 44, has been the deputy general manager of China Isotope & Radiation Corporation since 29 July 2022. From August 2000 to May 2003, Mr. Huang worked as an employee of Room 33 of the Division of Radiochemistry of China Institute of Atomic Energy; from May 2003 to October 2006, he worked as an employee of the General Planning Division of China Institute of Atomic Energy; from October 2006 to February 2012, he worked as the section chief of the Development Planning Section of the General Planning Division of China Institute of Atomic Energy; from February 2012 to February 2013, he worked as the deputy director (probation) of the General Planning Division of China Institute of Atomic Energy. From February 2013 to March 2015, he was the deputy director of the General Planning Division of China Institute of Atomic Energy; from March 2015 to August 2017, he was the deputy director (presiding over the work) of the Human Resources Division of China Institute of Atomic Energy; from August 2017 to March 2019, he was the director of the Human Resources Division of China Institute of Atomic Energy. From March 2019 to July 2020, Mr. Huang served as the deputy head (deputy bureau level) the Party Committee Inspection Team (黨組巡視組) of CNNC. From July 2020 to June 2022, Mr. Huang served as the secretary of the Discipline Inspection Committee of China Nuclear Industry Maintenance Co., Ltd.

Mr. Huang obtained a Bachelor's degree in Applied Chemistry from School of Water Resources and Hydropower Engineering in June 2000 and a Master's degree in Software Engineering from Sichuan University in June 2015. Mr. Huang is a senior engineer.

**Mr. Wang Guoqing** (王國清), aged 48, has been the deputy general manager of China Isotope & Radiation Corporation since 30 March 2023. From July 1997 to July 2002, Mr. Wang was a member of the commissioning team of the maintenance section of Nuclear Power Qinshan Joint Venture Company Limited; from July 2002 to August 2006, he was a clerk in the secretarial section of the company office of Nuclear Power Qinshan Joint Venture Company Limited; from August 2006 to April 2010, he was the deputy chief in the secretarial section of the company office of Nuclear Power Qinshan Joint Venture Company Limited; from April 2010 to November 2011, he was the chief in the secretarial section of the company office of Nuclear Power Qinshan Joint Venture Company Limited. From November 2011 to October 2012, he was the chief in the secretarial section of the General Office of the Secondary Plant of CNNC Nuclear Power Operation Management Co., Ltd., from October 2012 to December 2013, he was the deputy director (deputy division level) of the General Office of the Secondary Plant of CNNC Nuclear Power Operation Management Co., Ltd., from December 2013 to December 2014, he was the deputy director (deputy division level) of the company office of CNNC Nuclear Power Operation Management Co., Ltd., from December 2014 to July 2016, he was the deputy director of the operation planning section of CNNC Nuclear Power Operation Management Co., Ltd. From July 2016 to September 2017, Mr. Wang served as the director of public relations section of the General Office of CNNC. From September 2017 to August 2018, Mr. Wang served as the director in the secretarial section of the General Office of CNNC. From August 2018 to April 2021, Mr. Wang served as the director in the Secretarial I Section of General Office (Party Group Office/Board Office) of CNNC. From April 2021 to January 2023, Mr. Wang served as the secretary of the Discipline Inspection Committee of China North Nuclear Fuel Co., Ltd.

Mr. Wang obtained a Bachelor's degree in Automatic Control from Sichuan University in July 1997 and a Master's degree in Public Administration from Zhejiang University in December 2006. Mr. Wang is qualified as a senior engineer.

# DIRECTORS' REPORT

## 1. PRINCIPAL BUSINESS

The Group is primarily engaged in the research, development, manufacturing and sale of diagnostic and therapeutic radiopharmaceuticals and radioactive source products for medical and industrial applications. The Group provides irradiation service for sterilisation purpose and EPC service for the design, manufacturing and installation of gamma ray irradiation facilities and independent clinical laboratory services to hospitals and other medical institutions.

## 2. BUSINESS REVIEW

The business review of the Group is set out in the section headed "Management Discussion and Analysis" in this annual report.

## 3. SUBSEQUENT EVENTS

The subsequent events of the Group is set out in the section headed "Management Discussion and Analysis" in this annual report.

## 4. FINANCIAL PERFORMANCE

The profits for the year ended 31 December 2022 of the Company and the financial position of the Company then ended are set out in the "Consolidated Statement of Profit or Loss and Other Comprehensive Income" and the "Consolidated Statement of Financial Position" in this annual report, respectively.

## 5. MAJOR RISKS AND OUTLOOK

The operation of the Group is subject to certain risks and uncertainties, some of which are beyond the control of the Group. These risks and uncertainties include domestic and foreign economic trends, the PRC credit policy and foreign exchange policy, movements in relevant laws, rules and law enforcement policies, etc, together with some uncertainties that are unknown and immaterial but will be proved to be material in the future. The discussion and analysis as required by Schedule 5 to the Companies Ordinance (Cap. 622 of the Laws of Hong Kong), including a fair review of the business of the Group, a discussion of the principal risks and uncertainties facing the Group, and an indication of likely future development in the Group's business, can be found in the "Chairman's Statement", "Management Discussion and Analysis"and "Notes to the Financial Statements" sections of this annual report respectively. The above sections form part of this report.

# DIRECTORS' REPORT (CONTINUED)

## 6. DIVIDEND

The Board resolved to declare a final cash dividend of RMB0.4407 per Share (inclusive of tax) for the year ended 31 December 2022 (the "**2022 Final Dividend**") to Shareholders whose names appear on the register of members of the Company on 12 July 2023, with a total cash dividend to be distributed of RMB140,968,868.43 (inclusive of tax). The 2022 Final Dividend is expected to be declared and paid in RMB to holders of Domestic Shares and, whereas dividends payable to holders of H shares will be declared in RMB and payable in Hong Kong dollars before 31 August 2023. Exchange rate between RMB and Hong Kong dollar will be the arithmetic mean of the median of the exchange rates of Hong Kong dollars against RMB as quoted by the PBOC for the five business days preceding the date of the dividend payment (inclusive). The above dividend distribution proposal is subject to the review and approval by Shareholders at the AGM to be held on 30 June 2023. Details of the dividend distribution will be published after the AGM.

The Company will hold the AGM on Friday, 30 June 2023. The register of members of the Company will be closed from Tuesday, 27 June 2023 to Friday, 30 June 2023 (both dates inclusive) and from Thursday, 6 July 2023 to Wednesday, 12 July 2023 (both dates inclusive). Shareholders whose names appear on the register of members of the Company on Friday, 30 June 2023 will be entitled to attend and vote at the AGM. Shareholders whose names appear on the register of members of the Company on Wednesday, 12 July 2023 will be entitled to receive the 2022 Final Dividend. For the purpose of determining members who are qualified as Shareholders to attend and vote at the AGM, Shareholders of the Company must lodge all transfers documents accompanied by the relevant share certificates with the Company's H Share Registrar, Computershare Hong Kong Investor Services Limited, at Shops 1712-1716, 17th Floor, Hopewell Centre, 183 Queen's Road East, Wanchai, Hong Kong (for holders of H Shares) or the Company's registered office at Room 418, South 4th Floor, Building 1, No. 66 Changwa Middle Street, Haidian District, Beijing, China (for holders of Domestic Shares) for registration no later than 4:30 p.m. on Monday, 26 June 2023. For the purpose of determining members who are qualified as Shareholders to receive the 2022 Final Dividend (subject to the approval by Shareholders at the AGM), Shareholders must lodge all transfers documents accompanied by the relevant share certificates with the Company's H Share Registrar (see the address above) (for holders of H Shares) or the Company's registered office (see the address above) (for holders of Domestic Shares) for registration no later than 4:30 p.m. on Wednesday, 5 July 2023.

According to the "Enterprise Income Tax Law of the People's Republic of China" and its implementing rules, which came into effect on 1 January 2008, and other relevant rules, the Company is required to withhold 10% enterprise income tax before distributing the proposed 2022 Final Dividend to non-resident enterprise Shareholders whose names appear on the register of members of the Company. Any H Shares registered in the name of non-individual registered Shareholders, including but not limited to HKSCC Nominees Limited, other nominees, trustees or other groups and organizations, will be treated as being held by non-resident enterprise Shareholders and therefore will be subject to the withholding of enterprise income tax.

# DIRECTORS' REPORT (CONTINUED)

According to the letter titled the "Tax arrangements on dividends paid to Hong Kong residents by mainland companies" issued by the Stock Exchange to the issuers on 4 July 2011 and a circular (Guo Shui Han [2011] No. 348) issued by the State Administration of Taxation on 28 June 2011, and relevant laws and regulations, if individual holders of H Shares are residents of Hong Kong or Macau or countries which have entered into a tax treaty with the PRC stipulating a dividend tax rate of 10%, the Company will withhold and pay individual income tax at the rate of 10% on behalf of such Shareholders. If individual holders of H Shares are residents of countries which have entered into a tax treaty with the PRC stipulating a dividend tax rate of less than 10%, the Company will nonetheless withhold and pay individual income tax at the rate of 10% on behalf of such Shareholders. In such a case, if the relevant Shareholders would like a refund of the additional amount withheld, the Company will apply for the agreed preferential tax treatment provided that information required by the applicable tax treaty notice(s) is submitted to the Company's H Share registrar in Hong Kong, Computershare Hong Kong Investor Services Limited. If individual holders of H Shares are residents of countries which have entered into a tax treaty with the PRC stipulating a dividend tax rate of more than 10% but less than 20%, the Company will withhold and pay individual income tax at the actual tax rate stipulated in the relevant tax treaty. If individual holders of H Shares are residents of countries which have entered into a tax treaty with the PRC stipulating a dividend tax rate of 20%, or countries which have not entered into any tax treaty with the PRC, or under any other circumstances, the Company will withhold and pay individual income tax at the rate of 20% on behalf of such Shareholders. The Company assumes no responsibility and will not entertain any claim arising from any delay in, or inaccurate determination of, the tax status or tax treatment of Shareholders or any dispute over tax(es) withheld. Shareholders are recommended to consult their tax advisers regarding the PRC, Hong Kong and other tax effects involved in their holding and disposal of H Shares.

## 7. PROPERTY, PLANT AND EQUIPMENT

Details of the changes in the property, plant and equipment of the Company are set out in Note 12 to the "Financial Statements" in this annual report.

## 8. SHARE CAPITAL

At the end of the Reporting Period, the total number of Shares of the Company was 319,874,900 Shares, comprising 239,906,100 Domestic Shares, representing 75.00% of the issued Shares, and 79,968,800 H Shares, representing 25.00% of the issued Shares.

On 6 July 2018, the Company issued 79,968,700 H Shares with par value of RMB1.00 per share at a price of HK$21.6 per share by way of initial public offering to Hong Kong and overseas investors. On 3 August 2018, the over-allotment option granted by the Company was partially exercised. The Company issued and allotted an aggregate of 100 H Shares at HK$21.6 each. After the issuance and allotment of these H Shares, the registered and issued ordinary Shares of the Company increased to 319,874,900 Shares.

## 9. RESERVES

Details of the changes in the reserves of the Company during the year are set out in the "Consolidated Statement of Changes in Equity" in this annual report.

# DIRECTORS' REPORT (CONTINUED)

## 10. DISTRIBUTABLE RESERVES

As of 31 December 2022, we had RMB1,757.8 million in retained profits, as determined under IFRS, available for distribution.

## 11. USE OF PROCEEDS FROM THE INITIAL PUBLIC OFFERING

Details of the use of proceeds from the initial public offering of the Group are set out in the section headed "Management Discussion and Analysis" in this annual report.

## 12. MAJOR CUSTOMERS AND SUPPLIERS

The Group understands the importance of maintaining good relationship with its employees, customers and suppliers so as to meet its current or long-term business goals. During the year ended 31 December 2022, there were no material and substantive disputes between the Group and its employees, customers and suppliers.

During the year ended 31 December 2022, revenue from our sales to the five largest customers of the Company accounted for approximately 1.0%, 1.0%, 0.9%, 0.9% and 0.9% of the total revenue of the Company, respectively, totally representing 4.7% of the total revenue of the Company. For the year ended 31 December 2022, the purchase amount from the five largest suppliers of the Company accounted for approximately 15.0%, 5.9%, 3.8%, 3.0% and 2.9% of the aggregate amount of goods procurement and subcontracting purchase and other costs of the Company, respectively, totally representing 30.6% of the total cost of the Company. None of the Shareholders (other than CNNC), which, to the best knowledge of the Company, own more than 5% of the share capital of the Company, the Directors or their close associates has any interest in the above five largest customers or five largest suppliers. The Company does not constitute a dependence on minority customers and suppliers.

## 13. SUBSIDIARIES, JOINT VENTURES AND ASSOCIATES

Details of the major subsidiaries, joint ventures and associates of the Company for the year ended 31 December 2022 are set out in Notes 14, 16 and 15 to the "Financial Statements" in this annual report, respectively.

## 14. DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT

The Directors during the year ended 31 December 2022 and up to the date of this report are as follows:

### Executive Directors

Mr. Wang Suohui *(Chairman of the Board) (appointed on 29 July 2022)*
Mr. Xu Hongchao *(appointed on 16 September 2022)*
Mr. Du Jin
Mr. Meng Yanbin *(Chairman of the Board) (resigned on 29 July 2022)*

# DIRECTORS' REPORT (CONTINUED)

### Non-executive Directors

Mr. Chen Shoulei
Mr. Dai Shuquan *(appointed on 16 September 2022)*
Ms. Chang Jinyu
Ms. Liu Xiuhong
Mr. Liu Zhonglin *(resigned on 29 July 2022)*

### Independent Non-executive Directors

Mr. Hui Wan Fai
Mr. Tian Jiahe
Ms. Chen Jingshan
Mr. Lu Chuang

The Supervisors during the year ended 31 December 2022 and up to the date of this report are as follows:

Mr. Liu Zhonglin *(Chairman) (appointed on 16 September 2022)*
Mr. Zhang Guoping
Mr. Zhao Nanfei
Mr. Ma Fuxin *(appointed on 30 August 2022)*
Ms. Peng Qihui *(appointed on 30 August 2022)*
Mr. Zhang Qingjun *(Chairman) (resigned on 29 July 2022)*
Mr. Li Zhenhua *(resigned on 30 August 2022)*
Mr. Zhang Jian *(resigned on 30 August 2022)*

The biographical details of the current Directors, Supervisors and senior management of the Company is set out in the section headed "Biographical Details of Directors, Supervisors and Senior Management" in this annual report.

## 15. INTERESTS OF DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT IN CONTRACTS

Save as the service contracts, no Directors, Supervisors and senior management or entities connected with Directors, Supervisors and senior management of the Company have material interests, either directly or indirectly, in any transaction, arrangement or contract of significance to the Company to which the Company, any of its subsidiaries or fellow subsidiaries or its holding company is a party during the Reporting Period based on the information available to the Company.

# DIRECTORS' REPORT (CONTINUED)

## 16. REMUNERATIONS OF DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT

In 2022, the total amount of fees, salaries, allowances, discretionary bonuses, retirement scheme contributions and other benefits in kind (if applicable) paid to Directors by the Company was RMB3.801 million.

In 2022, the total amount of fees, salaries, allowances, discretionary bonuses, retirement scheme contributions and other benefits in kind (if applicable) paid to Supervisors by the Company was RMB1.094 million.

In 2022, the total amount of fees, salaries, allowances, discretionary bonuses, retirement scheme contributions and other benefits in kind (if applicable) paid to senior management by the Company was RMB3.631 million.

In 2022, the total amount of fees, salaries, allowances, discretionary bonuses, retirement scheme contributions and other benefits in kind (if applicable) received by five highest-paid individuals was RMB5.857 million.

During the Track Record Period, no incentive payment for joining or having joined the Company was paid or payable to any Directors, Supervisors or the five highest paid individuals by the Company. During the Track Record Period, no remuneration was paid or payable by the Company to any Directors, former Directors, Supervisors, former Supervisors or the five highest paid individuals as compensation for termination of their management positions in any subsidiaries of the Company.

During the Track Record Period, none of the Directors or Supervisors gave up or agreed to give up any remuneration or benefits-in-kind. Save as disclosed above, during the Track Record Period, no other amounts were paid or payable to any Directors, Supervisors or the five highest paid individuals by the Company or any of its subsidiaries.

According to our remuneration policies, the Remuneration and Appraisal Committee will take into account various factors in evaluating the remuneration amount payable to Directors, Supervisors and the relevant employees, including salaries paid by comparable companies, and the term, commitment, duties and performance of the Directors, Supervisors and senior management (as the case may be). In accordance with the arrangements currently in effect, the aggregate amounts of remuneration (excluding any discretionary bonus) paid by the Company to the Directors and Supervisors are approximately RMB2.751 million and RMB0.929 million for the year ended 31 December 2022, respectively.

## 17. DIRECTORS', SUPERVISORS' AND SENIOR MANAGEMENT'S RIGHTS TO ACQUIRE SHARES OR DEBENTURES

As of 31 December 2022, none of the Company, controlling Shareholders of the Company or the companies under the same controlling Shareholders with the Company was a party to any arrangement to entitle the Company's Directors, Supervisors and senior management or their respective minor children to acquire benefits by means of the acquisition of shares or debentures of the Company or any other body corporate.

# DIRECTORS' REPORT (CONTINUED)

## 18. DIRECTORS' AND SUPERVISORS' SERVICE CONTRACTS

Each of executive Director, non-executive Director and independent non-executive Director has entered into a service contract with the Company for a fixed term of three years commencing from the Listing Date. These service agreements may be terminated pursuant to their respective terms and may be renewed in accordance with the Articles of Association and applicable laws, rules and regulations.

Supervisors have entered into contracts with the Company in respect of, among other things, compliance with relevant laws and rules, the Articles of Association and the arbitration provisions.

None of the Directors and Supervisors has a service contract with the Company or any of its subsidiaries which is not determinable within one year without the payment of compensation (other than statutory compensation).

## 19. DIRECTORS', SUPERVISORS' AND SENIOR MANAGEMENT'S INTEREST AND SHORT POSITIONS IN SHARES, UNDERLYING SHARES AND DEBENTURES

As of 31 December 2022, based on the information available to the Company and to the best knowledge of the Directors, none of the Directors, Supervisors and chief executive of the Company had any interest and short position in the shares, underlying shares or debentures of the Company or its associated corporations (within the meaning of Part XV of the SFO) which will have to be notified to the Company and the Stock Exchange pursuant to Divisions 7 and 8 of Part XV of the SFO (including interests or short positions which they are taken or deemed to have under such provisions of the SFO), or which will be required, pursuant to section 352 of the SFO, to be entered in the register of interests referred to therein or which will be required to be notified to the Company and the Stock Exchange pursuant to the Model Code.

## 20. APPROVED INDEMNITY PROVISIONS

During the year ended 31 December 2022, the Company had arranged Directors', Supervisors' and officers' liability insurance for all Directors, Supervisors and senior management. These insurances provided protection to the liability incurred from related cost, fees, expense and legal actions resulting from corporate activities. Except for such insurances, the Company has no valid indemnity provisions (as defined in Companies (Directors' Report) Regulation (Chapter 622D of the Laws of Hong Kong) approved during the Reporting Period and at the time of approval of this report.

## 21. MANAGEMENT CONTRACTS

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

# DIRECTORS' REPORT (CONTINUED)

## 22. SUBSTANTIAL SHAREHOLDERS' AND OTHER PERSONS' INTERESTS AND SHORT POSITIONS IN SHARES AND UNDERLYING SHARES

### Substantial Shareholders' Interests and Short Positions in Shares and Underlying Shares

To the best knowledge of the Company, as of 31 December 2022, the following persons (other than the Directors, Supervisors and chief executive of the Company) had interests or short positions in the Shares or underlying Shares of our Company which are required to be disclosed to our Company and the Stock Exchange pursuant to the provisions of Divisions 2 and 3 of Part XV of the SFO, or interests or short positions which are required to be entered in the register pursuant to Section 336 of SFO, or, directly or indirectly, be interested in 5% or more of the nominal value of any class of our share capital:

| Shareholder | Class of Shares | Nature of interest | Number of Shares held | Approximate percentage of shareholding in the relevant class of Shares (%) | Approximate percentage of shareholding in the total share capital of our Company (%) |
|---|---|---|---|---|---|
| CNNC(1) | Domestic Shares | Beneficial owner/Interest of controlled corporation | 236,150,233(L) | 98.43(L) | 73.83 |
| CIAE(1) | Domestic Shares | Beneficial owner | 58,534,835(L) | 24.40(L) | 18.30 |
| NPIC(1) | Domestic Shares | Beneficial owner | 46,994,835(L) | 19.59(L) | 14.69 |
| CNNC Fund(1) | Domestic Shares | Beneficial owner | 18,779,342(L) | 7.83(L) | 5.87 |
| Shanghai Industrial Investment (Holdings) Company Limited ("**SIIC**")(2) | H Shares | Interest of controlled corporation | 8,906,400(L) | 11.14(L) | 2.78 |
| Shanghai Industrial Investment Treasury Company Limited(2) | H Shares | Interest of controlled corporation | 8,906,400(L) | 11.14(L) | 2.78 |
| Shanghai Investment Holdings Limited(2) | H Shares | Interest of controlled corporation | 8,906,400(L) | 11.14(L) | 2.78 |
| Shanghai Industrial Holdings Limited ("**SIHL**")(2) | H Shares | Interest of controlled corporation | 8,906,400(L) | 11.14(L) | 2.78 |
| S.I. Infrastructure (Holdings) Limited(2) | H Shares | Interest of controlled corporation | 8,906,400(L) | 11.14(L) | 2.78 |
| Sure Advance Holdings Limited ("**Sure Advance**")(2) | H Shares | Beneficial owner | 8,906,400(L) | 11.14(L) | 2.78 |
| Lianwen Ltd(3) | H Shares | Beneficial owner | 13,289,800(L) | 16.62(L) | 4.15 |
| Li Hongbo(3) | H Shares | Interest of controlled corporation | 15,789,800(L) | 19.75(L) | 4.94 |
| Serenity Capital Management, Ltd.(4) | H Shares | Investment manager | 4,801,600(L) | 6.00(L) | 1.50 |
| Serenity Investment Master Fund Limited(4) | H Shares | Beneficial owner | 4,801,600(L) | 6.00(L) | 1.50 |
| The Bank of New York Mellon Corporation | H Shares | Interest of controlled corporation | 7,993,422(L)<br>7,993,422(P) | 9.99(L)<br>9.99(P) | 2.50(L)<br>2.50(P) |
| Invesco Advisers, Inc. | H Shares | Investment manager | 7,024,000(L) | 8.78(L) | 2.20 |
| Invesco Corporate Class Inc. | H Shares | Person having security interest in shares | 6,367,800(L) | 7.96(L) | 1.99 |

# DIRECTORS' REPORT (CONTINUED)

| Shareholder | Class of Shares | Nature of interest | Number of Shares held | Approximate percentage of shareholding in the relevant class of Shares (%) | Approximate percentage of shareholding in the total share capital of our Company (%) |
|---|---|---|---|---|---|
| Invesco Hong Kong Limited | H shares | Investment manager | 5,652,000(L) | 7.06(L) | 1.77 |
| UBS Group AG | H Shares | Interest of controlled corporation | 4,288,478(L) | 5.36(L) | 1.34 |
| JPMorgan Chase & Co. | H Shares | Interest of controlled corporation and person having a security interest in shares | 6,114,200(L)(5) | 7.64(L) | 1.91 |
| JPMorgan Chase & Co. | H Shares | Interest of controlled corporation | 5,777,400(S)(6) | 7.22(S) | 1.81 |

Notes:

1. CNNC directly holds 106,676,903 Domestic Shares of the Company, representing approximately 44.47% of the domestic share capital of our Company. Each of CIAE and NPIC is a public institute controlled and managed by CNNC and holds 58,534,835 and 46,994,835 Domestic Shares, representing approximately 24.40% and 19.59% of the domestic share capital of our Company, respectively. CNNC Fund is a non-wholly-owned subsidiary of CNNC and holds 18,779,342 Domestic Shares, representing approximately 7.83% of the domestic share capital of our Company. Each of 404 Company and China Baoyuan is a wholly-owned subsidiary of CNNC and holds 3,755,868 Domestic Shares and 1,408,450 Domestic Shares, respectively, representing approximately 1.57% and 0.59% of the domestic share capital of our Company, respectively. By virtue of the SFO, CNNC is deemed to be interested in the Domestic Shares held by CIAE, NPIC, CNNC Fund, 404 Company and China Baoyuan, which in aggregate representing approximately 98.43% of the domestic share capital of our Company.

2. By virtue of the SFO, SIIC is deemed to be interested in the 8,906,400 H Shares held by Sure Advance a controlled corporation of SIIC. SIIC holds 100% equity interest in Shanghai Industrial Investment Treasury Company Limited, while Shanghai Industrial Investment Treasury Company Limited directly held 100% equity interest in Shanghai Investment Holdings Limited, which in turn holds approximately 55.13% equity interest in SIHL. SIHL directly holds 100% equity interest in S.I. Infrastructure (Holdings) Limited, which directly held 100% equity interest in Sure Advance.

# DIRECTORS' REPORT (CONTINUED)

3. Lianwen Ltd is 100% controlled by Li Hongbo. By virtue of the SFO, Li Hongbo is deemed to be interested in the 13,621,600 H shares held by Lianwen Ltd.

4. Serenity Investment Master Fund Limited is 100% controlled by Serenity Capital Management, Ltd. By virtue of the SFO, Serenity Capital Management, Ltd. is deemed to be interested in the 4,801,600 H Shares held by Serenity Investment Master Fund Limited.

5. Among these 6,114,200 H shares, 5,571,000 H shares are held by JPMorgan Chase Bank, National Association, a direct wholly-owned subsidiary of JPMorgan Chase & Co., and 543,200 H shares are held by J.P. Morgan Securities PLC, an indirect wholly-owned subsidiary of JPMorgan Chase & Co. Accordingly, JPMorgan Chase & Co. is deemed as the owner of the H share equity interests held by its aforesaid subsidiaries.

6. Among these 5,777,400 H shares, 5,571,000 H shares are held by JPMorgan Chase Bank, National Association, a direct wholly-owned subsidiary of JPMorgan Chase & Co., and 206,400 H shares are held by J.P. Morgan Securities PLC, an indirect wholly-owned subsidiary of JPMorgan Chase & Co. Accordingly, JPMorgan Chase & Co. is deemed as the owner of the H share equity interests held by its aforesaid subsidiaries.

Save as disclosed herein, as of 31 December 2022, the Company is not aware of any other person (other than the Directors, Supervisors and chief executive of the Company) who has an interest or short position, which would be required to be disclosed to our Company and the Stock Exchange under the provisions of Divisions 2 and 3 of Part XV of the SFO, or interests or short positions registered on the register pursuant to Section 336 of SFO, or, directly or indirectly, be interested in 5% or more of the nominal value of any class of our Company's share capital.

## 23. INTEREST OF DIRECTORS IN COMPETING BUSINESSES

None of the Directors and their associates directly or indirectly has any interest in the businesses which constitute or may constitute competition with the business of the Company.

# DIRECTORS' REPORT (CONTINUED)

## 24. COMPETING BUSINESSES

CNNC, the controlling Shareholder of the Group, (for the purpose of the descriptions in this sub-section, excluding the Group), is principally engaged in the scientific research and development, construction and production operations in nuclear power, nuclear power generation, nuclear fuel, natural uranium, nuclear environmental protection, non-nuclear civilian products, new energy sources, etc. Although some of the retained businesses of CNNC constitute competition with the Company, such competition is limited.

### CNNC's Interests in Certain Excluded Entities

As of 31 December 2022, CNNC was entitled to exercise, or control the exercise of, 10% or more of the voting power at the general meeting of the following entities carrying out business which competes, or is likely to compete, directly or indirectly with our principal businesses (the "**Excluded Entities**"):

| | Name of the Excluded Entities | Equity interest held by CNNC (as of 31 December 2022) | Principal business | Excluded business | Reason for exclusion |
|---|---|---|---|---|---|
| 1 | China Institute for Radiation Protection ("**CIRP**") | Not applicable, CIRP is a public institute directly controlled and managed by CNNC | Research, development and application in aspects of radiation protection, nuclear emergency and safety, radiological medicine and environmental medicine, nuclear environmental science, radioactive waste management and nuclear facility decommissioning, irradiation technology, environmental protection technology, nuclear electronic information technology, biological material technology, diagnosis and treatment of occupational disease and also provides technical support to national functional departments with respect to radiation protection and nuclear safety | Irradiation services | The excluded business involves non-operating state-owned assets, which is impractical to be isolated |

# DIRECTORS' REPORT (CONTINUED)

| | Name of the Excluded Entities | Equity interest held by CNNC (as of 31 December 2022) | Principal business | Excluded business | Reason for exclusion |
|---|---|---|---|---|---|
| 2 | CIAE | Not applicable, CIAE is a public institute directly controlled and managed by CNNC | Nuclear physics research, reactor engineering research and design, radiochemical research, fast reactor research and design, isotope research, nuclear technology application and research, radiation safety research | Radioactive sources and reactor irradiation services | The excluded business involves non-operating state-owned assets, which is impractical to be isolated |
| 3 | NPIC | Not applicable, NPIC is a public institute directly controlled and managed by CNNC | Nuclear power engineering design, integrated equipment supply of nuclear steam supply system, reactor operation and applied research, reactor engineering experimental research, nuclear fuel and materials research, isotope production and nuclear technology services and applications | Isotope, reactor irradiation services and sales of radioactive source-based instruments | The excluded business involves non-operating state-owned assets, which is impractical to be isolated |
| 4 | 404 Company | 100% | Nuclear research and production, uranium conversion, reprocessing of spent fuel, decommission of nuclear facilities and radioactive waste treatment and disposal | Radioactive sources and recycling of radioactive sources | 404 Company is mainly engaged in the scientific research and production in the military industry, and the excluded business is not the principal business of 404 Company and is impractical to be isolated |
| 5 | China Nuclear Energy Industry Corporation ("**CNEIC**") | 100% | Import and export trade of uranium products, nuclear fuel cycling equipment and nuclear power technologies and equipment | Import agency services for radioactive isotopes, radioactive therapeutic apparatus | CNEIC is an integrated platform for the import and export of nuclear power equipment of CNNC, the excluded business is not the principal business of CNEIC and is impractical to be isolated |

# DIRECTORS' REPORT (CONTINUED)

| | Name of the Excluded Entities | Equity interest held by CNNC (as of 31 December 2022) | Principal business | Excluded business | Reason for exclusion |
|---|---|---|---|---|---|
| 6 | Yunke Pharm | 47.89% | Technical research of radiopharmaceuticals, product development, production and sales, technical consultancy and technical services | Iodine-125 sealed source and Yunke injection | The controlling shareholder of Yunke Pharm is a listed company which is an Independent Third Party. CNNC has no control over its decision-making process |
| 7 | China Baoyuan | 100% | Nuclide therapy services | Independently establishing hospitals to provide nuclide therapy services. However, CIRC can choose internal and external hospitals of CNNC according to the situation, with China Baoyuan (as the controlling shareholder) and CIRC (as other shareholder) operating cooperatively | CIRC does not have the capacity or resources to establish hospitals by itself |

## Production and Sale of the Raw Materials of Isotopes

Each of CIAE, NPIC and 404 Company is capable of producing the raw materials of isotopes by using its respective nuclear reactors and other facilities. However, as of the Latest Practicable Date, none of CIAE, NPIC and 404 Company produces or plans to produce isotope raw materials. To avoid the potential competition between us and CIAE, NPIC and 404 Company, each of CIAE, NPIC and 404 Company has undertaken to us that if it starts to produce isotope raw materials, the Company will be the exclusive sales agent for such isotope raw materials. The Company will fully comply with the relevant requirements of the Listing Rules (including but not limited to Chapter 14A of the Listing Rules) when it enters into transactions with CIAE, NPIC and/or 404 Company.

# DIRECTORS' REPORT (CONTINUED)

Save as disclosed above, neither our controlling Shareholder nor any of our Directors was, as of 31 December 2022, interested in any business which competes or is likely to compete, directly or indirectly, with the Group's principal business and would otherwise require disclosure under Rule 8.10 of the Listing Rules.

## Non-competition Undertaking

To avoid the potential competition between CNNC and the Group, CNNC issued a non-competition undertaking (the "**Non-competition Undertaking**") to the Company on 16 June 2018, pursuant to which CNNC shall not, and shall procure that its associates (excluding the Group and Yunke Pharm) not to, engage in any business which, directly or indirectly, competes with the business of the Company, including nuclear medicine products and application service, radioactive source products and application service, irradiation and irradiation facilities related services, independent clinical laboratory services, etc. (the "**Restricted Business**") within the period during which (i) the H Shares of the Company are listed on the Stock Exchange (including the circumstances under which trading of our H Shares is suspended in accordance with the Listing Rules), and (ii) CNNC and its associates (excluding the Group and Yunke Pharm) may, individually or collectively, exercise or control the exercise of not less than 30% of the voting rights or are deemed as the controlling Shareholders of the Group.

The above Non-competition Undertaking does not apply in the following circumstances:

(i) CNNC having interests in any member of the Group; and

(ii) CNNC having interests in a company other than the Group, provided that:

  (a) any business (or its related assets) carried out or engaged by such company accounts for less than 10% of the Group's consolidated income and consolidated assets as shown in the most recent audited accounts of the Group;

  (b) CNNC and its associates (excluding the Group) have no right to appoint majority of the directors of such company. In addition, there must be at least one shareholder of such company holding more interest than the total interest held by CNNC and its associates, or the company is controlled by a third party; and

  (c) CNNC and its associates (excluding the Group) have not controlled the Board.

(iii) To the extent that CNNC and/or its associates do not control Yunke Pharm, CNNC and/or its associates directly or indirectly holding the equity interests of Yunke Pharm.

In addition, each of CIRP, CIAE, NPIC, 404 Company, CNEIC and China Baoyuan entered into non-competition undertaking with the Company on 12 August 2016, 1 August 2016, 5 August 2016, 18 August 2016, 18 August 2016 and 5 July 2016, respectively.

# DIRECTORS' REPORT (CONTINUED)

The independent non-executive Directors of the Company have reviewed the compliance and execution of the Non-competition Undertaking and consider that, other than the Company, the above all parties to the Non-competition Undertaking had complied with their respective non-competing undertakings during the Reporting Period.

## 25. CONNECTED TRANSACTIONS

### Connected Persons

As of 31 December 2022, the following entities with whom we have entered into certain transactions in our ordinary and usual business are our connected persons:

a. *CNNC*

CNNC directly and indirectly through CIAE, NPIC, CNNC Fund, 404 Company and China Baoyuan, holds 73.83% equity interests of our total issued share capital. Therefore, CNNC and its associates will constitute our connected persons under Chapter 14A of the Listing Rules.

b. *CNNC Tongxing*

The Company and CNNC (through one of its subsidiaries) hold 51% and 49% equity interests in CNNC Tongxing, respectively. CNNC is our controlling Shareholder. Therefore, CNNC Tongxing and its associates will constitute our connected subsidiary under Chapter 14A.16 of the Listing Rules.

c. *Headway*

The Company and CNNC hold 54.1% and 27.9% equity interests in Headway, respectively. CNNC is our controlling Shareholder. Therefore, Headway is a connected subsidiary of the Company under Rule 14A.16(1) of the Listing Rules, and Headway and its subsidiaries will constitute our connected persons under Chapter 14A of the Listing Rules.

d. *CNNC Finance Company Limited ("**CNNCFC**")*

CNNCFC was established on 21 July 1997 by CNNC and CNNC's 25 member units, with a registered capital of RMB2,009.6 million. CNNCFC is a non-bank financial institution which strengthens the centralised management of fund within the CNNC group, improves the fund utilisation efficiency and the financial management services for CNNC groups' member units. The business scope includes: (i) providing financial and financing consultancy, credit certification and related consultancy and agency services to members of the CNNC group; (ii) assisting members of the CNNC group in collection and payment of transaction funds; (iii) providing guarantees to members of the group; (iv) providing entrusted loan and entrusted investment services to members of the CNNC group; (v) providing bill acceptance and discount services to members of the CNNC group; (vi) processing the settlement of internal fund transfers among members of the CNNC group and providing solution plans for relevant settlement and clearing; (vii) taking deposits from members of the CNNC group; (viii) providing loan and finance leases to members of the CNNC group; (ix) conducting inter-borrowings among finance companies; (x) issuing corporate bonds; (xi) underwriting the corporate bonds issued by members of the CNNC group; (xii) equity investments in financial institutions; and (xiii) investments in negotiable securities.

# DIRECTORS' REPORT (CONTINUED)

e. *CNNC Financial Leasing Co., Ltd. ("**CNNC Financial Leasing Company**")*

CNNC Financial Leasing Company was established in Pilot Free Trade Zone (Shanghai) on 22 December 2015. It is a sino-foreign leasing company, jointly established by CNNC and other 10 companies, including CNNC Shenzhen Xie He Kong Co. Ltd. (Hong Kong), with registered capital of RMB1 billion. The business scope of CNNC Financial Leasing Company includes: (i) financial leasing; (ii) leasing; (iii) purchase of leased property from domestic and overseas sellers; (iv) treatment of residual value of, and maintenance of, leased property; (v) consultation and guarantee for leasing transactions; and (vi) factoring business associated with principal businesses.

f. *CIAE*

CIAE is one of the Shareholders of the Company, and a second-level entity actually controlled and managed by CNNC as the Company. It is mainly engaged in nuclear physics research, reactor engineering research and design, radiochemical research, fast reactor research and design, isotope research, nuclear technology application and research, radiation safety research.

g. *Beijing Yuanke Technology Development Co., Ltd.*

Beijing Yuanke Technology Development Co., Ltd. is a company incorporated in the PRC with limited liability, and a platform company engaged in the transfer use of research result and foreign investment management by CIAE.

h. *Hynergy Industrial Funds Management Co., Ltd. ("**Hynergy Industrial Funds**")*

Hynergy Industrial Funds was established on 18 November 2016 with a registered capital of RMB200 million. It is registered with the Asset Management Association of China as a private equity fund manager. Hynergy Industrial Funds was initiated by CNNC Capital Holdings Limited ("**CNNC Capital**") and jointly funded and established by China Aerospace Science and Technology Corporation (中國航天科技集團公司) (a joint strategic alliance partner), China Development Bank, China Life Insurance (Group) Company (中國人壽保險(集團)公司) and Agricultural Bank of China. It is held as to 35% by CNNC Capital, as to 20% by China Development Bank Capital Corporation Ltd. (國開金融有限責任公司) and as to 15% by each of China Life Asset Management Company Limited (中國人壽資產管理有限公司), China Aerospace Investment Holdings Ltd. (航天投資控股有限公司) and ABCI Corporate Management Co., Ltd (農銀國際企業管理有限公司).

i. *CNNC Capital*

CNNC Capital was established in July 2016 and is a wholly-owned subsidiary of CNNC, with a registered capital of RMB7.08 billion. As a specialised management platform for the financial sector of CNNC, CNNC Capital is positioned as a center of industrial finance risk control, center of industrial finance investment control, center of industrial financial resource allocation and center of industrial finance business collaboration of CNNC.

# DIRECTORS' REPORT (CONTINUED)

*j. CNNC SUFA Technology Industry Co., Ltd. ("**CNNC Technology**")*

CNNC Technology was established in 1952 as a technology-based manufacturing company engaged in research, development, design, manufacture and sales of industrial valves. It provides valve system resolutions to players in sectors of oil, natural gas, oil refining, nuclear power, electricity power, metallurgy, chemical engineering, shipbuilding, papermaking and medicine. It was listed on Shenzhen Stock Exchange in 1997, making itself the first listed company as a subsidiary of CNNC in the valve industry in China. Currently, CNNC is the de facto controlling person of CNNC Technology.

*k. Guizhou Nuclear Industry Xinyuan Industry Co., Ltd. ("**Xinyuan Industry**")*

Xinyuan Industry was established on 29 March 2000 and is mainly engaged in the development and application of chemical products, mineral resource (uranium), metallurgical products, rare metal and non-ferrous metal. CNNC, the controlling Shareholder, holds 100% equity interest in Xinyuan Industry through its wholly-owned subsidiary China National Uranium Co., Ltd. ("**CNUC**"). Therefore, Xinyuan Industry is a connected person of the Company.

*l. Xinjiang Mining and Metallurgy Bureau of Nuclear Industry ("**XMMB**")*

XMMB was established in October 1964. It is a public institution directly under CNNC, and is principally responsible for managing the uranium mining and metallurgy enterprises in Xinjiang, with its businesses controlled and managed by CNUC, a wholly-owned subsidiary of CNNC. Therefore, XMMB is a connected person of the Company.

*m. CNNC Nuclear Power Operation Management Co., Ltd. ("**CNNC Nuclear**")*

CNNC Nuclear Power Operation Management Co., Ltd. was established in September 2010, mainly engaged in nuclear power operation and management and related technical services. China National Nuclear Power Co., Ltd. holds 100% of its shares, while CNNC holds 64.11% shares of China National Nuclear Power Co., Ltd. Therefore, CNNC Nuclear Power Operation Management Co., Ltd. is a connected person of the Company.

# DIRECTORS' REPORT (CONTINUED)

## Connected Transactions in 2022

### A. *Non-exempt Continuing Connected Transactions undertaken during the Reporting Period*

The property, equipment leasing and related services framework agreement with CNNC ("**2020 Leasing Agreement**") dated 30 November 2020, the Products and Services Supply Framework Agreement with CNNC (the "**2020 Supply Agreement**") dated 30 November 2020, the Products and Services Purchase Framework Agreement with CNNC (the "**Purchase Agreement**") dated 30 November 2020, the Cobalt-60 Radioactive Sources Supply and Related Services Framework Agreement with CNNC Tongxing (the "**2020 Cobalt-60 Supply Agreement**") dated 30 November 2020, the consulting services fee framework agreement (the "**2020 Consulting Agreement**") with CNNC Tongxing dated 30 November 2020, the Carbon-14 Raw Materials Supply Framework Agreement with Headway (the "**2020 Carbon-14 Supply Agreement**") dated 30 November 2020, the Financial Services Framework Agreement with CNNC (the "**2020 Financial Services Agreement**") dated 22 April 2020 and the Engineering Construction Services Framework Agreement with CNNC ("**2020 Engineering Construction Services Agreement**") dated 22 April 2020 constitute continuing connected transactions of the Group.

The above-mentioned agreements were entered into in the ordinary and usual course of business of the Group, the pricing policies of which are determined through arm-length's negotiation based on production costs and current market prices, and the specific terms are concluded on normal commercial terms and fair and reasonable, and in the interests of the Company and the Shareholders as a whole. In addition, the Company has established (1) the reporting, approval and, if necessary, selection & verification procedures, to ensure that the agreed prices and terms of the continuing connected transactions are no less favourable than those that may be granted by the relevant members of the Group to independent third parties or be granted by independent third parties to the relevant members of the Group (if applicable), and are in compliance with the pricing policies; and (2) the procedures and policies for the purpose of identifying the connected persons and monitoring the annual caps of continuing connected transactions, and strictly followed internal control measures to manage connected transactions.

# DIRECTORS' REPORT (CONTINUED)

The annual caps and actual amount of continuing connected transactions incurred in 2022 are as follows:

| | | Annual caps for the year ended 31 December 2022 (RMB' 000) | Actual amount incurred for the year ended 31 December 2022 (RMB' 000) |
|---|---|---|---|
| 1 | Property & equipment leasing and related services | 70,000 | 35,942 |
| 2 | Products and services supply | 110,000 | 107,411 |
| 3 | Products and services purchase | 180,000 | 153,557 |
| 4 | Cobalt-60 radioactive sources supply and related services | 85,000 | 45,635 |
| 5 | Consulting services fee | 25,000 | 16,521 |
| 6 | Carbon-14 raw materials supply | 23,000 | 5,195 |
| 7 | Financial Services Agreement | | |
| | • Deposit services | | |
| | (a) Maximum daily outstanding balance | 3,082,666 | 2,711,722 |
| | (b) Interest income | 45,778 | 24,433 |
| | • Settlement, entrusted loans and other financial services | | |
| | (a) Maximum daily outstanding balance of entrusted loans provided by our Group through CNNCFC | 1,000,000 | 489,647 |
| | (b) Service fees for settlement, entrusted loans and other financial services | 150 | 17 |
| | • Finance leasing services | 248,980 | 1,996 |
| 8 | Engineering construction services | 230,000 | 37,775 |
| | • Construction Services | 150,000 | 26,468 |
| | • Equipment Services | 40,000 | 7,542 |
| | • Consultation Services | 40,000 | 3,765 |

# DIRECTORS' REPORT (CONTINUED)

1. **2020 Leasing Agreement**

Parties: CNNC (the lessor and service provider); and the Company (the lessee and service recipient).

Principal Terms: The Company entered into a leasing agreement with CNNC on 30 November 2020, pursuant to which we will rent or use a number of properties and equipment from CNNC and/or its associates, and CNNC and/or its associates will provide us with supporting services relating to the properties and equipment and other services. Such properties and equipment are mainly used for our production, operation and management, including but not limited to: (i) office buildings, land and office facilities; (ii) production plants (mainly used to produce technetium-99m labeled injections, fluorine-18-FDG injections and iodine-125 sealed source etc.); (iii) production facilities in relation to waste liquid and gas emissions and treatment services and others; (iv) production equipment (mainly high-power accelerator); (v) common areas and facilities (including kindergarten, water and electricity facilities and other facilities); and (vi) services associated with employee education, safety production and research and development of technologies. The term of the Leasing Agreement commenced on 1 January 2021 and will expire on 31 December 2023, subject to renewal as may be agreed upon by both parties.

2. **2020 Supply Agreement**

Parties: CNNC (the purchaser); and the Company (the supplier).

Principal Terms: The Company entered into a supply agreement with CNNC on 30 November 2020, pursuant to which CNNC and/or its associates would purchase the following products from the Group: radioactive source products, radioactive instruments and pharmaceuticals. The Group will also provide detection, recycling, transportation, reloading and other ancillary services related to the sales of such products and research and development services related to research and development projects. The term of the Supply Agreement commenced on the 1 January 2021 and will expire on 31 December 2023, subject to renewal as may be agreed upon by both parties.

# DIRECTORS' REPORT (CONTINUED)

3. **2020 Purchase Agreement**

Parties: The Company (the purchaser); and CNNC (the supplier).

Principal Terms: The Company entered into a purchase agreement with CNNC on 30 November 2020, pursuant to which CNNC and/or its associates will provide the Group: (i) various types of raw and auxiliary materials, production equipment and other products; (ii) transportation containers (including related design and manufacturing services); (iii) technical testing services; (iv) encapsulation and processing services of cobalt-60 radioactive sources; and (v) scientific research services related to high-end irradiation research and development. The term of the Purchase Agreement commenced on the 1 January 2021 and will expire on 31 December 2023, subject to renewal as may be agreed upon by both parties.

4. **2020 Cobalt-60 Supply Agreement**

Parties: The Company (the purchaser); and CNNC Tongxing (the supplier).

Principal Terms: The Company entered into a cobalt-60 supply agreement with CNNC Tongxing on 16 June 2018, pursuant to which the Group will purchase cobalt-60 radioactive sources from CNNC Tongxing and/or its associates, and CNNC Tongxing and/or its associates will provide related services such as transportation and reloading in connection with the sales of cobalt-60 radioactive sources. The term of the Cobalt-60 Supply Agreement commenced on the 1 January 2021 and will expire on 31 December 2023, subject to renewal as may be agreed upon by both parties.

Revised annual cap: The Board of the Company resolved on 29 April 2022 to amend the annual caps under the 2020 Cobalt-60 Supply Agreement for the year ending 31 December 2022 and for the year ending 31 December 2023.

5. **2020 Consulting Agreement**

Parties: CNNC Tongxing (the service receiver); and the Company (the service provider).

Principal Terms: The Company entered into a consulting agreement with CNNC Tongxing on 16 June 2018, pursuant to which the Company will provide technical support and consulting services to CNNC Tongxing and/or its associates relating to the distribution channels and customer resources of cobalt-60 radioactive sources, and CNNC Tongxing and/or its associates will pay us consultation service fees. The term of the Consulting Agreement commenced on the 1 January 2021 and will expire on 31 December 2023, subject to renewal as may be agreed upon by both parties.

# DIRECTORS' REPORT (CONTINUED)

6. **2020 Carbon-14 Supply Agreement**

Parties: Headway (the purchaser); and the Company (the supplier).

Principal Terms: The Group entered into a carbon-14 supply agreement with Headway on 16 June 2018, pursuant to which the Group will provide Headway and/or its associates with carbon-14 as the raw materials for production of carbon-14 breath-testing medicine boxes. The Group will also provide ancillary services such as packaging and transportation relating to provision of the carbon-14 raw materials. The term of the Carbon-14 Raw Materials Supply Agreement commenced on the 1 January 2021 and will expire on 31 December 2023, subject to renewal as may be agreed on by both parties.

7. **2020 Financial Services Agreement**

Parties: The Company (service recipient); and CNNC (service provider).

Principal Terms: The Company renewed the Financial Services Agreement with CNNC on 28 June 2019, pursuant to which CNNC and/or its associates will provide the Group with, among other things, (i) deposits and related services (the "**Deposit Services**"); (ii) entrusted loan, settlement, foreign exchange and other services (the "**Settlement, Entrusted Loan and Other Financial Services**"); and (iii) financial leasing service (the "**Financial Leasing Service**") for certain assets used in the operation of the Group. The 2020 Financial Services Agreement commenced on 30 June 2020, and expired on the date of 2022 AGM of the Company convened in early 2023.

Revised annual cap: The Board the Company resolved on 29 July 2022 to propose an amendment to the annual cap of maximum daily outstanding balance of entrusted loans provided by our Group through CNNCFC under the 2020 Financial Services Agreement. for the period commencing from the date of the 2021 AGM of the Company to the date of the 2022 AGM of the Company This resolution was passed at the EGM held on 16 September 2022.

8. **2020 Engineering Construction Services Agreement**

Parties: CNNC (the supplier), and the Company (the purchaser).

Principal Terms: The Company and CNNC agreed that CNNC and/or its associates will provide engineering construction services to the Company and its subsidiaries according to the Engineering Construction Services Framework Agreement and on normal commercial terms, including: (i) EPC services and construction services ("**Construction Services**"); (ii) equipment procurement, manufacturing and installation services ("**Equipment Services**"); and (iii) engineering consultation services such as engineering consultation, management and supervision services and survey and design services ("**Consultation Services**"). The 2020 Engineering Construction Services Agreement will be effective from the signing date and expire on 31 December 2022, subject to renewal as may be agreed on by both parties.

# DIRECTORS' REPORT (CONTINUED)

*B. Non-exempt Continuing Connected Transactions entered during the Reporting Period*

**2022 Engineering Construction Services Agreement**

The Engineering Construction Services Framework Agreement with CNNC ("**2022 Engineering Construction Services Agreement**") dated 23 December 2022 constitutes a continuing connected transaction of the Group.

The terms of the 2022 Engineering Construction Services Framework Agreement were determined after arm's length negotiations on normal commercial terms, and the transactions contemplated thereunder and the proposed annual caps were fair and reasonable and were entered into in the ordinary and usual course of business of the Group, and in the interests of the Company and the Shareholders as a whole. In addition, the Company has established (1) the reporting, approval and, if necessary, selection and verification procedures, to ensure that the agreed prices and terms of the continuing connected transactions are no less favourable than those that may be granted by the relevant members of the Group to independent third parties or be granted by independent third parties to the relevant members of the Group (if applicable), and are in compliance with the pricing policies; and (2) the procedures and policies for the purpose of identifying the connected persons and monitoring the annual caps of continuing connected transactions.

| | |
|---|---|
| Parties: | CNNC (the supplier), and the Company (the purchaser). |
| Principal Terms: | The Company and CNNC agreed that CNNC and/or its associates will provide engineering construction services to the Company and its subsidiaries according to the Engineering Construction Services Framework Agreement and on normal commercial terms, including: (i) EPC services and construction services ("**Construction Services**"); (ii) equipment procurement, manufacturing and installation services ("**Equipment Services**"); and (iii) engineering consultation services such as engineering consultation, management and supervision services and survey and design services ("**Consultation Services**"). The 2022 Engineering Construction Services Agreement will be effective from 1 January 2023 and expire on 31 December 2023, subject to renewal as may be agreed on by both parties. |

Proposed annual caps:

| **Nature of transaction** | **Annual cap for the year ending 31 December 2023 (RMB' 000)** |
|---|---|
| Construction Services | **190,000** |
| Equipment Services | **5,000** |
| Consultation Services | **5,000** |

# DIRECTORS' REPORT (CONTINUED)

*C. Non-exempt Discontinued Connected Transactions*

During the Reporting Period, the Group has no non-exempt discontinued connected transactions

The related party transactions were disclosed in Note 37 of the financial statements for the year 2022 prepared by the Company under the IFRS. According to the Listing Rules, all of the related party transactions disclosed in Note 37 constituted connected transactions under the Listing Rules and were required to be disclosed in accordance with Chapter 14A of the Listing Rules. The Company has complied with the disclosure requirements of Chapter 14A of the Listing Rules in respect of disclosure of the above continuing connected transactions.

## Annual Review of Continuing Connected Transactions

The independent non-executive Directors have reviewed the aforesaid continuing connected transactions for the year ended 31 December 2022 and confirmed that such transactions were entered into:

(i) in the ordinary and usual course of business of the Company;

(ii) on normal commercial terms or better and in the interests of the Shareholders of the Company as a whole; and

(iii) according to the proposed annual caps that are fair and reasonable and in the interests of the Company and the Shareholders as a whole.

## Confirmation from the Independent Auditor

Pursuant to Chapter 14A.56 of the Listing Rules, the Company's auditor was engaged by the Board to report on the Group's continuing connected transactions in accordance with Hong Kong Standard on Assurance Engagements 3000 (Revised) "Assurance Engagements Other than Audits or Reviews of Historical Financial Information" and with reference to Practice Note 740 "Auditor's Letter on Continuing Connected Transactions under the Hong Kong Listing Rules" issued by the Hong Kong Institute of Certified Public Accountants. Based on the work performed, the auditor of the Company confirmed to the Board of Directors of the Company that the aforesaid continuing connected transactions:

(1) have been approved by the Board of Directors of the Company;

(2) involving the provision of goods and services by the Group were priced in accordance with the pricing policies of the Group stipulated under the relevant agreements governing such transactions;

(3) have been entered into in accordance with the relevant agreements governing such transactions; and

(4) have not exceeded the relevant annual cap as disclosed in the Prospectus.

The auditor has issued his unqualified letter containing his findings and conclusions in respect of the continuing connected transactions disclosed by the Group in pages 75 to 84 of this annual report in accordance with rule 14A.56 of the Listing Rules. A copy of the auditor's letter has been provided by the Company to the Stock Exchange.

# DIRECTORS' REPORT (CONTINUED)

## 26. PURCHASE, SALE AND REDEMPTION OF THE LISTED SECURITIES OF THE COMPANY

Neither the Company nor any of its subsidiaries has purchased, sold or redeemed any of the Company's listed securities for the year ended 31 December 2022.

## 27. EQUITY-LINKED AGREEMENT

During the Reporting Period, the Company and its subsidiaries did not enter into any agreements in relation to equity-linked products or participate in any arrangement to purchase equity-linked financial products.

## 28. ARRANGEMENT FOR PRE-EMPTIVE RIGHT AND SHARE OPTION SCHEME

According to the Articles of Association and relevant laws of China, Shareholders of the Company have no pre-emptive right. During the Reporting Period, the Company has no arrangement for pre-emptive right or share option scheme.

## 29. BANK BORROWINGS

Details of the bank borrowings of the Company are set out in Note 23 to the "Financial Statements" in this annual report.

## 30. REMUNERATION AND EQUITY-INCENTIVE POLICY

The review of the Group's employee and remuneration policy is set out in the section headed "Management Discussion and Analysis" in this annual report.

## 31. EMPLOYEE RETIREMENT BENEFITS

Details of the employee retirement benefits of the Company are set out in Note 28 to the "Financial Statements" in this annual report.

## 32. DONATIONS

The Group extended a helping hand to the disaster-stricken area in Luzhou, Sichuan Province, and CIRC made a donation of RMB250,000 in total through Headway and HTA to support earthquake relief and post-quake reconstruction in Luzhou.

For the purpose of consolidating the achievements of poverty alleviation, CIRC donated RMB100,000 to Baihe County to support the construction of a nuclear culture and teaching room at Shunshui Primary School. HTA donated RMB116,000 to charitable organizations. Anhui Young-Hearty donated a total of RMB100,000 to charitable organizations, poor villages and poor schools. CNGT donated RMB26,100 to a poor village in Ya'an County. CIRC actively carried out supporting activities in poverty-stricken areas and purchased products of RMB110,000 from Xuyang and Tongxin County as holiday condolences for employees and office supplies.

CIRC actively exercised its responsibilities as a central state-owned enterprise and promoted the collaborative development of local communities. CIRC donated supplies of RMB100,000 to its subdistrict and its Beijing branch donated supplies of USD6,000 to its cooperating hospital.

# DIRECTORS' REPORT (CONTINUED)

## 33. COMPLIANCE WITH THE CORPORATE GOVERNANCE CODE

The Company has complied with all applicable code provisions set out in the Corporate Governance Code during the Reporting Period. Details are set out in the "Corporate Governance Report" of this annual report.

## 34. INDEPENDENT AUDITOR

As resolved at the first extraordinary general meeting of 2022 of the Company held on 16 September 2022, KPMG was not re-appointed as international auditor of the Company and SHINEWING (HK) CPA Limited was appointed as its international auditor for 2022, to provide relevant overseas audit and review services under IFRSs. Save as disclosed above, the Company did not change auditor in the last three years. The resolutions regarding appointment of auditors of the Company for the 2023 financial report will be proposed at the forthcoming AGM for consideration and approval

## 35. COMPLIANCE WITH RELEVANT LAWS

After the listing on the main board of the Stock Exchange, the Company is subject to the Company Law, the Listing Rules, the SFO and other related laws and regulations at home and abroad. The Company complies with the following key regulatory requirements:

The State-owned Assets Supervision and Administration Commission of the State Council, the Supervisory Board for Key Large State-Owned Enterprises and other Chinese government departments (including but not limited to Ministry of Finance, State Administration of Taxation, National Audit Office of the PRC, State Administration for Market Regulation of the PRC, PBOC, State Administration of Foreign Exchange, Ministry of Human Resources and Social Security of the PRC and subsidiary organs thereof) have made inquiries and onsite inspection or off-site survey to the Company's compliance with Chinese laws and regulations in terms of state-owned assets management, financial condition and business operation, solvency status, tax payment, foreign exchange management, labour and social welfare, etc.

Compliance with the Listing Rules and the SFO, including but not limited to fulfilling the followings: safe-keeping the register of interests in shares and short positions and the register of interests and short positions of Directors, Supervisors and chief executives, disclosure of inside information etc. The Company has implemented internal control to ensure its compliance with such laws and regulations. To the best of our knowledge, there are not any legal or regulatory procedures or issues that may, in the opinion of the Directors, have material adverse effects on the business, financial condition, business performance or prospects of the Company as of the end of Reporting Period.

# DIRECTORS' REPORT (CONTINUED)

## 36. ENVIRONMENTAL POLICIES AND PERFORMANCE

The Group recognises the importance of environmental protection and has adopted stringent measures for environmental protection in order to ensure our compliance to the prevailing environmental protection laws and regulations. Adhering to the concept of green environmental protection, the Group has also promoted green operations and advocated the concept of green office. Environmental protection, energy conservation and emissions reduction and reasonable and efficient utilisation of resources have been consistently implemented in the daily operation activities of the Group. The Group has also been working on reducing its energy use, consumption and wastage by actively promoting recycling concept, including using less paper and saving electric power and use of water. Going forward, the Group will continue to develop sustainable policies and designs to reduce its environmental impact not only internally within its offices but also externally in the regions it operates in. Discussion on the environmental policies and performance of the Group is set out in the "Environmental, Social and Governance Report" for 2022.

## 37. COMPLIANCE WITH THE OFAC UNDERTAKINGS

During the Reporting Period, the Company has requested its subsidiaries to conduct overseas business in accordance with the Detailed Rules on the Work of the Overseas Risk Management Committee of China Isotope & Radiation Corporation. The Company has kept the relevant OFAC undertakings in the Reporting Period and will continue doing so in the future daily operation.

## 38. PUBLIC FLOAT

As of the date of this annual report, the shares of the Company held by the public accounted for 25% of the total shares of the Company, which complied with the requirements of the Listing Rules as the capital structure of the Company maintained sufficient public float.

## 39. REVIEW OF ANNUAL REPORT

The Audit and Risk Management Committee of the Company has reviewed the Company's annual results of 2022, and the financial statements for the year ended 31 December 2022 prepared in accordance with International Financial Reporting Standards.

# DIRECTORS' REPORT (CONTINUED)

## 40. INFORMATION ON TAX REDUCTION AND EXEMPTION FOR HOLDERS OF H SHARES

### 40.1 Individual investors

According to the Notice on the Management of Personal Income Tax Imposed after the Abolition of Guo Shui Fa [1993] No. 045 Document issued by the State Administration of Taxation (Guo Shui Han [2011] No. 348) (《國家稅務總局關於國稅發[1993]045號文件廢止後有關個人所得稅徵管問題的通知》(國稅函[2011]348號)), the dividend received by foreign resident individual shareholders from the issuance of shares in Hong Kong by domestic non-foreign invested enterprises is subject to the payment of individual income tax according to the items of "interests, dividend and bonus income", which shall be withheld by the withholding agents according to the relevant laws. The foreign resident individual shareholders who hold the shares issued by domestic non-foreign invested enterprises in Hong Kong are entitled to the relevant preferential tax treatment pursuant to the provisions in the tax agreements signed between the countries where they reside and China or the tax arrangements between Mainland and Hong Kong (Macau). The tax rate for dividends under the relevant tax agreements and tax arrangements is generally 10%, and for the purpose of simplifying tax administration, domestic non-foreign invested enterprises issuing shares in Hong Kong may, when distributing dividends, generally withhold individual income tax at the rate of 10%, and are not obligated to file an application. If the tax rate for dividends is not equal to 10%, the following provisions shall apply: (1) for citizens from countries which have entered into tax agreements/arrangements stipulating a tax rate of lower than 10%, the withholding agents will file applications on their behalf to seek entitlement of the relevant agreed preferential treatments, and upon approval by the tax authorities, the excess tax amounts withheld will be refunded; (2) for citizens from countries which have entered into tax agreements/arrangements stipulating a tax rate of higher than 10% but lower than 20%, the withholding agents will withhold the individual income tax at the agreed-upon effective tax rate when distributing dividends, and are not obligated to file an application; (3) for citizens from countries without tax agreements or are under other situations, the withholding agents will withhold the individual income tax at a tax rate of 20% when distributing dividends.

According to the Arrangements for the Avoidance of Double Taxation and Prevention of Tax Evasion in Mainland China and Hong Kong (Guo Shui Han [2006] No. 884) (《內地和香港特別行政區關於對所得避免雙重徵稅和防止偷漏稅的安排》(國稅函[2006]884號)) signed on 21 August 2006 in relation to income tax, the Chinese government may impose tax on dividends payable by the Chinese companies to Hong Kong residents, but the tax should not exceed 10% of the total dividend payable; if Hong Kong residents directly hold at least 25% equity interest in the Chinese company, the relevant tax shall not exceed 5% of the total dividend payable by the Chinese company.

# DIRECTORS' REPORT (CONTINUED)

### 40.2 Enterprise

According to the Enterprise Income Tax law of the People's Republic of China (《中華人民共和國企業所得稅法》) and the Regulations on the Implementation of the Enterprise Income Tax Law of the People's Republic of China (《中華人民共和國企業所得稅法實施條例》) effective on 1 January 2008, if non-resident enterprises establish no organisations and sites within the territory of China, or though they have established certain organisations and sites but the dividends and bonuses received have actually not correlated to the organisations and sites established, such enterprises shall pay the corporate income tax at the rate of 10% of its income from the Chinese territory. The withholding tax may be relieved under an applicable double taxation treaty.

According to the Notice on the Withholding Corporate Income Tax on the Dividends Distributed by the Chinese Resident Enterprise to Foreign H Share Non-resident Enterprise Shareholders (Guo Shui Han [2008] No. 897) (《關於中國居民企業向境外H股非居民企業股東派發股利代扣代繳企業所得稅有關問題的通知》(國稅函[2008]897號)) issued by the State Administration of Taxation and effective on 6 November 2008, when the Chinese resident enterprises distribute dividends of 2008 and subsequent years to foreign H share non-resident enterprise shareholders, they shall pay the withholding enterprise income tax at the unified rate of 10%. Such withholding tax may be reduced pursuant to applicable tax avoidance under the double taxation treaty.

Pursuant to the provisions in the Notice on Tax Policy Regarding Shanghai-Hong Kong Stock Connect Pilot Programs (Cai Shui [2014] No. 81) (《關於滬港股票市場交易互聯互通機制試點有關稅收政策的通知》(財稅[2014]81號)) issued by the Ministry of Finance, the State Administration of Taxation and CSRC, for the dividends obtained by mainland individual investors from investing in H-shares listed in Hong Kong Stock Exchange through Shanghai-Hong Kong Stock Connect, such H-share companies shall withhold individual income tax at the tax rate of 20%. For the dividends obtained by mainland securities investment funds by investing in shares listed in Hong Kong Stock Exchange through Shanghai-Hong Kong Stock Connect, the individual income tax will be levied pursuant to the provisions mentioned above. For the dividends obtained by mainland enterprise investors from investing in shares listed in Hong Kong Stock Exchange through Shanghai-Hong Kong Stock Connect, such H-share companies shall not withhold and pay any income taxes on the dividends, as the income taxes shall be reported and paid by the investing enterprises on their own. Meanwhile, for the dividends obtained by mainland resident enterprises from holding relevant H shares for consecutive 12 months, the corporate income taxes shall be exempted according to laws.

Pursuant to the current practices of Inland Revenue Department of Hong Kong, no taxes shall be levied for the dividends distributed by the Company. The Shareholders of the Company shall pay the relevant taxes and/or be entitled to tax relieves pursuant to the above provisions.

By order of the Board of Directors
**Wang Suohui**
*Chairman of the Board*
21 April 2023

# SUPERVISORS' REPORT

## 1. BASIC COMPOSITION OF THE BOARD OF SUPERVISORS

### 1.1 Basic information

As of 31 December 2022, the Board of Supervisors consists of five members, namely Mr. Liu Zhonglin, Mr. Zhao Nanfei, Mr. Zhang Guoping, Mr. Ma Fuxin and Ms. Peng Qihui, among whom Mr. Liu Zhonglin is the chairman of the Board of Supervisors, Mr. Ma Fuxin and Ms. Peng Qihui are employee representative supervisors. The term of office of supervisors is three years. Supervisors can be re-appointed upon re-election after the term of office expires.

### 1.2 Changes in supervisors

The Company held an employee meeting on 30 August 2022 and elected Mr. Ma Fuxin and Ms. Peng Qihui as the employee representative supervisors of the third session of the Board of Supervisors of the Company. On 16 September 2022, the first extraordinary general meeting of CIRC approved Mr. Liu Zhonglin as a non-employee representative supervisor of the Company and Mr. Zhang Qingjun has retired as a non-employee representative supervisor.

## 2. MEETINGS OF THE BOARD OF SUPERVISORS

In 2022, the Board of Supervisors convened six meetings. The convening, holding and voting procedures of the meetings and the contents of the resolutions are in compliance with the laws and regulations and the Articles of Association. The details of the meetings are as follows:

1. The first meeting of the third session of the Board of Supervisors for 2022 was held on 30 March 2022. Mr. Zhang Qingjun, the chairman of the Board of Supervisors, served as the convener. Three resolutions were considered and approved at the meeting, which were the Unaudited 2021 Annual Results Announcement of CIRC, the 2021 Annual Report on Internal Control Construction and Evaluation of CIRC and the 2022 Annual Report on Comprehensive Risk Management of CIRC. Three resolutions were considered, which were the Accounting Information Quality Inspection Project of CIRC, the Financial Risk Prevention and Control Project of CIRC and the Internal Audit Project of CIRC.

2. The second meeting of the third session of the Board of Supervisors for 2022 was held on 19 April 2022. Mr. Zhang Qingjun, the chairman of the Board of Supervisors, served as the convener. Eight resolutions were considered and approved at the meeting, which were the 2021 Work Report of the Board of Supervisors of CIRC, the 2021 Work Report of the Board of Directors of CIRC, the Audited 2021 Annual Results Announcement of China Isotope & Radiation Corporation, the 2021 Annual Report of China Isotope & Radiation Corporation, the Environmental, Social and Governance Report of China Isotope & Radiation Corporation for 2021, the 2021 Final Accounts of the Company, the 2022 Financial Budget Plan of the Company and the Proposed Declaration and Distribution of Final Dividend for the Year Ended 31 December 2021.

3. The third meeting of the third session of the Board of Supervisors for 2022 was held on 26 April 2022. Mr. Zhang Qingjun, the chairman of the Board of Supervisors, served as the convener. A resolution was considered and approved at the meeting, which was the 2021 Annual Report on Corporate Bonds of China Isotope & Radiation Corporation.

# SUPERVISORS' REPORT (CONTINUED)

4. The fourth meeting of the third session of the Board of Supervisors for 2022 was held on 29 July 2022. Two resolutions were considered and approved at the meeting, which were the Changes in Supervisors and the Appointment of Overseas Annual Audit Accounting Firm.

5. The fifth meeting of the third session of the Board of Supervisors for 2022 was held on 31 August 2022. Mr. Zhao Nanfei, the Supervisor, served as the convener. Two resolutions were considered and approved at the meeting, which were the 2022 Interim Results Announcement of CIRC and the 2022 Interim Report on Corporate Bonds of CIRC.

6. The sixth meeting of the third session of the Board of Supervisors for 2022 was held on 16 September 2022. Mr. Liu Zhonglin, the Supervisor, served as the convener. A resolution was considered and approved at the meeting, which was the 2022 Interim Report of China Isotope & Radiation Corporation, and Mr. Liu Zhonglin was selected as the chairman of the third session of the Board of Supervisors.

## 3. BOARD OF SUPERVISORS' PRESENCE ON OTHER MEETINGS

In 2022, the Supervisors of the Company attended six Board meetings, the 2021 AGM and the first 2022 extraordinary general meeting.

## 4. BASIC EVALUATION OF THE BOARD OF SUPERVISORS ON PERFORMANCE OF THE BOARD AND SENIOR MANAGEMENT

During the Reporting Period, with the supervision on the Directors and senior management of the Company, the Board of Supervisors was of the view that the Board of the Company was able to duly perform its duties in strict compliance with the requirements under the Company Law, Securities Law, the Articles of Association and the relevant laws and regulations, and to operate in accordance with laws. The major business decision making procedures of the Company were legitimate and effective. The Directors and senior management of the Company performed their duties in strict accordance with the State laws and regulations, the Articles of Association and resolutions of the general meeting and the Board. The Board of Supervisors was not aware of any irregularities of Directors and senior management that are not in the interests of the Company and the Shareholders or have violated laws and regulations.

## 5. INDEPENDENT OPINIONS OF THE BOARD OF SUPERVISORS ON OPERATION OF THE COMPANY

### 5.1 Independent opinions on the financial position of the Company

The financial report of the year is prepared in accordance with International Financial Reporting Standards with sound internal control system on financial and audit aspects and no material omission or false statement in the accounting, and has been audited by SHINEWING (HK) CPA Limited, which reflected the financial position and operation results of the Company in a true and objective manner.

### 5.2 Independent opinions on disclosure of information by the Company

During the Reporting Period, the Board of Supervisors attended the general meeting and the Board meeting and listened to the report about information disclosure. The Board of Supervisors believed that the information disclosure procedures were in compliance with the Administrative Measures on Information Disclosure of CIRC (《中國同輻信息披露管理辦法》) and complied with the regulatory requirements of the Stock Exchange.

# SUPERVISORS' REPORT (CONTINUED)

5.3 Independent opinions on the connected transactions of the Company

During the Reporting Period, the Board of Supervisors conducted supervision on the connected transactions of the Company and was of the view that the approval and disclosure procedure of the connected transactions of the Company were in compliance with the relevant laws and regulations such as the Listing Rules and requirements of the Articles of Association, and the pricing of which was fair and reasonable.

5.4 Independent opinions on the management and use of proceeds of the Company

During the Reporting Period, the Board of Supervisors conducted supervision on the management and use of proceeds of the Company. The Board of Supervisors believed that the Company managed and used the proceeds in strict compliance with the Listing Rules.

## 6. WORKING PLAN

In 2023, the Board of Supervisors will strictly comply with the relevant requirements under the Company Law, Securities Law of the PRC, Listing Rules and Articles of Association to further perfect the corporate governance structure of the Company as a legal person and improve the standard of corporate governance. The Board of Supervisors will continually strengthen the implementation of supervision and conduct effective supervision with focus on procuring the implementation of the resolutions passed at the general meeting and the Board meeting, major operational decisions of the Company and financial inspection. It will step up its efforts in supervision of major acquisition of assets, external investment, management and use of proceeds and disclosure of information so as to better safeguard the interests of Shareholders.

By order of the Board of Supervisors
**Liu Zhonglin**
*Chairman of the Board of Supervisors*
21 April 2023

# INDEPENDENT AUDITOR'S REPORT

SHINEWING (HK) CPA Limited
17/F, Chubb Tower, Windsor House,
311 Gloucester Road,
Causeway Bay, Hong Kong

信永中和(香港)會計師事務所有限公司
香港銅鑼灣告士打道311號
皇室大廈安達人壽大樓17樓

**TO THE SHAREHOLDERS OF CHINA ISOTOPE & RADIATION CORPORATION**

*(Incorporated in the People's Republic of China with limited liability)*

## OPINION

We have audited the consolidated financial statements of China Isotope & Radiation Corporation (the "Company") and its subsidiaries (hereinafter collectively referred to as the "Group") set out on pages 98 to 202, which comprise the consolidated statement of financial position as at 31 December 2022, and the consolidated statement of profit or loss, consolidated statement of profit or loss and other comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

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 2022, and of its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards ("IFRSs") issued by the International Accounting Standards Boards ("IASB") 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 Hong Kong Standards on Auditing ("HKSAs") issued by the Hong Kong Institute of Certified Public Accountants ("HKICPA"). 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 are independent of the Group in accordance with the HKICPA's Code of Ethics for Professional Accountants ("the Code"), and we have fulfilled our other ethical responsibilities in accordance with these requirements and the Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

## KEY AUDIT MATTERS

Key audit matters are those matters that, in our professional judgement, 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.

# INDEPENDENT AUDITOR'S REPORT (CONTINUED)

## KEY AUDIT MATTERS (CONTINUED)

<table>
<tr><td colspan="2">Revenue recognition</td></tr>
<tr><td colspan="2">Refer to Note 4 to the consolidated financial statements and the accounting policies in Note 2(w)(i).</td></tr>
<tr><td>The key audit matter</td><td>How the matter was addressed in our audit</td></tr>
<tr><td>The Group is principally engaged in research, development, manufacturing and sale of a broad range of pharmaceuticals and radioactive source products, and also design, manufacturing, construction and installation of gamma ray irradiation facilities, provision of irradiation service for sterilisation purpose as well as independent clinical laboratory services.<br><br>The amount of sales of goods recognised for the year ended 31 December 2022 is RMB5,241 million and accounted for 85% of total revenue. The revenue from sales of goods is recognised when the customer obtains control of the promised goods in the contract.<br><br>We identified the recognition of revenue as a key audit matter because the revenue is one of the key performance indicators of the Group and the Group's business is diversified and from different segments. Therefore, there is inherent risk of material misstatement in revenue recognition.</td><td>Our audit procedures to assess the timing of revenue recognition included the following:<br><br>• obtaining an understanding of and assessing the design, implementation and operating effectiveness of management's key internal controls in relation to revenue recognition;<br><br>• inspecting the terms of sales contracts with customers from each segment, on a sample basis, and evaluating the conditions of goods acceptance as to whether control over the goods has been passed and performance obligation is satisfied when the Group recognises the revenue, and assessing the Group's timing and value of recognition of revenue with reference to the requirements of the prevailing accounting standards;<br><br>• inspecting goods delivery notes and logistics records, on a sample basis, to assess whether revenue transactions recorded just before and after the financial year end date had been recognised in the appropriate financial period on the basis of the terms of sale as set out in the sales contracts;<br><br>• comparing revenue transactions, on a sample basis, with invoices, goods delivery notes and other relevant underlying documentation as applicable;</td></tr>
</table>

# INDEPENDENT AUDITOR'S REPORT (CONTINUED)

## OTHER MATTER

The consolidation financial statements of the Group for the year ended 31 December 2021 were audited by another auditor who expressed an unmodified opinion in those statements on 19 April 2022.

## INFORMATION OTHER THAN THE CONSOLIDATED FINANCIAL STATEMENTS AND AUDITOR'S REPORT THEREON

The directors of the Company are responsible for the other information. The other information comprises all 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 THE DIRECTORS OF THE COMPANY AND AUDIT AND RISK MANAGEMENT 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 issued by the IASB and the disclosure requirements of the Hong Kong Companies Ordinance, and for such internal control as the directors of the Company determine is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud error.

In preparing the consolidated financial statements, the directors of the Company 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 of the Company either intend to liquidate the Group or to cease operations, or have no realistic alternative but to do so.

Audit and Risk Management Committee is responsible for overseeing the Group's financial reporting process.

# INDEPENDENT AUDITOR'S REPORT (CONTINUED)

## 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, solely to you, as a body, in accordance with our agreed terms of engagement, 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 HKSAs 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 HKSAs, we exercise professional judgement 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.

# INDEPENDENT AUDITOR'S REPORT (CONTINUED)

## AUDITOR'S RESPONSIBILITIES FOR THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

- 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 and Risk Management 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 and Risk Management Committee with a statement that we have complied with relevant ethical requirements regarding independence and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence and, where applicable, actions taken to eliminate threats or safeguards applied.

From the matters communicated with the Audit and Risk Management 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 Mr. Lee Shun Ming.

**SHINEWING (HK) CPA Limited**
*Certified Public Accountants*
**Lee Shun Ming**
Practising Certificate Number: P07068

Hong Kong
30 March 2023

# CONSOLIDATED STATEMENT OF PROFIT OR LOSS

FOR THE YEAR ENDED 31 DECEMBER 2022

| | Notes | 2022<br>RMB'000 | 2021<br>RMB'000 |
|---|---|---|---|
| Revenue | 4 | **6,146,172** | 5,143,694 |
| Cost of sales | | **(2,631,493)** | (1,901,790) |
| **Gross profit** | | **3,514,679** | 3,241,904 |
| Other income, gains and losses | 5 | **91,183** | 61,569 |
| Selling and distribution expenses | | **(1,787,952)** | (1,820,458) |
| Administrative expenses | | **(573,463)** | (497,984) |
| Research and development costs | | **(300,510)** | (196,214) |
| Impairment losses on trade and other receivables | | **(31,193)** | (10,996) |
| **Profit from operations** | | **912,744** | 777,821 |
| Finance costs | 6(a) | **(34,399)** | (35,803) |
| Share of profits less losses of associates | | **8,618** | 6,962 |
| Share of profits of joint ventures | | **33,548** | 53,698 |
| **Profit before taxation** | 6 | **920,511** | 802,678 |
| Income tax expense | 7 | **(165,947)** | (129,641) |
| **Profit for the year** | | **754,564** | 673,037 |
| **Attributable to:** | | | |
| Equity shareholders of the Company | | **391,605** | 335,751 |
| Non-controlling interests | | **362,959** | 337,286 |
| **Profit for the year** | | **754,564** | 673,037 |
| **Earnings per share:** | 8 | | |
| Basic and diluted (RMB) | | **1.22** | 1.05 |

The notes on pages 106 to 202 form part of these financial statements. Details of dividends payable to equity shareholders of the Company attributable to the profit for the year are set out in Note 33(b).

# CONSOLIDATED STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME

FOR THE YEAR ENDED 31 DECEMBER 2022

| | Note | 2022 RMB'000 | 2021 RMB'000 |
|---|---|---|---|
| **Profit for the year** | | **754,564** | 673,037 |
| **Other comprehensive income for the year (after tax and reclassification adjustments)** | 11 | | |
| Item that may be reclassified subsequently to profit or loss: | | | |
| Exchange differences on translation of share of profits less losses of an associate | | **–** | (2,623) |
| Items that will not be reclassified to profit or loss: | | | |
| Remeasurement of net defined benefit liability | | **(3,374)** | (1,469) |
| Equity investments at FVOCI-net movement in fair value reserve (non-recycling) | | **15,523** | 10,047 |
| **Other comprehensive income for the year** | | **12,149** | 5,955 |
| **Total comprehensive income for the year** | | **766,713** | 678,992 |
| **Attributable to:** | | | |
| Equity shareholders of the Company | | **405,135** | 341,921 |
| Non-controlling interests | | **361,578** | 337,071 |
| **Total comprehensive income for the year** | | **766,713** | 678,992 |

The notes on pages 106 to 202 form part of these financial statements.

# CONSOLIDATED STATEMENT OF FINANCIAL POSITION

AS AT 31 DECEMBER 2022

| | Notes | 2022 RMB'000 | 2021 RMB'000 |
|---|---|---|---|
| **Non-current assets** | | | |
| Property, plant and equipment | 12 | 2,820,749 | 2,512,947 |
| Investment properties | 13 | 49,604 | 19,670 |
| Intangible assets | 14 | 160,876 | 156,496 |
| Goodwill | 18 | 30,764 | 44,036 |
| Interests in associates | 16 | 165,096 | 52,500 |
| Interests in joint ventures | 17 | 512,867 | 594,252 |
| Long-term receivables | 32(c) | 38,997 | 37,176 |
| Unquoted equity investments | 19 | 162,494 | 150,410 |
| Deferred tax assets | 31(b) | 221,484 | 214,445 |
| Other non-current assets | | 9,899 | 35,255 |
| | | 4,172,830 | 3,817,187 |
| **Current assets** | | | |
| Inventories | 20 | 677,636 | 691,923 |
| Contract assets | 21(b) | 27,359 | 29,424 |
| Trade and bill receivables | 21(a) | 3,501,338 | 2,821,153 |
| Deposits and other receivables | 22(a) | 146,462 | 153,733 |
| Prepayments | 22(b) | 236,724 | 212,358 |
| Cash at bank and on hand | 23 | 2,923,191 | 2,748,190 |
| | | 7,512,710 | 6,656,781 |
| **Current liabilities** | | | |
| Bank loans | 24(b) | 18,196 | 118,084 |
| Corporate bond | 25 | – | 499,996 |
| Trade payables | 26 | 488,288 | 337,856 |
| Accruals and other payables | 27(a) | 3,270,735 | 2,816,406 |
| Lease liabilities | 28 | 28,520 | 53,368 |
| Provisions | 32 | 86,322 | 76,554 |
| Income tax payable | 31(a) | 95,729 | 69,398 |
| **Total current liabilities** | | 3,987,790 | 3,971,662 |
| **Net current assets** | | 3,524,920 | 2,685,119 |
| **Total assets less current liabilities** | | 7,697,750 | 6,502,306 |

# CONSOLIDATED STATEMENT OF FINANCIAL POSITION (CONTINUED)

AS AT 31 DECEMBER 2022

| | Notes | 2022 RMB'000 | 2021 RMB'000 |
|---|---|---|---|
| **Non-current liabilities** | | | |
| Bank loans | 24(a) | 786,513 | 144,680 |
| Deferred income | 27(b) | 60,001 | 43,875 |
| Lease liabilities | 28 | 51,631 | 40,500 |
| Defined benefit retirement obligation | 29(a) | 53,940 | 49,898 |
| Deferred tax liabilities | 31(b) | 18,242 | 17,347 |
| Provisions | 32 | 137,885 | 131,706 |
| Other long-term payables | 27(c) | 36,255 | 42,912 |
| **Total non-current liabilities** | | 1,144,467 | 470,918 |
| **Net assets** | | 6,553,283 | 6,031,388 |
| **Capital and reserves** | 33 | | |
| Share capital | | 319,875 | 319,875 |
| Reserves | | 4,145,412 | 3,859,415 |
| **Total equity attributable to equity shareholders of the Company** | | 4,465,287 | 4,179,290 |
| **Non-controlling interests** | | 2,087,996 | 1,852,098 |
| **Total equity** | | 6,553,283 | 6,031,388 |

Approved and authorised for issue by the Board of Directors on 30 March 2023 and are signed on its behalf by:

| | |
|---|---|
| Wang Suohui | Gui Youquan |
| Chairman of the board | Chief accountant |

The notes on page 106 to 202 form part of these financial statements.

# CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

FOR THE YEAR ENDED 31 DECEMBER 2022

| | | Attributable to equity shareholders of the Company | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Note | Share capital RMB'000 Note 33(c) | Capital reserve RMB'000 Note 33(d)(i) | PRC statutory reserve RMB'000 Note 33(d)(ii) | Fair value reserve (non-recycling) RMB'000 Note 33(d)(iii) | Other reserve RMB'000 Note 33(d)(iv) | Exchange reserve RMB'000 Note 33(d)(v) | Retained profits RMB'000 | Sub-total RMB'000 | Non-controlling interests RMB'000 | Total equity RMB'000 |
| **Balance at 1 January 2021** | | 319,875 | 2,113,577 | 138,594 | 29,343 | 43,913 | 2,623 | 1,243,273 | 3,891,198 | 1,614,412 | 5,505,610 |
| **Changes in equity for 2021:** | | | | | | | | | | | |
| Profit for the year | | – | – | – | – | – | – | 335,751 | 335,751 | 337,286 | 673,037 |
| Other comprehensive income | | – | – | – | 10,047 | – | (2,623) | (1,254) | 6,170 | (215) | 5,955 |
| Total comprehensive income | | – | – | – | 10,047 | – | (2,623) | 334,497 | 341,921 | 337,071 | 678,992 |
| Capital contributions from non-controlling equity owners of subsidiaries | | – | – | – | – | – | – | – | – | 20,465 | 20,465 |
| Capital injections in subsidiaries | | – | 16,857 | – | – | – | – | – | 16,857 | 1,218 | 18,075 |
| Acquisition of non-controlling interest in a subsidiary | | – | (12,977) | – | – | – | – | – | (12,977) | (44,454) | (57,431) |
| Disposal of interest in an associate | | | (36) | | | | | | (36) | | (36) |
| Acquisition of subsidiaries | | | | | | | | | | 20,008 | 20,008 |
| Appropriation of maintenance and production funds | | – | – | – | – | 22,080 | – | (22,080) | – | – | – |
| Utilisation of maintenance and production funds | | – | – | – | – | (18,023) | – | 18,023 | – | – | – |
| Appropriation to reserves | | – | – | 5,624 | – | – | – | (5,624) | – | – | – |
| Dividends | 33(b) | – | – | – | – | – | – | (57,673) | (57,673) | – | (57,673) |
| Distributions by subsidiaries to non-controlling equity owners | | – | – | – | – | – | – | – | – | (96,622) | (96,622) |
| **Balance at 31 December 2021** | | 319,875 | 2,117,421 | 144,218 | 39,390 | 47,970 | – | 1,510,416 | 4,179,290 | 1,852,098 | 6,031,388 |

The notes on page 106 to 202 form part of these financial statements.

# CONSOLIDATED STATEMENT OF CHANGES IN EQUITY (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

| | | Attributable to equity shareholders of the Company | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Note | Share capital RMB'000 Note 33(c) | Capital reserve RMB'000 Note 33(d)(i) | PRC statutory reserve RMB'000 Note 33(d)(ii) | Fair value reserve (non-recycling) RMB'000 Note 33(d)(iii) | Other reserve RMB'000 Note 33(d)(iv) | Exchange reserve RMB'000 Note 33(d)(v) | Retained profits RMB'000 | Sub-total RMB'000 | Non - controlling interests RMB'000 | Total equity RMB'000 |
| **Balance at 1 January 2022** | | 319,875 | 2,117,421 | 144,218 | 39,390 | 47,970 | - | 1,510,416 | 4,179,290 | 1,852,098 | 6,031,388 |
| **Changes in equity for 2022:** | | | | | | | | | | | |
| Profit for the year | | - | - | - | - | - | - | 391,605 | 391,605 | 362,959 | 754,564 |
| Other comprehensive income | | - | - | - | 15,523 | - | - | (1,993) | 13,530 | (1,381) | 12,149 |
| Total comprehensive income | | - | - | - | 15,523 | - | - | 389,612 | 405,135 | 361,578 | 766,713 |
| Capital contributions from non-controlling equity owners of subsidiaries | | - | - | - | - | - | - | - | - | 30,745 | 30,745 |
| Capital contributions from shareholders | | - | 1,743 | - | - | - | - | - | 1,743 | 640 | 2,383 |
| Deregistration of a subsidiary (note) | | - | - | - | - | - | - | - | - | (126) | (126) |
| Appropriation of maintenance and production funds | | - | - | - | - | 33,144 | | (33,144) | - | - | - |
| Utilisation of maintenance and production funds | | - | - | - | - | (23,545) | - | 23,545 | - | - | - |
| Appropriation to reserves | | - | - | 11,727 | - | - | - | (11,727) | - | - | - |
| Dividends | 33(b) | - | - | - | - | - | - | (120,881) | (120,881) | - | (120,881) |
| Distributions by subsidiaries to non-controlling equity owners | | - | - | - | - | - | - | - | - | (156,939) | (156,939) |
| **Balance at 31 December 2022** | | 319,875 | 2,119,164 | 155,945 | 54,913 | 57,569 | - | 1,757,821 | 4,465,287 | 2,087,996 | 6,553,283 |

Note: During the year ended 31 December 2022, the Group deregistered a subsidiary, 中核普林醫療科技(成都)有限公司 in which the non-controlling interest in 中核普林 of approximately RMB126,000 was derecognised accordingly.

The notes on pages 106 to 202 form part of these financial statements.

# CONSOLIDATED STATEMENT OF CASH FLOWS

FOR THE YEAR ENDED 31 DECEMBER 2022

| | Notes | 2022 RMB'000 | 2021 RMB'000 |
|---|---|---|---|
| **OPERATING ACTIVITIES** | | | |
| Profit before taxation | | **920,511** | 802,678 |
| Adjustments for: | | | |
| Depreciation and amortisation | 6(c) | **220,575** | 197,236 |
| Government grants | 5 | **(41,948)** | (14,220) |
| Interest income | 5 | **(45,286)** | (3,078) |
| Finance costs | 6(a) | **34,399** | 35,803 |
| Gain on bargain purchases | 34(a) | **(125)** | – |
| Dividend income on unquoted equity investment | 5 | **(6,404)** | (4,739) |
| Impairment loss on intangible asset | 14 | **3,392** | – |
| Impairment loss on goodwill | 18 | **13,272** | – |
| Write-off of intangible assets | | **8** | – |
| Write-off of property, plant and equipment | 12 | **660** | – |
| Net loss on disposal of property, plant and equipment | 5 | **1,116** | 683 |
| Share of profits less losses of associates | | **(8,618)** | (6,962) |
| Share of profits of joint ventures | | **(33,548)** | (53,698) |
| Operating cash flows before movement in working capital | | **1,058,004** | 953,703 |
| Decrease/(increase) in inventories | 20 | **14,287** | (101,898) |
| Increase in trade and bill receivables | 21 | **(678,120)** | (463,276) |
| Decrease/(increase) in prepayments, deposits and other receivables | | **2,541** | (109,996) |
| Increase in trade payables | 26 | **150,432** | 138,353 |
| Increase in accruals and other payables | | **451,672** | 489,548 |
| Decrease in defined benefit retirement obligation | 29 | **(1,007)** | (6,836) |
| Increase in other long-term payables | | **–** | 17,612 |
| Increase in provisions | | **12,368** | 2,648 |
| **Cash generated from operations** | | **1,010,177** | 919,858 |
| Income taxes paid | 31(a) | **(147,518)** | (125,546) |
| **NET CASH GENERATED FROM OPERATING ACTIVITIES** | | **862,659** | 794,312 |

# CONSOLIDATED STATEMENT OF CASH FLOWS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

| | Notes | 2022<br>RMB'000 | 2021<br>RMB'000 |
|---|---|---|---|
| **INVESTING ACTIVITIES** | | | |
| Increase in deposits with banks | 23 | **(717,203)** | (1,076,002) |
| Withdrawal of deposits with banks | 23 | **606,740** | 655,920 |
| Payments for purchase of investment property, plant and equipment, lease prepayments and intangible assets | | **(534,000)** | (427,723) |
| Payments for acquisition of subsidiaries | 34 | **(25,414)** | (85,977) |
| Payments for purchase of interests in associates | 16 | **(72,000)** | (22,930) |
| Disposal of interest in an associate | | **–** | 14,033 |
| Partial disposal of interest in joint ventures | 17 | **36,140** | – |
| Capital injections in subsidiaries | | **2,383** | – |
| Proceeds from disposal of property, plant and equipment | | **39,765** | 810 |
| (Decrease)/increase in other long-term payables | | **(6,657)** | – |
| Dividends received from associates | 16 | **216** | 4,461 |
| Dividends received from joint ventures | 17 | **53,643** | 12,193 |
| Dividends received from unquoted equity investment | | **6,404** | 4,739 |
| Government grants received | | **58,074** | 10,042 |
| Interests received | | **45,286** | 3,078 |
| **NET CASH USED IN INVESTING ACTIVITIES** | | **(506,623)** | (907,356) |
| **FINANCING ACTIVITIES** | | | |
| Capital injections from non-controlling equity owners of subsidiaries | | **30,745** | 20,465 |
| Proceeds from bank loans | 23(b) | **734,560** | 194,900 |
| Repayments of bank loans | 23(b) | **(193,467)** | (102,758) |
| Capital elements of lease rentals paid | 23(b) | **(54,286)** | (28,791) |
| Interest elements of lease rentals paid | 23(b) | **(4,696)** | (5,649) |
| Repayment of principal of corporate bonds | 23(b) | **(500,000)** | – |
| Interest paid on corporate bond | 23(b) | **(19,000)** | (18,893) |
| Other finance costs paid | 23(b) | **(7,534)** | (9,697) |
| Dividends paid by the Company to equity shareholders | | **(120,881)** | (57,673) |
| Dividends paid by subsidiaries to non-controlling equity owners | | **(156,939)** | (89,340) |
| **NET CASH USED IN FINANCING ACTIVITIES** | | **(291,498)** | (97,436) |
| **NET INCREASE/(DECREASE) IN CASH AND CASH EQUIVALENTS** | | **64,538** | (210,480) |
| **CASH AND CASH EQUIVALENTS AT THE BEGINNING OF THE YEAR** | | **2,141,450** | 2,351,602 |
| Effect of foreign exchange rate changes | | **–** | 328 |
| **CASH AND CASH EQUIVALENTS AT THE END OF THE YEAR** | | **2,205,988** | 2,141,450 |

The notes on pages 106 to 202 form part of these financial statements.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

FOR THE YEAR ENDED 31 DECEMBER 2022

## 1. GENERAL

China Isotope & Radiation Corporation (the "Company") was established on 4 December 2007 in the People's Republic of China (the "PRC") as a state-owned enterprise with limited liability. The Company was converted into a joint stock company with limited liability on 6 December 2011 and its shares are listed on The Stock Exchange of Hong Kong Limited. The immediate and ultimate holding company of the Company is China National Nuclear Corporation ("CNNC"). The address of its Hong Kong office is changed from Level 54, Hopewell Centre, 183 Queen's Road East, Hong Kong to 5/F., Manulife Place, 348 Kwun Tong Road, Kowloon, Hong Kong, effective from 15 August 2022. The principal place of business is located in the PRC, with the address of No. 66, Changwa Middle Street, Haidian District Beijing, the PRC.

The principal activity of the Company is investment holding.

The Company and its subsidiaries (hereafter collectively referred to as the "Group") are mainly engaged in (i) research, development, manufacturing and sale of diagnostic and therapeutic radiopharmaceuticals and radioactive source products for medical and industrial applications; (ii) provision of irradiation service for sterilisation purpose and EPC service for the design, manufacturing and installation of gamma ray irradiation facilities; and (iii) provision of independent clinical medical and laboratory services and medicine equipment to hospitals and other medical institutions.

The consolidated financial statements are presented in Renminbi ("RMB"), which is also the functional currency of the Company.

## 2. SIGNIFICANT ACCOUNTING POLICIES

### (a) Statement of compliance

These financial statements have been prepared in accordance with all applicable International Financial Reporting Standards ("IFRSs"), which collective term includes all applicable individual International Financial Reporting Standards, International Accounting Standards ("IASs") and Interpretations issued by the International Accounting Standards Board ("IASB") and the applicable disclosure requirements of the Hong Kong Companies Ordinance. These financial statements also comply with the applicable disclosure provisions of the Rules Governing the Listing of Securities on the Stock Exchange. Significant accounting policies adopted by the Group are disclosed below.

The IASB has issued certain amendments to IFRSs that are first effective or available for early adoption for the current accounting period of the Group. Note 2(c) provides information on any changes in accounting policies resulting from initial application of these developments to the extent that they are relevant to the Group for the current accounting periods reflected in these financial statements.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

## 2. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

### (b) Basis of preparation of the financial statements

The consolidated financial statements for the year ended 31 December 2022 comprise the Company and its subsidiaries (together referred as the "Group") and the Group's interest in associates and joint ventures.

The measurement basis used in the preparation of the financial statements is the historical cost basis except that the equity investments (see Note 2(g)) are stated at their fair value.

The preparation of consolidated financial statements in conformity with IFRSs requires management to make judgements, estimates and assumptions that affect the application of policies and reported amounts of assets, liabilities, income and expenses. The estimates and associated assumptions are based on historical experience and various other factors that are believed to be reasonable under the circumstances, the results of which form the basis of making the judgements about carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised if the revision affects only that period, or in the period of the revision and future periods if the revision affects both current and future periods.

Judgements made by management in the application of IFRSs that have significant effect on the consolidated financial statements and major sources of estimation uncertainty are discussed in Note 3.

## 2. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

### (c) Application of new and amendments to International Financial Reporting Standards ("IFRSs")

*Amendment to IFRSs that are mandatorily effective for the current year*

The Group has applied the following amendments to IFRSs issued by the IASB to these financial statements for the current accounting period:

| | |
|---|---|
| Amendments to IFRS 3 | Reference to the Conceptual Framework |
| Amendments to IAS 16 | Property, plant and equipment: Proceeds before Intended Use |
| Amendments to IAS 37 | Onerous Contracts – Cost of fulfilling a contract |
| Amendments to IFRSs | Annual Improvement to IFRSs 2018-2020 Cycle |

In addition, the Group applied the agenda decision of the International Financial Reporting Standards Interpretations Committee of the International Accounting Standards Board which are relevant to the Group.

None of these developments have had a material effect on how the Group's results and financial position for the current or prior years have been prepared or presented in this financial report.

*New and amendments to IFRSs is issued but not yet effective*

Up to date of issue of these financial statements, the IASB has issued a number of amendments and new standards which are not yet effective for the accounting year ended 31 December 2022 and which have not been adopted in these financial statements.

These include the following which may be relevant to the Group.

| | **Effective for accounting periods beginning on or after** |
|---|---|
| Amendments to IAS 1, *Classification of Liabilities as Current or Non-current* | 1 January 2023 |
| Amendments to IAS 12, *Deferred Tax related to Assets and Liabilities arising from a Single Transaction* | 1 January 2023 |
| Amendments to IAS 8, *Definition of Accounting Estimates* | 1 January 2023 |
| Amendments to IFRS Practice Statement 2, *Disclosure of Accounting Policies* | 1 January 2023 |
| IFRS 17 (including the June 2020 and December 2021 amendments to IFRS17), *Insurance Contracts* | 1 January 2023 |
| Amendments to IFRS 16, *Lease Liability in a Sale and Leaseback* | 1 January 2024 |
| Amendments to IFRS 10 and IAS 28, *Sale or contribution of assets between an investor and its associate or joint venture* | To be determined |

The Group is in the process of making an assessment of what the impact of these developments is expected to be in the period of initial application. So far it has concluded that the adoption of them is unlikely to have a significant impact on the consolidated financial statements.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

## 2. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

### (d) Subsidiaries and non-controlling interests

Subsidiaries are entities controlled by the Group. The Group controls an entity when it is exposed, or has rights, to variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. When assessing whether the Group has power, only substantive rights (held by the Group and other parties) are considered.

An investment in a subsidiary is consolidated into the consolidated financial statements from the date that control commences until the date that control ceases. Intra-group balances, transactions and cash flows and any unrealised profits arising from intra-group transactions are eliminated in full in preparing the consolidated financial statements. Unrealised losses resulting from intra-group transactions are eliminated in the same way as unrealised gains but only to the extent that there is no evidence of impairment.

Non-controlling interests represent the equity in a subsidiary not attributable directly or indirectly to the Company, and in respect of which the Group has not agreed any additional terms with the holders of those interests which would result in the Group as a whole having a contractual obligation in respect of those interests that meets the definition of a financial liability. For each business combination involving entities not under common control, the Group can elect to measure any non-controlling interests either at fair value or at the non-controlling interests' proportionate share of the subsidiary's net identifiable assets.

Non-controlling interests are presented in the consolidated statement of financial position within equity, separately from equity attributable to the equity shareholders of the Company. Non-controlling interests in the results of the Group are presented on the face of the consolidated statement of profit or loss and the consolidated statement of profit or loss and other comprehensive income as an allocation of the total profit or loss and total comprehensive income for the year between non-controlling interests and the equity shareholders of the Company.

Changes in the Group's interests in a subsidiary that do not result in a loss of control are accounted for as equity transactions, whereby adjustments are made to the amounts of controlling and non-controlling interests within consolidated equity to reflect the change in relative interests, but no adjustments are made to goodwill and no gain or loss is recognised.

When the Group loses control of a subsidiary, it is accounted for as a disposal of the entire interest in that subsidiary, with a resulting gain or loss being recognised in profit or loss. Any interest retained in that former subsidiary at the date when control is lost is recognised at fair value and this amount is regarded as the fair value on initial recognition of a financial asset or, when appropriate, the cost on initial recognition of an interest in an associate and a joint venture (see Note 2(e)).

In the Company's statements of financial position, an investment in a subsidiary is stated at cost less impairment losses (see Note 2(l)), unless the investment is classified as held for sale.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

## 2. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

### (e) Associates and joint ventures

An associate is an entity in which the Group or Company has significant influence, but not control or joint control, over its management, including participation in the financial and operating policy decisions.

A joint venture is an arrangement whereby the Group or Company and other parties contractually agree to share control of the arrangement and have rights to the net assets of the arrangement.

An investment in an associate or a joint venture is accounted for in the consolidated financial statements under the equity method unless it is classified as held for sale. Under the equity method, the investment is initially recorded at cost, adjusted for any excess of the Group's share of the acquisition-date fair values of the investee's identifiable net assets over the cost of the investment (if any). The cost of the investment includes purchase price, other costs directly attributable to the acquisition of the investment, and any direct investment into the associate or joint venture that forms part of Group's equity investment. Thereafter, the investment is adjusted for the post acquisition change in the Group's share of the investee's net assets and any impairment loss relating to the investment (see Notes 2(f) and 2(l)). At each reporting date, the Group assesses whether there is any objective evidence that the investment is impaired Any acquisition-date excess over cost, the Group's share of the post-acquisition, post-tax results of the investees and any impairment losses for the year are recognised in the consolidated statement of profit or loss, whereas the Group's share of the post-acquisition post-tax items of the investees' other comprehensive income is recognised in the consolidated statement of profit or loss and other comprehensive income.

When the Group's share of losses exceeds its interest in the associate or the joint venture, the Group's interest is reduced to nil and recognition of further losses is discontinued except to the extent that the Group has incurred legal or constructive obligations or made payments on behalf of the investee. For this purpose, the Group's interest is the carrying amount of the investment under the equity method together with the Group's long-term interests that in substance form part of the Group's net investment in the associate or the joint venture (after applying the ECL model to such other long-term interests where applicable (see Note 2(l)(i)).

Unrealised profits and losses resulting from transactions between the Group and its associates and joint ventures are eliminated to the extent of the Group's interest in the investee, except where unrealised losses provide evidence of an impairment of the asset transferred, in which case they are recognised immediately in profit or loss.

If an investment in an associate becomes an investment in a joint venture or vice versa, the retained interest is not remeasured. Instead, the investment continues to be accounted for under the equity method.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

## 2. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

### (e) Associates and joint ventures (continued)

In all other cases, when the Group ceases to have significant influence over an associate or joint control over a joint venture, it is accounted for as a disposal of the entire interest in that investee, with a resulting gain or loss being recognised in profit or loss. Any interest retained in that former investee at the date when significant influence or joint control is lost is recognised at fair value and this amount is regarded as the fair value on initial recognition of a financial asset.

### (f) Goodwill

Goodwill represents the excess of

(i) the aggregate of the fair value of the consideration transferred, the amount of any non-controlling interest in the acquiree and the fair value of the Group's previously held equity interest in the acquiree; over

(ii) the net fair value of the acquiree's identifiable assets and liabilities measured as at the acquisition date.

When (ii) is greater than (i), then this excess is recognised immediately in profit or loss as a gain on a bargain purchase.

Goodwill is stated at cost less accumulated impairment losses. Goodwill arising on a business combination is allocated to each cash-generating unit, or groups of cash generating units, that is expected to benefit from the synergies of the combination and is tested annually for impairment (see Note 2(l)).

On disposal of a cash generating unit during the periods, any attributable amount of purchased goodwill is included in the calculation of the profit or loss on disposal.

### (g) Other investments in equity securities

The Group's policies for investments in equity securities, other than investments in subsidiaries, associates and joint ventures, are set out below.

Investments in equity securities are recognised/derecognised on the date the Group commits to purchase/sell the investment. The investments are initially stated at fair value plus directly attributable transaction costs, except for those investments measured at fair value through profit or loss ("FVPL") for which transaction costs are recognised directly in profit or loss. For an explanation of how the Group determines fair value of financial instruments, see Note 35(d). These investments are subsequently accounted for as follows, depending on their classification.

## 2. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

### (g) Other investments in equity securities (continued)

An investment in equity securities is classified as FVPL unless the equity investment is not held for trading purposes and on initial recognition of the investment the Group makes an election to designate the investment at fair value through other comprehensive income ("FVOCI") (non-recycling) such that subsequent changes in fair value are recognised in other comprehensive income. Such elections are made on an instrument-by-instrument basis but may only be made if the investment meets the definition of equity from the issuer's perspective. Where such an election is made, the amount accumulated in other comprehensive income remains in the fair value reserve (non-recycling) until the investment is disposed of. At the time of disposal, the amount accumulated in the fair value reserve (non-recycling) is transferred to retained earnings. It is not recycled through profit or loss. Dividends from an investment in equity securities, irrespective of whether classified as at FVPL or FVOCI, are recognised in profit or loss as other income in accordance with the policy set out in Note 2(w)(v).

### (h) Investment property

Investment property are land and/or buildings which are owned or held under a leasehold interest (see Note 2(k)) to earn rental income and/or for capital appreciation. Investment property are stated at cost less accumulated depreciation and impairment losses (see Note 2(l)). The investment property is depreciated in accordance with the accounting policy set out in Note 2(i). Rental income from investment property are accounted for as described in Note 2(w)(iv).

### (i) Property, plant and equipment

The following items of property, plant and equipment are stated at cost less accumulated depreciation and impairment losses (see Note 2(l)):

– interests in leasehold land and buildings where the Group is the registered owner of the property interest;

– right-of-use assets arising from leases over leasehold properties where the Group is not the registered owner of the property interest; and

– items of plant and equipment, including right-of-use assets arising from leases of underlying plant and equipment (see Note 2(k)).

The cost of self-constructed items of property, plant and equipment includes the cost of materials, direct labour, the initial estimate, where relevant, of the costs of dismantling and removing the items and restoring the site on which they are located, and an appropriate proportion of production overheads and borrowing costs (see Note 2(y)).

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

## 2. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

### (i) Property, plant and equipment (continued)

Gains or losses arising from the retirement or disposal of an item of property, plant and equipment are determined as the difference between the net disposal proceeds and the carrying amount of the item and are recognised in profit or loss on the date of retirement or disposal.

Depreciation is calculated to write-off the cost or valuation of items of property, plant and equipment, less their estimated residual value, if any, using the straight-line method over their estimated useful lives as follows:

| | |
|---|---|
| Buildings | 10 – 45 years |
| Machinery and equipment | 3 – 20 years |
| Office equipment | 3 – 15 years |
| Motor vehicles and others | 1 – 20 years |
| Leasehold improvement | 2 – 20 years |
| Right-of-use assets | Over the term of lease |

Where parts of an item of property, plant and equipment have different useful lives, the cost or valuation of the item is allocated on a reasonable basis between the parts and each part is depreciated separately. Both the useful life of an asset and its residual value, if any, are reviewed annually.

No depreciation is provided in respect of construction in progress until it is completed and ready for its intended use.

### (j) Intangible assets (other than goodwill)

Expenditure on research activities is recognised as an expense in the period in which it is incurred. Expenditure on development activities is capitalised if the product or process is technically and commercially feasible and the Group has sufficient resources and the intention to complete development. The expenditure capitalised includes the costs of materials, direct labor, and an appropriate proportion of overheads and borrowing costs, where applicable (see Note 2(y)). Capitalised development costs are stated at cost less accumulated amortisation and impairment losses (see Note 2(l)). Other development expenditure is recognised as an expense in the period in which it is incurred.

Other Intangible assets that are acquired by the Group are stated at cost less accumulated amortisation (where the estimated useful life is finite) and impairment losses (see Note 2(l)). Expenditure on internally generated goodwill and brands, is recognised in profit or loss as incurred.

## 2. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

### (j) Intangible assets (other than goodwill) (continued)

Amortisation of intangible assets with finite useful lives is charged to profit or loss on a straight-line basis over the assets' estimated useful lives. The following intangible assets with finite useful lives are amortised from the date they are available for use and their estimated useful lives are as follows:

| | |
|---|---|
| Patents and know-how | 10 – 20 years |
| Royalty | 10 years |
| Software and others | 3 – 12 years |
| Customer relationship | 7 years |

Both the period and method of amortisation are reviewed annually.

### (k) Leased assets

At inception of a contract, the Group assesses whether the contract is, or contains, a lease. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. Control is conveyed where the customer has both the right to direct the use of the identified asset and to obtain substantially all of the economic benefits from that use.

#### *(i) As a lessee*

Where the contract contains lease component(s) and non-lease component(s), the Group has elected not to separate non-lease components and accounts for each lease component and any associated non-lease components as a single lease component for all leases.

At the lease commencement date, the Group recognises a right-of-use asset and a lease liability, except for short-term leases that have a lease term of 12 months or less and leases of low-value assets which, for the Group are primarily laptops and office furniture. When the Group enters into a lease in respect of a low-value asset, the Group decides whether to capitalise the lease on a lease-by-lease basis. The lease payments associated with those leases which are not capitalised are recognised as an expense on a systematic basis over the lease term.

Where the lease is capitalised, the lease liability is initially recognised at the present value of the lease payments payable over the lease term, discounted using the interest rate implicit in the lease or, if that rate cannot be readily determined, using a relevant incremental borrowing rate. After initial recognition, the lease liability is measured at amortised cost and interest expense is calculated using the effective interest method. Variable lease payments that do not depend on an index or rate are not included in the measurement of the lease liability and hence are charged to profit or loss in the accounting period in which they are incurred.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

## 2. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

### (k) Leased assets (continued)

#### *(i) As a lessee (continued)*

The right-of-use asset recognised when a lease is capitalised is initially measured at cost, which comprises the initial amount of the lease liability plus any lease payments made at or before the commencement date, and any initial direct costs incurred. Where applicable, the cost of the right-of-use assets also includes an estimate of costs to dismantle and remove the underlying asset or to restore the underlying asset or the site on which it is located, discounted to their present value, less any lease incentives received. The right-of-use asset is subsequently stated at cost less accumulated depreciation and impairment losses (see Notes 2(i) and 2(l)(iii).

The lease liability is remeasured when there is a change in future lease payments arising from a change in an index or rate, or there is a change in the Group's estimate of the amount expected to be payable under a residual value guarantee, or there is a change arising from the reassessment of whether the Group will be reasonably certain to exercise a purchase, extension or termination option. When the lease liability is remeasured in this way, a corresponding adjustment is made to the carrying amount of the right-of-use asset or is recorded in profit or loss if the carrying amount of the right-of-use asset has been reduced to zero.

The lease liability is also remeasured when there is a change in the scope of a lease or the consideration for a lease that is not originally provided for in the lease contract ("lease modification") that is not accounted for as a separate lease. In this case the lease liability is remeasured based on the revised lease payments and lease term using a revised discount rate at the effective date of the modification. The only exceptions are rent concessions that occurred as a direct consequence of the COVID-19 pandemic and met the conditions set out in paragraph 46B of IFRS16 Leases. In such cases, the Group has taken advantage of the practical expedient not to assess whether the rent concessions are lease modifications, and recognised the change in consideration as negative variable lease payments in profit or loss in the period in which the event or condition that triggers the rent concessions occurred.

In the consolidated statement of financial position, the current portion of long-term lease liabilities is determined as the present value of contractual payments that are due to be settled within twelve months after the reporting period.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

## 2. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

### (k) Leased assets (continued)

#### *(ii) As a lessor*

When the Group acts as a lessor, it determines at lease inception whether each lease is a finance lease or an operating lease. A lease is classified as a finance lease if it transfers substantially all the risks and rewards incidental to the ownership of an underlying assets to the lessee. If this is not the case, the lease is classified as an operating lease.

When a contract contains lease and non-lease components, the Group allocates the consideration in the contract to each component on a relative stand-alone selling price basis. The rental income from operating leases is recognised in accordance with Note 2(w)(iv).

When the Group is an intermediate lessor, the sub-leases are classified as a finance lease or as an operating lease with reference to the right-of-use asset arising from the head lease. If the head lease is a short-term lease to which the Group applies the exemption described in Note 2(k)(i), then the Group classifies the sub-lease as an operating lease.

### (l) Credit losses and impairment of assets

#### *(i) Credit losses from financial instruments and contract assets*

The Group recognises a loss allowance for expected credit losses (ECLs) on the following items:

– financial assets measured at amortised cost (including cash and cash equivalents, trade and bill receivables and deposit and other receivables); and

– contract assets as defined in IFRS15 (see Note 2(n)).

Other financial assets measured at fair value, including equity and debt securities measured at FVPL and equity securities designated at FVOCI (non-recycling) are not subject to the ECL assessment.

Measurement of ECLs

ECLs are a probability-weighted estimate of credit losses. Credit losses are measured as the present value of all expected cash shortfalls (i.e., the difference between the cash flows due to the Group in accordance with the contract and the cash flows that the Group expects to receive).

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

## 2. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

### (l) Credit losses and impairment of assets (continued)

#### *(i) Credit losses from financial instruments and contract assets (continued)*

The expected cash shortfalls are discounted using the following discount rates where the effect of discounting is material:

– fixed-rate financial assets, trade and other receivables: effective interest rate determined at initial recognition or an approximation thereof;

– variable-rate financial assets: current effective interest rate;

The maximum period considered when estimating ECLs is the maximum contractual period over which the Group is exposed to credit risk.

In measuring ECLs, the Group takes into account reasonable and supportable information that is available without undue cost or effort. This includes information about past events, current conditions and forecasts of future economic conditions.

ECLs are measured on either of the following bases:

– 12-month ECLs: these are losses that are expected to result from possible default events within the 12 months after the reporting date; and

– lifetime ECLs: these are losses that are expected to result from all possible default events over the expected lives of the items to which the ECL model applies.

Loss allowances for trade and bill receivables and contract assets are always measured at an amount equal to lifetime ECLs. ECLs on these financial assets are estimated using a provision matrix based on the Group's historical credit loss experience, adjusted for factors that are specific to the debtors and an assessment of both the current and forecast general economic conditions at the reporting date.

For all other financial instruments, the Group recognises a loss allowance equal to 12-month ECLs unless there has been a significant increase in credit risk of the financial instrument since initial recognition, in which case the loss allowance is measured at an amount equal to lifetime ECLs.

## 2. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

### (l) Credit losses and impairment of assets (continued)

#### *(i) Credit losses from financial instruments and contract assets (continued)*

Significant increases in credit risk

In assessing whether the credit risk of a financial instrument has increased significantly since initial recognition, the Group compares the risk of default occurring on the financial instrument assessed at the reporting date with that assessed at the date of initial recognition. In making this reassessment, the Group considers that a default event occurs when the borrower is unlikely to pay its credit obligations to the Group in full, without recourse by the Group to actions such as realising security (if any is held). The Group considers both quantitative and qualitative information that is reasonable and supportable, including historical experience and forward-looking information that is available without undue cost or effort.

In particular, the following information is taken into account when assessing whether credit risk has increased significantly since initial recognition:

– failure to make payments of principal or interest on their contractually due dates;

– an actual or expected significant deterioration in a financial instrument's external or internal credit rating (if available);

– an actual or expected significant deterioration in the operating results of the debtor; and

– existing or forecast changes in the technological, market, economic or legal environment that have a significant adverse effect on the debtor's ability to meet its obligation to the Group.

Depending on the nature of the financial instruments, the assessment of a significant increase in credit risk is performed on either an individual basis or a collective basis. When the assessment is performed on a collective basis, the financial instruments are grouped based on shared credit risk characteristics, such as past due status and credit risk ratings.

ECLs are remeasured at each reporting date to reflect changes in the financial instrument's credit risk since initial recognition. Any change in the ECL amount is recognised as an impairment gain or loss in profit or loss. The Group recognises an impairment gain or loss for all financial instruments with a corresponding adjustment to their carrying amount through a loss allowance account, except for investments in debt securities that are measured at FVOCI (recycling), for which the loss allowance is recognised in other comprehensive income and accumulated in the fair value reserve (recycling).

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

## 2. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

### (l) Credit losses and impairment of assets (continued)

#### *(i) Credit losses from financial instruments and contract assets (continued)*

Basis of calculation of interest income

Interest income recognised in accordance with Note 2(w)(vi) is calculated based on the gross carrying amount of the financial asset unless the financial asset is credit-impaired, in which case interest income is calculated based on the amortised cost (i.e., the gross carrying amount less loss allowance) of the financial asset.

At each reporting date, the Group assesses whether a financial asset is credit impaired. A financial asset is credit-impaired when one or more events that have a detrimental impact on the estimated future cash flows of the financial asset have occurred.

Evidence that a financial asset is credit-impaired includes the following observable events:

– significant financial difficulties of the debtor;

– a breach of contract, such as a default or delinquency in interest or principal payments;

– it becoming probable that the borrower will enter into bankruptcy or other financial reorganisation;

– significant changes in the technological, market, economic or legal environment that have an adverse effect on the debtor; or

– the disappearance of an active market for a security because of financial difficulties of the issuer.

Write-off policy

The gross carrying amount of a financial asset lease receivable or contract asset is written off (either partially or in full) to the extent that there is no realistic prospect of recovery. This is generally the case when the Group determines that the debtor does not have assets or sources of income that could generate sufficient cash flows to repay the amounts subject to the write-off.

Subsequent recoveries of an asset that was previously written off are recognised as a reversal of impairment in profit or loss in the period in which the recovery occurs.

## 2. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

### (l) Credit losses and impairment of assets (continued)

#### *(ii) Credit losses from financial guarantees issued*

Financial guarantees are contracts that require the issuer (i.e. the guarantor) to make specified payments to reimburse the beneficiary of the guarantee (the "holder") for a loss the holder incurs because a specified debtor fails to make payment when due in accordance with the terms of a debt instrument.

Financial guarantees issued are initially recognised at fair value, which is determined by reference to fees charged in an arm's length transaction for similar services, when such information is obtainable, or to interest rate differentials, by comparing the actual rates charged by lenders when the guarantee is made available with the estimated rates that lenders would have charged, had the guarantees not been available, where reliable estimates of such information can be made. Where consideration is received or receivable for the issuance of the guarantee, the consideration is recognised in accordance with the Group's policies applicable to that category of asset. Where no such consideration is received or receivable, an immediate expense is recognised in profit or loss.

Subsequent to initial recognition, the amount initially recognized as deferred income is amortised in profit or loss over the term of the guarantee as income from financial guarantees issued.

The Group monitors the risk that the specified debtor will default on the contract and recognises a provision when ECLs on the financial guarantees are determined to be higher than the carrying amount in respect of the guarantees (i.e., the amount initially recognised, less accumulated amortisation).

To determine ECLs, the Group considers changes in the risk of default of the specified debtor since the issuance of the guarantee. A 12-month ECL is measured unless the risk that the specified debtor will default has increased significantly since the guarantee is issued, in which case a lifetime ECL is measured. The same definition of default and the same assessment of significant increase in credit risk as described in Note 2(l)(i) apply.

As the Group is required to make payments only in the event of a default by the specified debtor in accordance with the terms of the instrument that is guaranteed, an ECL is estimated based on the expected payments to reimburse the holder for a credit loss that it incurs less any amount that the Group expects to receive from the holder of the guarantee, the specified debtor or any other party. The amount is then discounted using the current risk-free rate adjusted for risks specific to the cash flows.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

## 2. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

### (l) Credit losses and impairment of assets (continued)

#### *(iii) Impairment of other non-current assets*

Internal and external sources of information are reviewed at each reporting period to identify indications that the following assets may be impaired or, except in the case of goodwill, an impairment loss previously recognised no longer exists or may have decreased:

– property, plant and equipment, including right-of-use assets (other than property carried at revalued amounts);

– intangible assets;

– goodwill; and

– investments in subsidiaries, associates and joint ventures in the Company's statement of financial position.

If any such indication exists, the asset's recoverable amount is estimated. In addition, for goodwill and intangible assets that are not yet available for use, the recoverable amount is estimated annually whether or not there is any indication of impairment.

– Calculation of recoverable amount

The recoverable amount of an asset is the greater of its fair value less costs of disposal and value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. Where an asset does not generate cash inflows largely independent of those from other assets, the recoverable amount is determined for the smallest group of assets that generates cash inflows independently (i.e., a cash-generating unit). A portion of the carrying amount of a corporate asset (for example, head office building) is allocated to an individual cash generating unit if the allocation can be done on a reasonable and consistent basis, or to the smallest group of cash-generating units if otherwise.

– Recognition of impairment losses

An impairment loss is recognised in profit or loss if the carrying amount of an asset, or the cash-generating unit to which it belongs, exceeds its recoverable amount. Impairment losses recognised in respect of cash-generating units are allocated first to reduce the carrying amount of any goodwill allocated to the cash-generating unit (or group of units) and then, to reduce the carrying amount of the other assets in the unit (or group of units) on a pro rata basis, except that the carrying value of an asset will not be reduced below its individual fair value less costs of disposal (if measurable) or value in use (if determinable).

## 2. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

### (l) Credit losses and impairment of assets (continued)

#### *(iii) Impairment of other non-current assets (continued)*

– Reversals of impairment losses

In respect of assets other than goodwill, an impairment loss is reversed if there has been a favorable change in the estimates used to determine the recoverable amount. An impairment loss in respect of goodwill is not reversed.

A reversal of an impairment loss is limited to the asset's carrying amount that would have been determined had no impairment loss been recognised in prior years. Reversals of impairment losses are credited to profit or loss in the year in which the reversals are recognised.

### (m) Inventories and other contract costs

#### *(i) Inventories*

Inventories are assets which are held for sale in the ordinary course of business, in the process of production for such sale or in the form of materials or supplies to be consumed in the production process or in the rendering of services.

Inventories are carried at the lower of cost and net realisable value.

Cost is calculated using the weighted average cost formula and comprises all costs of purchase, costs of conversion and other costs incurred in bringing the inventories to their present location and condition.

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.

When inventories are sold, the carrying amount of those inventories is recognised as an expense in the period in which the related revenue is recognised.

The amount of any write-down of inventories to net realisable value and all losses of inventories are recognised as an expense in the period the write-down or loss occurs. The amount of any reversal of any write-down of inventories is recognised as a reduction in the number of inventories recognised as an expense in the period in which the reversal occurs.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

## 2. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

### (m) Inventories and other contract costs (continued)

#### *(ii) Other contract costs*

Other contract costs are either the incremental costs of obtaining a contract with a customer or the costs to fulfil a contract with a customer which are not capitalised as inventory (see Note 2(m)(i)), property, plant and equipment (see Note 2(i)) or intangible assets (see Note 2(j)).

Incremental costs of obtaining a contract are those costs that the Group incurs to obtain a contract with a customer that it would not have incurred if the contract had not been obtained e.g., an incremental sales commission. Incremental costs of obtaining a contract are capitalised when incurred if the costs relate to revenue which will be recognised in a future reporting period and the costs are expected to be recovered. Other costs of obtaining a contract are expensed when incurred.

Costs to fulfil a contract are capitalised if the costs relate directly to an existing contract or to a specifically identifiable anticipated contract; generate or enhance resources that will be used to provide goods or services in the future; and are expected to be recovered. Costs that relate directly to an existing contract or to a specifically identifiable anticipated contract may include direct labour, direct materials, allocations of costs, costs that are explicitly chargeable to the customer and other costs that are incurred only because the Group entered into the contract (for example, payments to sub-contractors). Other costs of fulfilling a contract, which are not capitalised as inventory, property, plant and equipment or intangible assets, are expensed as incurred.

Capitalised contract costs are stated at cost less accumulated amortisation and impairment losses. Impairment losses are recognised to the extent that the carrying amount of the contract cost asset exceeds the net of (i) remaining amount of consideration that the Group expects to receive in exchange for the goods or services to which the asset relates, less (ii) any costs that relate directly to providing those goods or services that have not yet been recognised as expenses.

Amortisation of capitalised contract costs is charged to profit or loss when the revenue to which the asset relates is recognised. The accounting policy for revenue recognition is set out in Note 2(w).

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

## 2. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

### (n) Contract assets and contract liabilities

A contract asset is recognised when the Group recognises revenue (see Note 2(w)) before being unconditionally entitled to the consideration under the payment terms set out in the contract. Contract assets are assessed for expected credit losses (ECL) in accordance with the policy set out in Note 2(l)(i) and are reclassified to receivables when the right to the consideration has become unconditional (see Note 2(o)).

A contract liability is recognised when the customer pays consideration before the Group recognises the related revenue (see Note 2(w)). A contract liability would also be recognised if the Group has an unconditional right to receive consideration before the Group recognises the related revenue. In such cases, a corresponding receivable would also be recognised (see Note 2(o)).

For a single contract with the customer, either a net contract asset or a net contract liability is presented. For multiple contracts, contract assets and contract liabilities of unrelated contracts are not presented on a net basis.

When the contract includes a significant financing component, the contract balance includes interest accrued under the effective interest method (see Note 2(w)).

### (o) Trade and other receivables

A receivable is recognised when the Group has an unconditional right to receive consideration. A right to receive consideration is unconditional if only the passage of time is required before payment of that consideration is due. If revenue has been recognised before the Group has an unconditional right to receive consideration, the amount is presented as a contract asset (see note 2(w)).

Trade receivables that do not contain a significant financing component are initially measured at their transaction price. Trade receivables that contain a significant financing component and other receivables are initially measured at fair value plus transaction costs. All receivables are subsequently stated at amortised cost, using the effective interest method and including an allowance for credit losses (see note 2(l)(i)).

### (p) Cash and cash equivalents

Cash and cash equivalents comprise cash at bank and on hand, demand deposits with banks and other financial institutions, and short-term, highly liquid investments that are readily convertible into known amounts of cash and which are subject to an insignificant risk of changes in value, having been within three months of maturity at acquisition. Cash and cash equivalents are assessed for ECL in accordance with the policy set out in Note 2(l)(i).

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

## 2. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

### (q) Trade and other payables

Trade and other payables are initially recognised at fair value. Subsequent to initial recognition, trade and other payables are stated at amortised cost unless the effect of discounting would be immaterial, in which case they are stated at invoice amounts.

### (r) Interest-bearing borrowings

Interest-bearing borrowings are measured initially at fair value less transaction costs. Subsequent to initial recognition, interest-bearing borrowings are stated at amortised cost using the effective interest method. Interest expense is recognised in accordance with the Group's accounting policy for borrowing costs (see Note 2(y)).

### (s) Employee benefits

*(i) Short-term employee benefits and contributions to defined contribution retirement plans*

Salaries, annual bonuses, paid annual leave, contributions to defined contribution retirement plans and the cost of non-monetary benefits are accrued in the year in which the associated services are rendered by employees. Where payment or settlement is deferred and the effect would be material, these amounts are stated at their present values.

*(ii) Defined benefit retirement plan obligations*

The Group's net obligation in respect of defined benefit retirement plans is calculated separately for each plan by estimating the amount of future benefit that employees have earned in return for their service in the current and prior periods; that benefit is discounted to determine the present value and the fair value of any plan assets is deducted. The calculation is performed by a qualified actuary using the projected unit credit method. When the calculation results in a benefit to the Group, the recognised asset is limited to the present value of economic benefits available in the form of any future refunds from the plan or reductions in future contributions to the plan.

Service cost and net interest expense (income) on the net defined benefit liability (asset) are recognised in profit or loss and allocated to "administrative expenses". Current service cost is measured as the increase in the present value of the defined benefit obligation resulting from employee service in the current period. When the benefits of a plan are changed, or when a plan is curtailed, the portion of the changed benefit related to past service by employees, or the gain or loss on curtailment, is recognised as an expense in profit or loss at the earlier of when the plan amendment or curtailment occurs and when related restructuring costs or termination benefits are recognised. Net interest expense (income) for the period is determined by applying the discount rate used to measure the defined benefit obligation at the beginning of the reporting period to the net defined benefit liability (asset). The discount rate is the yield at the end of the reporting period on high quality corporate bonds that have maturity dates approximating the terms of the Group's obligations.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

## 2. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

### (s) Employee benefits (continued)

#### *(ii) Defined benefit retirement plan obligations (continued)*

When the benefits of a plan are changed, or when a plan is curtailed, current service cost for the portion of the changed benefit related to past service by employees, or the gain or loss on curtailment, is recognised as an expense in profit or loss at the earlier of when the plan amendment or curtailment occurs and when related restructuring costs or termination benefits are recognised.

Remeasurements arising from defined benefit retirement plans are recognised in other comprehensive income and reflected immediately in retained earnings. Remeasurements comprise actuarial gains and losses, the return on plan assets (excluding amounts included in net interest on the net defined benefit liability (asset)) and any change in the effect of the asset ceiling (excluding amounts included in net interest on the net defined benefit liability (asset)).

#### *(iii) Termination benefits*

Termination benefits are recognised at the earlier of when the Group can no longer withdraw the offer of those benefits and when it recognises restructuring costs involving the payment of termination benefits.

### (t) Income tax

Income tax for the year comprises current tax and movements in deferred tax assets and liabilities. Current tax and movements in deferred tax assets and liabilities are recognised in profit or loss except to the extent that they relate to business combinations, items recognised in other comprehensive income or directly in equity, in which case the relevant amounts of tax are recognised in other comprehensive income or directly in equity, respectively.

Current tax is the expected tax payable on the taxable income for the year, using tax rates enacted or substantively enacted at the end of the reporting period, and any adjustment to tax payable in respect of previous years.

## 2. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

### (t) Income tax (continued)

Deferred tax assets and liabilities arise from deductible and taxable temporary differences respectively, being the differences between the carrying amounts of assets and liabilities for financial reporting purposes and their tax bases. Deferred tax assets also arise from unused tax losses and unused tax credits.

Apart from certain limited exceptions, all deferred tax liabilities, and all deferred tax assets to the extent that it is probable that future taxable profits will be available against which the asset can be utilised, are recognised. Future taxable profits that may support the recognition of deferred tax assets arising from deductible temporary differences include those that will arise from the reversal of existing taxable temporary differences, provided those differences relate to the same taxation authority and the same taxable entity, and are expected to reverse either in the same period as the expected reversal of the deductible temporary difference or in periods into which a tax loss arising from the deferred tax asset can be carried back or forward. The same criteria are adopted when determining whether existing taxable temporary differences support the recognition of deferred tax assets arising from unused tax losses and credits, that is, those differences are taken into account if they relate to the same taxation authority and the same taxable entity, and are expected to reverse in a period, or periods, in which the tax loss or credit can be utilised.

The limited exceptions to recognition of deferred tax assets and liabilities are those temporary differences arising from goodwill not deductible for tax purpose, the initial recognition of assets or liabilities that affect neither accounting nor taxable profit (provided they are not part of a business combination), and temporary differences relating to investments in subsidiaries to the extent that, in the case of taxable differences, the Group controls the timing of the reversal and it is probable that the differences will not reverse in the foreseeable future, or in the case of deductible differences, unless it is probable that they will reverse in the future.

Where investment properties are stated at cost loss accumulated depreciation and impairment losses in accordance with the accounting policy note 2(h), the amount of deferred tax recognised is measured based on the expected manner of realisation or settlement of the carrying amount of the assets and liabilities, using tax rates enacted or substantively enacted at the end of the reporting period. Deferred tax assets and liabilities are not discounted.

The carrying amount of a deferred tax asset is reviewed at the end of each reporting period and is reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow the related tax benefit to be utilised. Any such reduction is reversed to the extent that it becomes probable that sufficient taxable profits will be available to allow the related tax benefit to be utilised. Any such reduction is reversed to the extent that it comes probable that sufficient taxable profits will be available.

Additional income taxes that arise from the distribution of dividends are recognised when the liability to pay the related dividends is recognised.

## 2. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

### (t) Income tax (continued)

Current tax balances and deferred tax balances, and movements therein, are presented separately from each other and are not offset. Current tax assets are offset against current tax liabilities, and deferred tax assets against deferred tax liabilities, if the Company or the Group has the legally enforceable right to set off current tax assets against current tax liabilities and the following additional conditions are met:

– in the case of current tax assets and liabilities, the Company or the Group intends either to settle on a net basis, or to realise the asset and settle the liability simultaneously; or

– in the case of deferred tax assets and liabilities, if they relate to income taxes levied by the same taxation authority on either:

  – the same taxable entity; or

  – different taxable entities, which, in each future period in which significant amounts of deferred tax liabilities or assets are expected to be settled or recovered, intend to realise the current tax assets and settle the current tax liabilities on a net basis or realise and settle simultaneously.

### (u) Provisions, contingent liabilities and onerous contracts

#### *(i) Provisions and contingent liabilities*

Provisions are recognised when the Group has a legal or constructive obligation arising as a result of a past event, it is probable that an outflow of economic benefits will be required to settle the obligation and a reliable estimate can be made. Where the time value of money is material, provisions are stated at the present value of the expenditure expected to settle the obligation.

Where it is not probable that an outflow of economic benefits will be required, or the amount cannot be estimated reliably, the obligation is disclosed as a contingent liability, unless the probability of outflow of economic benefits is remote. Possible obligations, whose existence will only be confirmed by the occurrence or non-occurrence of one or more future events are also disclosed as contingent liabilities unless the probability of outflow of economic benefits is remote.

Where some or all of the expenditure required to settle a provision is expected to be reimbursed by another party, a separate asset is recognised for any expected reimbursement that would be virtually certain. The amount recognised for the reimbursement is limited to the carrying amount of the provision.

## 2. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

### (u) Provisions, contingent liabilities and onerous contracts (continued)

#### *(ii) Onerous contracts*

An onerous contract exists when the Group has a contract under which the unavoidable costs of meeting the obligations under the contract exceed the economic benefits expected to be received from the contract. Provisions for onerous contracts are measured at the present value of the lower of the expected cost of terminating the contract and the net cost of continuing with the contract.

### (v) Obligations for reclamation

The Group's obligations for reclamation consist of estimated expenditures for retirement of its radioactive production facilities in accordance with the relevant rules and regulations in the PRC. The Group estimates its liabilities for reclamation based on detailed calculations of the amount and timing of the future expenditures to perform the required work. Estimated expenditures have taken into account of inflation, then discounted at a discount rate that reflects current market assessments of the time value of money and the risks specific to the liability such that the amount of provision reflects the present value of the expenditures expected to be required to settle the obligation. The Group records a corresponding asset associated with the liability for reclamation of radioactive production facilities, which is included in property, plant and equipment. The obligation and corresponding asset are recognised in the period in which the liability is incurred. The asset is depreciated using the straight-line method over the expected useful life of radioactive production facilities and the liability is accreted to the projected spending date. As changes in estimates occur (such as changes in estimated costs or changes in timing of the performance of reclamation activities), the revisions to the obligation and the corresponding asset are remeasured at the appropriate discount rate and any gain or loss on remeasurement is recognised in profit or loss.

### (w) Revenue and other income

Income is classified by the Group as revenue when it arises from the sale of goods, the rendering of services or the use by others of the Group's assets under leases in the ordinary course of the Group's business.

Revenue is recognised when control over a product or service is transferred to the customer, or the lessee has the right to use the asset, at the amount of promised consideration to which the Group is expected to be entitled, excluding those amounts collected on behalf of third parties. Revenue excludes value added tax or other sales taxes and is after deduction of any trade discounts.

## 2. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

### (w) Revenue and other income (continued)

Where the contract contains a financing component which provides a significant financing benefit to the customer for more than 12 months, revenue is measured at the present value of the amount receivable, discounted using the discount rate that would be reflected in a separate financing transaction with the customer, and interest income is accrued separately under the effective interest method. Where the contract contains a financing component which provides a significant financing benefit to the Group, revenue recognised under that contract includes the interest expense accreted on the contract liability under the effective interest method. The Group takes advantage of the practical expedient in paragraph 63 of IFRS 15 and does not adjust the consideration for any effects of a significant financing component if the period of financing is 12 months or less.

Further details of the Group's revenue and other income recognition policies are as follows:

*(i) Sale of goods*

Revenue is recognised when the customer takes possession of and accepts the products. If the products are a partial fulfilment of a contract covering other goods and/or services, then the amount of revenue recognised is an appropriate proportion of the total transaction price under the contract, allocated between all the goods and services promised under the contract on a relative stand-alone selling price basis.

*(ii) Construction contracts*

A contract with a customer is classified by the Group as a construction contract when the contract relates to work on real estate assets under the control of the customer and therefore the Group's construction activities create or enhance an asset under the customer's control.

When the outcome of a construction contract can be reasonably measured, revenue from the contract is recognised progressively over time using the cost-to-cost method, i.e., based on the proportion of the actual costs incurred relative to the estimated total costs.

The likelihood of the Group earning contractual bonuses for early completion or suffering contractual penalties for late completion are taken into account in making these estimates, such that revenue is only recognised to the extent that it is highly probable that a significant reversal in the amount of cumulative revenue recognised will not occur.

When the outcome of the contract cannot be reasonably measured, revenue is recognised only to the extent of contract costs incurred that are expected to be recovered.

If at any time the costs to complete the contract are estimated to exceed the remaining amount of the consideration under the contract, then a provision is recognised in accordance with the policy set out in Note 2(u)(ii).

## 2. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

### (w) Revenue and other income (continued)

#### *(iii) Rendering of services*

Revenue from irradiation services and other services rendered is recognised upon the delivery or performance of the services.

#### *(iv) Rental income from operating leases*

Rental income receivable under operating leases is recognised in profit or loss in equal installments over the periods covered by the lease term, except where an alternative basis is more representative of the pattern of benefits to be derived from the use of the leased asset. Lease incentives granted are recognised in profit or loss as an integral part of the aggregate net lease payments receivable. Contingent rentals are recognised as income in the accounting period in which they are earned.

#### *(v) Dividends*

– Dividend income from unlisted investments is recognised when the shareholder's right to receive payment is established.

– Dividend income from listed investments is recognised when the share price of the investment goes ex-dividend.

#### *(vi) Interest income*

Interest income is recognised as it accrues under the effective interest method using the rate that exactly discounts estimated future cash receipts through the expected life of the financial asset to the gross carrying amount of the financial asset. For financial assets measured at amortised cost or FVOCI (recycling) that are not credit-impaired, the effective interest rate is applied to the gross carrying amount of the asset. For credit-impaired financial assets, the effective interest rate is applied to the amortised cost (i.e., gross carrying amount net of loss allowance) of the asset (see Note 2(l)(i)).

#### *(vii) Government grants*

Government grants are recognised in the statement of financial position initially when there is reasonable assurance that they will be received and that the Group will comply with the conditions attaching to them. Grants that compensate the Group for expenses incurred are recognised as income in profit or loss on a systematic basis in the same periods in which the expenses are incurred. Grants that compensate the Group for the cost of an asset are initially recognised as deferred income and are subsequently recognised in profit or loss over the useful life of the asset.

## 2. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

### (x) Translation of foreign currencies

Foreign currency transactions during the year are translated at the foreign exchange rates ruling at the transaction dates. Monetary assets and liabilities denominated in foreign currencies are translated at the foreign exchange rates ruling at the end of the reporting period. Exchange gains and losses are recognised in profit or loss.

Non-monetary assets and liabilities that are measured in terms of historical cost in a foreign currency are translated using the foreign exchange rates ruling at the transaction dates. The transaction date is the date on which the company initially recognizes such non-monetary assets or liabilities.

The results of foreign operations are translated into RMB at the exchange rates approximating the foreign exchange rates ruling at the dates of the transactions. Statement of financial position items are translated into RMB at the closing foreign exchange rates at the end of the reporting period. The resulting exchange differences are recognised in other comprehensive income and accumulated separately in equity in the exchange reserve.

On disposal of a foreign operation, the cumulative amount of the exchange differences relating to that foreign operation is reclassified from equity to profit or loss when the profit or loss on disposal is recognised.

### (y) Borrowing costs

Borrowing costs that are directly attributable to the acquisition, construction or production of an asset which necessarily takes a substantial period of time to get ready for its intended use or sale are capitalised as part of the cost of that asset. Other borrowing costs are expensed in the period in which they are incurred.

The capitalisation of borrowing costs as part of the cost of a qualifying asset commences when expenditure for the asset is being incurred, borrowing costs are being incurred and activities that are necessary to prepare the asset for its intended use or sale are in progress. Capitalisation of borrowing costs is suspended or ceases when substantially all the activities necessary to prepare the qualifying asset for its intended use or sale are interrupted or complete.

### (z) Related parties

(a) A person, or a close member of that person's family, is related to the Group if that person:

- (i) has control or joint control over the Group;
- (ii) has significant influence over the Group; or
- (iii) is a member of the key management personnel of the Group or the Group's parent.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

## 2. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

### (z) Related parties (continued)

(b) An entity is related to the Group if any of the following conditions applies:

(i) The entity and the Group are members of the same group.

(ii) One entity is an associate or joint venture of the other entity (or an associate or joint venture of a member of a group of which the other entity is a member).

(iii) Both entities are joint ventures of the same third party.

(iv) One entity is a joint venture of a third entity and the other entity is an associate of the third entity.

(v) The entity is a post-employment benefit plan for the benefit of employees of either the Group or an entity related to the Group.

(vi) The entity is controlled or jointly controlled by a person identified in (a).

(vii) A person identified in (a)(i) has significant influence over the entity or is a member of the key management personnel of the entity (or of a parent of the entity).

(viii) The entity, or any member of a group of which it is a part, provides key management personnel services to the Group or to the Group's parent.

Close members of the family of a person are those family members who may be expected to influence, or be influenced by, that person in their dealings with the entity.

### (aa) Segment reporting

Operating segments, and the amounts of each segment item reported in the consolidated financial statements are identified from the financial information provided regularly to the Group's most senior executive management for the purposes of allocating resources to, and assessing the performance of, the Group's various lines of business and geographical locations.

Individually material operating segments are not aggregated in the consolidated financial statements unless the segments have similar economic characteristics and are similar in respect of the nature of products and services, the nature of production processes, the type or class of customers, the methods used to distribute the products or provide the services, and the nature of the regulatory environment. Operating segments which are not individually material may be aggregated if they share a majority of these criteria.

## 3. CRITICAL ACCOUNTING JUDGEMENTS AND KEY SOURCES OF ESTIMATED UNCERTAINTY

Note 35(d) contains information about the assumptions and their risk factors relating to fair value of financial instruments. Critical accounting judgements and other key sources of estimation uncertainty are as follows:

### Critical judgements in applying accounting policies

*(a) Classification of joint ventures*

The directors of the Company assessed whether these joint arrangements are joint operations or joint ventures under IFRS 11 Joint Arrangements. After considering the rights and obligations of parties to the joint arrangements with reference to the structure, the legal form of the arrangements, the contractual terms agreed by the parties in the arrangements, and the relevant facts and circumstances, the directors of the Company concluded that all of the Group's joint arrangements should be classified as joint ventures under IFRS 11 as contractual terms agreed by the parties in the arrangements stated that the relevant activities of the joint ventures require unanimous consent of the parties sharing control. Accordingly, 上海欣科醫藥有限公司 (Shanghai GMS Pharmaceutical Co., Ltd.)* ("Shanghai GMS") and 北京同輻創新產業投資基金合夥企業(有限合夥) (Beijing Tongfu Innovation Industrial Investment Fund Partnership (Limited Partnership))* ("Beijing Tongfu") are classified as joint ventures of the Group.

*(b) Controls in subsidiaries*

As stated in note 14, 北京雙原同位素技術有限公司 (Beijing Clae-riar Rediosotope Technique Co., Ltd.)*, 上海原子科興藥業有限公司 (Shanghai Yuanzi Kexing)*, 深圳市中核海得威生物科技有限公司 (Shenzhen Zhonghe Headway Bio-Sci & Tech Co., Ltd.)* and 安徽養和醫療器械設備有限公司 (Anhui Young-Hearty Medical Appliance & Equipment Co., Ltd.)* are subsidiaries of the Group even through the Group has less than 50% ownership interest.

The directors of the Company assessed the Group's control over those subsidiaries on the basis of its voting power attributable to the Group and practical ability to direct the relevant activities unilaterally, so the Group has the power over those subsidiaries.

### Key sources of estimated uncertainty

*(a) Depreciation*

Property, plant and equipment and investment property are depreciated on a straight-line basis over their estimated useful lives, after taking into account the estimated residual values, if any. The Group reviews the estimated useful lives and residual values, if any, of the property, plant and equipment and investment property regularly in order to determine the amount of depreciation expense to be recorded during any reporting period. The determination of useful lives and residual values, if any, are based on the historical experience with similar assets and taking into account anticipated technological changes. The depreciation expense for future periods is adjusted if there are significant changes from previous estimates.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

## 3. CRITICAL ACCOUNTING JUDGEMENTS AND KEY SOURCES OF ESTIMATED UNCERTAINTY (CONTINUED)

### Key sources of estimated uncertainty (continued)

*(b) Recognition of deferred tax assets*

Deferred tax assets in respect of unused tax losses and deductible temporary differences are recognised and measured based on the expected manner of realisation or settlement of the carrying amount of the assets, using tax rates enacted or substantively enacted at the end of reporting period. In determining the carrying amounts of deferred assets, expected taxable profits are estimated which involves a number of assumptions relating to the operating environment of the Group and require a significant level of judgment exercised by the directors. Any change in such assumptions and judgment would affect the carrying amounts of deferred tax assets to be recognised and hence the net profit in future years.

*(c) Obligation for reclamation*

The estimation of the liabilities for reclamation and disposal of the radioactive production facilities involves the estimates of the amount and timing of future expenditures as well as rate of inflation and the discount rate used for reflecting current market assessments of the time value of money and the risks specific to the liability. The Group considers the factors including future production plan, useful life of relevant assets, and level of radioactivity to determine the scope, amount and timing of reclamation and disposal of the radioactive production facilities to be performed. Determination of the effect of these factors involves judgments from the Group and the estimated liabilities may turn out to be different from the actual expenditure to be incurred. The discount rate used by the Group may also be altered to reflect the changes in the market assessments of the time value of money and the risks specific to the liability, such as change of the borrowing rate and inflation rate in the market. As changes in estimates occur (such as changes in estimated costs, or changes in timing of the performance of reclamation activities), the revisions to the obligation will be remeasured at the appropriate discount rate and any gain or loss on remeasurement is recognised in profit or loss.

*(d) Impairment losses on trade receivables, contract assets, deposits and other receivables and long-term receivables*

The impairment provisions for trade receivables, contract assets, deposits and other receivables and long-term receivables are based on assumptions about ECL. The Group uses judgement in making these assumptions and selecting the inputs to the impairment calculation, based on the number of days that an individual receivable is outstanding as well as the Group's historical experience and forward-looking information at the end of the reporting period. Changes in these assumptions and estimates could materially affect the result of the assessment and it may be necessary to make additional impairment charge to the profit or loss. At 31 December 2022, the carrying amounts of trade receivables, contract assets, deposits and other receivables and long-term receivables are approximately RMB3,482,164,000 (2021: RMB2,813,166,000), RMB27,359,000 (2021: RMB29,424,000), RMB146,462,000 (2021: RMB153,733,000) and RMB38,997,000 (2021: RMB37,176,000) respectively, net of accumulated loss allowance for ECL of approximately RMB185,362,000 (2021: RMB157,050,000), RMB10,397,000 (2021: RMB8,135,000), nil (2021: nil) and nil (2021: nil) respectively.

## 4. REVENUE AND SEGMENT REPORTING

### (a) Revenue

The Group is principally engaged in research, development, manufacturing and sale of a broad range of pharmaceuticals and radioactive source products, also design, manufacturing, construction and installation of gamma ray irradiation facilities, provision of irradiation service for sterilisation purpose, and sale of radiation therapy equipment as well as independent clinical laboratory services.

#### *(i) Disaggregation of revenue*

Disaggregation of revenue from contracts with customers by major products or service lines is as follows:

| | **2022** | 2021 |
|---|---|---|
| | **RMB'000** | RMB'000 |
| **Revenue from contracts with customers within the scope of IFRS 15** | | |
| Disaggregated by major products of service lines | | |
| – sales of pharmaceuticals | **3,880,262** | 3,742,267 |
| – sales of radioactive source products | **533,725** | 488,772 |
| – sales of radiation therapy equipment | **502,731** | 195,726 |
| – sales of medical device | **171,843** | 39,917 |
| – sales of nucleic acid detection kit | **152,669** | 14,324 |
| – irradiation services | **151,175** | 135,870 |
| – technical services | **232,052** | 168,997 |
| – revenue from construction contracts | **60,366** | 47,569 |
| – independent clinical laboratory services | **384,777** | 227,800 |
| – others | **76,572** | 96,776 |
| | **6,146,172** | 5,143,694 |

Disaggregation of revenue from contracts with customers by the timing of revenue recognition is disclosed in Note 4(b).

The Group's customer base is diversified and there is no customer with whom transactions have exceeded 10% of the Group's revenue in 2022 and 2021. Details of the concentration of credit risk arising from the Group's customers are set out in Note 35(a).

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

## 4. REVENUE AND SEGMENT REPORTING (CONTINUED)

### (a) Revenue (continued)

*(ii) Revenue expected to be recognised in the future arising from contracts with customers in existence at the reporting date.*

As at 31 December 2022, the aggregated amount of the transaction price allocated to the remaining performance obligations under the Group's existing contracts is approximately RMB23,817,000 (2021: RMB4,283,000). This amount mainly represents revenue expected to be recognised in the future from construction contracts entered into by the customers with the Group. The Group will recognise the expected revenue in future when or as the work is completed, which is expected to occur within the next 12 months.

The Group has applied the practical expedient in paragraph 121 of IFRS 15 to its sales contracts such that the above information does not include information about revenue that the Group will be entitled to when it satisfies the remaining performance obligations under the sales contracts that had an original expected duration of one year or less.

The above amount also does not include any amounts of completion bonuses that the Group may earn in the future by meeting the conditions set out in the Group's construction contracts with customers, unless at the reporting date it is highly probable that the Group will satisfy the conditions for earning those bonuses.

### (b) Segment reporting

The Group manages its businesses by divisions, which are mainly organised by business lines (products and services). In a manner consistent with the way in which information is reported internally to the Group's most senior executive management for the purposes of resource allocation and performance assessment, the Group has presented the following five reportable segments. No operating segments have been aggregated to form the following reportable segments.

- Pharmaceuticals: manufacturing and sale of a range of imaging diagnostic and therapeutic radio pharmaceuticals imaging, UBT diagnostic kits and test analyzers, in vitro immunoassay diagnostic reagents and kits and other products.

- Radioactive source products: sale of medical and industrial radioactive source products and technical services.

## 4. REVENUE AND SEGMENT REPORTING (CONTINUED)

### (b) Segment reporting (continued)

- Irradiation: provision of irradiation services to manufacturers of medical facilities, pharmaceuticals, cosmetics and food in the PRC for sterilization purposes, and also design, manufacturing and installation of gamma ray irradiation facilities to irradiation service providers.

- Radiation therapy equipments and related services: sale of radiation therapy equipments and provision of related maintenance services.

- Independent clinical laboratory services and other businesses: provision of independent clinical laboratory services for customers, sale of radiation therapy equipment and other miscellaneous services.

*(i) Segment results, assets and liabilities*

For the purposes of assessing segment performance and allocating resources among segments, the Group's senior executive management monitors the results attributable to each reportable segment on the following basis:

Revenue and expenses are allocated to the reportable segments with reference to revenue generated by those segments and the expenses incurred by those segments. The measure used for reporting segment profit is gross profit. The Group's other income and expense items, such as other income, selling and distribution expenses, administrative and other operating expenses, and assets and liabilities, are not measured under individual segments. Accordingly, neither information on segment assets and liabilities nor information concerning capital expenditure, interest income and interest expenses is presented.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

## 4. REVENUE AND SEGMENT REPORTING (CONTINUED)

### (b) Segment reporting (continued)

#### *(i) Segment results, assets and liabilities (continued)*

Disaggregation of revenue from contracts with customers by timing of revenue recognition, as well as information regarding the Group's reportable segments as provided to the Group's most senior executive management for the purposes of resource allocation and assessment of segment performance for the years ended 31 December 2022 and 2021 is set out below.

| | Year ended 31 December 2022 | | | | | |
|---|---|---|---|---|---|---|
| | Pharmaceuticals RMB'000 | Radioactive source products RMB'000 | Irradiation RMB'000 | Radiation therapy equipment and related services RMB'000 | Independent clinical medical and laboratory services and other businesses RMB'000 | Total RMB'000 |
| **Disaggregated by timing of revenue recognition** | | | | | | |
| Point in time | 3,923,267 | 580,929 | 151,175 | 514,012 | 745,106 | 5,914,489 |
| Over time | – | – | 13,513 | 218,170 | – | 231,683 |
| **Revenue from external customers** | 3,923,267 | 580,929 | 164,688 | 732,182 | 745,106 | 6,146,172 |
| Inter-segment revenue | 1,793 | 37,508 | 132 | 7,796 | 9,263 | 56,492 |
| **Reportable segment revenue** | 3,925,060 | 618,437 | 164,820 | 739,978 | 754,369 | 6,202,664 |
| **Reportable segment profit (gross profit)** | 2,823,082 | 282,878 | 85,057 | 143,754 | 272,740 | 3,607,511 |

| | Year ended 31 December 2021 | | | | | |
|---|---|---|---|---|---|---|
| | Pharmaceuticals RMB'000 | Radioactive source products RMB'000 | Irradiation RMB'000 | Radiation therapy equipment and related services RMB'000 | Independent clinical medical and laboratory services and other businesses RMB'000 | Total RMB'000 |
| **Disaggregated by timing of revenue recognition** | | | | | | |
| Point in time | 3,753,365 | 520,167 | 135,870 | 224,189 | 336,030 | 4,969,621 |
| Over time | – | – | 8,260 | 165,813 | – | 174,073 |
| **Revenue from external customers** | 3,753,365 | 520,167 | 144,130 | 390,002 | 336,030 | 5,143,694 |
| Inter-segment revenue | 1,677 | 34,661 | 116 | 14,222 | 1,687 | 52,363 |
| **Reportable segment revenue** | 3,755,042 | 554,828 | 144,246 | 404,224 | 337,717 | 5,196,057 |
| **Reportable segment profit (gross profit)** | 2,696,586 | 232,355 | 73,748 | 127,029 | 135,549 | 3,265,267 |

## 4. REVENUE AND SEGMENT INFORMATION (CONTINUED)

### (b) Segment reporting (continued)

#### *(ii) Reconciliations of reportable segment profit (gross profit)*

| | 2022<br>RMB'000 | 2021<br>RMB'000 |
|---|---|---|
| Reportable segment profit (gross profit) | **3,607,511** | 3,265,267 |
| Elimination of inter-segment profit (gross profit) | **(92,832)** | (23,363) |
| Consolidated gross profit | **3,514,679** | 3,241,904 |

#### *(iii) Geographic information*

All of the Group's operations are carried out and most of the Group's customers are located in the PRC. The Group's non-current assets, including property, plant and equipment, investment property, lease prepayments and intangible assets are all located or allocated to operations located in the PRC.

## 5. OTHER INCOME, GAINS AND LOSSES

| | 2022<br>RMB'000 | 2021<br>RMB'000 |
|---|---|---|
| Bank interest income | **45,286** | 26,254 |
| Government grants (note) | **41,948** | 14,220 |
| Dividend income on unquoted equity investments (note 19) | **6,404** | 4,739 |
| Rental income from operating leases | **6,397** | 7,794 |
| Net foreign exchange loss | **(13,290)** | (1,649) |
| Net loss on disposal of property, plant and equipment | **(1,116)** | (683) |
| Gain on disposal of interest in an associate | **–** | 4,548 |
| Gain on bargain purchase (note 34) | **125** | – |
| Others | **5,429** | 6,346 |
| | **91,183** | 61,569 |

Note:

The government grants for the years ended 31 December 2022 mainly represented subsidies for COVID-19 support and support for research and development in the technology and medical field of approximately RMB39,945,000 (2021: RMB11,636,000). There are no conditions and other contingencies attached to the receipts of those subsidies. The remaining government grants are released from deferred income in note 27(b).

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

## 6. PROFIT BEFORE TAXATION

Profit before taxation is arrived at after charging/(crediting):

### (a) Finance costs

| | 2022<br>RMB'000 | 2021<br>RMB'000 |
|---|---|---|
| Interests on bank loans | **8,386** | 8,852 |
| Interests on corporate bond | **19,004** | 19,105 |
| Interests on lease liabilities | **4,696** | 5,649 |
| Less: interest expense capitalised into construction progress | **(5,330)** | (5,127) |
| | **26,756** | 28,479 |
| Interests accretion on reclamation obligations, net | **3,579** | 3,511 |
| Interests cost on defined benefit retirement plans (Note 29) | **1,675** | 1,762 |
| Interests cost on long-term payables | **2,389** | 2,051 |
| | **34,399** | 35,803 |

The borrowing costs have been capitalised at 4.71% per annum (2021: 4.44%).

### (b) Staff costs#

| | 2022<br>RMB'000 | 2021<br>RMB'000 |
|---|---|---|
| Salaries, wages and other benefits | **712,808** | 591,134 |
| Contributions to defined contribution retirement plans | **81,974** | 71,391 |
| Expenses recognised in respect of defined benefit retirement plans | **876** | (894) |
| | **795,658** | 663,419 |

Employees of the Company's subsidiaries in the PRC are required to participate in a defined contribution retirement scheme administered and operated by the local municipal government. The Company's subsidiaries in the PRC contribute funds which are calculated on certain percentages of the average employee salary as agreed by the local municipal government to the scheme to fund the retirement benefits of the employees.

## 6. PROFIT BEFORE TAXATION (CONTINUED)

### (c) Other items

| | 2022 RMB'000 | 2021 RMB'000 |
|---|---|---|
| Depreciation# | | |
| – property, plant and equipment (Note 12) | **202,364** | 178,477 |
| – investment property (Note 13) | **2,392** | 1,098 |
| Amortisation# | | |
| – intangible assets (Note 14) | **15,819** | 17,662 |
| Impairment losses recognised (reversed) | | |
| – trade and bill receivables (Note 21) | **28,931** | 15,547 |
| – contract assets (Note 21) | **148** | – |
| – prepayments, deposits and other receivables (Note 22) | **2,262** | (4,551) |
| – intangible assets (Note 14) | **3,392** | 7,446 |
| – goodwill (Note 18) | **13,272** | 4,313 |
| Write-off of intangible assets (Note 14) | **8** | – |
| Write-off of property, plant and equipment (Note 12) | **660** | – |
| Auditors' remuneration | | |
| – audit services | **1,950** | 3,736 |
| Increase in provisions for reclamation obligations | **11,410** | 7,191 |
| Cost of inventories# (Note 20(b)) | **2,467,555** | 1,703,554 |

# Cost of inventories includes approximately RMB360,696,000 (2021: RMB340,712,000) relating to staff costs, depreciation and amortisation expenses, which are also included in the respective total amounts disclosed separately above or in Note 6(b) for each of these types of expenses.

## 7. INCOME TAX IN THE CONSOLIDATED STATEMENT OF PROFIT OR LOSS

### (a) Taxation in the consolidated statement of profit or loss represents:

| | 2022 RMB'000 | 2021 RMB'000 |
|---|---|---|
| **Current tax** | | |
| Provision for the year | **165,517** | 141,232 |
| Under-provision in respect of prior years | **8,309** | 2,486 |
| **Deferred tax** | **173,826** | 143,718 |
| Origination and reversal of temporary differences (Note 31(b)) | **(7,879)** | (14,077) |
| | **165,947** | 129,641 |

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

## 7. INCOME TAX IN THE CONSOLIDATED STATEMENT OF PROFIT OR LOSS (CONTINUED)

### (b) Reconciliation between tax expense and accounting profit at applicable tax rates:

| | **2022** **RMB'000** | 2021 RMB'000 |
|---|---|---|
| Profit before taxation | **920,511** | 802,678 |
| National tax on profit before taxation at PRC statutory tax rate | **230,128** | 200,670 |
| Tax effect of non-deductible expenses | **5,525** | 8,867 |
| Tax effect of non-taxable income | **(12,143)** | (17,487) |
| Tax effect of unused tax losses and temporary differences not recognised | **47,629** | 50,314 |
| Tax concessions (Note (ii)) | **(73,734)** | (109,725) |
| Tax effect of unused tax losses and temporary differences not recognised in previous year but utilised in current year | **(4,425)** | (5,228) |
| Under-provision in respect of prior years | **8,309** | 2,486 |
| Tax effect of changes in tax rate | **1,642** | 1,145 |
| Tax effect of super deduction on research and development costs | **(36,984)** | (1,401) |
| Actual tax expense | **165,947** | 129,641 |

Notes:

(i) The Company and its subsidiaries established in the PRC are subject to PRC Corporate Income Tax rate of 25% (2021: 25%).

(ii) Certain subsidiaries of the Group are approved High and New Technology Enterprises and subject to a preferential PRC Corporate Income Tax rate of 15% during the approved period, subject to fulfillment of recognition criteria.

## 8. EARNINGS PER SHARE

The calculation of basic earnings per share is based on the profit attributable to ordinary equity shareholders of the Company of approximately RMB391,605,000 (2021: RMB335,751,000) and the weighted average of 319,874,900 ordinary shares (2021: 319,874,900 ordinary shares).

The Company did not have any potential dilutive shares in existence during the years ended 31 December 2022 and 2021. Accordingly, diluted earnings per share is the same as basic earnings per share.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

## 9. DIRECTORS' AND CHIEF EXECUTIVE'S EMOLUMENTS

Directors' and Supervisors' emoluments disclosed pursuant to section 383(1) of the Hong Kong Companies Ordinance and Part 2 of the Companies (Disclosure of Information about Benefits of Directors) Regulation are as follows:

| | Year ended 31 December 2022 | | | | |
|---|---|---|---|---|---|
| | Director's and Supervisors' fees RMB'000 | Allowances and benefits in kind RMB'000 | Discretionary bonuses RMB'000 | Retirement scheme contributions RMB'000 | Total RMB'000 |
| ***Executive directors*** | | | | | |
| Mr Meng Yanbin (resigned on 29 July 2022) | – | – | – | – | – |
| Mr Du Jin | – | 311 | 761 | 134 | 1,206 |
| Mr Wang Suohui (Chairman) (appointed on 29 July 2022) | – | 344 | 886 | 146 | 1,376 |
| Mr. Xu Hongchao (appointed on 16 September 2022) | – | 172 | 150 | 70 | 392 |
| ***Non-executive directors*** | | | | | |
| Ms. Liu Xiuhong | – | – | – | – | – |
| Mr. Chen Shoulei | – | – | – | – | – |
| Ms. Chang Jinyu | – | – | – | – | – |
| Mr. Liu Zhonglin (resigned on 29 July 2022) | – | – | – | – | – |
| Mr. Dai Shuquan (appointed on 16 September 2022) | – | – | – | – | – |
| ***Independent non-executive directors*** | | | | | |
| Mr. Hui Wan Fai | 162 | – | – | – | 162 |
| Mr. Chen Jingshan | 150 | – | – | – | 150 |
| Mr. Lu Chuang | 150 | – | – | – | 150 |
| Mr. Tian Jiahe | 366 | – | – | – | 366 |
| ***Supervisors*** | | | | | |
| Mr Li Zhenhua (resigned on 30 August 2022) | – | 273 | 63 | 57 | 393 |
| Mr Zhang Jian (resigned on 30 August 2022) | – | 256 | 54 | 56 | 366 |
| Mr Liu Zhonglin (appointed on 16 September 2022) | – | – | – | – | – |
| Mr. Zhang Qingjun (resigned on 29 July 2022) | – | – | – | – | – |
| Mr. Zhao Nanfei | – | – | – | – | – |
| Mr. Zhang Guoping | – | – | – | – | – |
| Ms. Peng Qihui (appointed on 30 August 2022) | – | 69 | 64 | 30 | 163 |
| Mr. Ma Fuxin (appointed on 30 August 2022) | – | 69 | 72 | 30 | 171 |
| Total | 828 | 1,494 | 2,050 | 523 | 4,895 |

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

## 9. DIRECTORS' AND CHIEF EXECUTIVE'S EMOLUMENTS (CONTINUED)

| | Year ended 31 December 2021 | | | | |
|---|---|---|---|---|---|
| | Director's and Supervisors' fees RMB'000 | Allowances and benefits in kind RMB'000 | Discretionary bonuses RMB'000 | Retirement scheme contributions RMB'000 | Total RMB'000 |
| ***Executive directors*** | | | | | |
| Mr Meng Yanbin | – | – | – | – | – |
| Mr Wu Jian (resigned on 25 February 2021) | – | 82 | – | 25 | 107 |
| Mr Du Jin | – | 441 | 528 | 133 | 1,102 |
| Mr Wang Suohui (appointed on 25 February 2021) | – | 461 | 546 | 135 | 1,142 |
| ***Non-executive directors*** | | | | | |
| Ms. Liu Xiuhong | – | – | – | – | – |
| Mr. Zhou Liulai (resigned on 25 February 2021) | – | – | – | – | – |
| Mr. Chen Shoulei | – | – | – | – | – |
| Ms. Chang Jinyu | – | – | – | – | – |
| Mr. Liu Zhonglin (appointed on 25 February 2021) | – | – | – | – | – |
| ***Independent non-executive directors*** | | | | | |
| Mr Meng Yan (resigned on 25 February 2021) | 25 | – | – | – | 25 |
| Mr. Hui Wan Fai | 149 | – | – | – | 149 |
| Mr. Chen Jingshan (appointed on 25 February 2021) | 113 | – | – | – | 113 |
| Mr. Lu Chuang (appointed on 25 February 2021) | 113 | – | – | – | 113 |
| Mr. Guo Qingliang (resigned on 25 February 2021) | – | – | – | – | – |
| Mr. Tian Jiahe | – | – | – | – | – |
| ***Supervisors*** | | | | | |
| Mr Li Zhenhua | – | 285 | 108 | 77 | 470 |
| Mr Zhang Jian | – | 273 | 103 | 83 | 459 |
| Mr. Zhang Qingjun | – | – | – | – | – |
| Mr. Zhao Nei (appointed on 25 February 2021) | – | – | – | – | – |
| Mr. Zhang Guoping | – | – | – | – | – |
| Total | 400 | 1,542 | 1,285 | 453 | 3,680 |

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

## 10. INDIVIDUALS WITH HIGHEST EMOLUMENTS

Of the five individuals with the highest emoluments in the Group, two (2021: two) of them were directors and the chief executive of the Company whose emoluments are included in the disclosures in note 9 above. The emoluments of the remaining three (2021: three) individuals were as follows:

| | **2022 RMB'000** | 2021 RMB'000 |
|---|---|---|
| Salaries and other emoluments | **804** | 1,251 |
| Retirement scheme contributions | **329** | 398 |
| Discretionary bonuses | **2,143** | 806 |
| Total | **3,276** | 2,455 |

The emoluments of the individuals with the highest emoluments are within the following band:

| | **2022 Number of individuals** | 2021 Number of individuals |
|---|---|---|
| Nil to HK$1,000,000 | **1** | 2 |
| HK$1,500,001 to HK$2,000,000 | **2** | 1 |
| Total | **3** | 3 |

During the years ended 31 December 2022 and 2021, no emoluments were paid by the Group to any of the directors or the chief executive of the Group or the five highest paid individuals as an inducement to join or upon joining the Group or as compensation for loss of office. None of the individuals waived any emoluments for both years.

The discretionary bonus is determined by the Group having regarded to the director's performance and the prevailing market conditions.

## 11. OTHER COMPREHENSIVE INCOME

### (a) Tax effects relating to each component of other comprehensive income:

| | **2022** | | | 2021 | | |
|---|---|---|---|---|---|---|
| | **Before-tax Amount RMB'000** | **Tax expense RMB'000** | **Net-of-tax Amount RMB'000** | Before-tax Amount RMB'000 | Tax expense RMB'000 | Net-of-tax Amount RMB'000 |
| Exchange differences on translation of share of profits less losses of an associate | **–** | **–** | **–** | (2,623) | – | (2,623) |
| Remeasurement of net defined benefit liability | **(3,374)** | **–** | **(3,374)** | (1,469) | – | (1,469) |
| Equity investments at FVOCI-net movement in fair value reserve (non-recycling) | **12,084** | **3,439** | **15,523** | 13,396 | (3,349) | 10,047 |
| Other comprehensive income | **8,710** | **3,439** | **12,149** | 9,304 | (3,349) | 5,955 |

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

## 12. PROPERTY, PLANT AND EQUIPMENT

| | Buildings RMB'000 | Right-of-use assets RMB'000 | Machinery and equipment RMB'000 | Office equipment RMB'000 | Motor vehicle and others RMB'000 | Leasehold improvement RMB'000 | Construction in progress RMB'000 | Total RMB'000 |
|---|---|---|---|---|---|---|---|---|
| **Cost:** | | | | | | | | |
| At 1 January 2021 | 869,644 | 269,598 | 870,442 | 86,452 | 133,483 | 83,749 | 717,211 | 3,030,579 |
| Additions | 18,292 | 60,377 | 29,515 | 10,007 | 42,889 | 25,519 | 279,483 | 466,082 |
| Additions through acquisition of a subsidiary | – | – | 16,900 | – | – | – | – | 16,900 |
| Disposals | (383) | (16,773) | (14,883) | (2,565) | (4,661) | – | – | (39,265) |
| Transfer in/(out) | 78,955 | – | 59,775 | – | 112 | – | (138,842) | – |
| At 31 December 2021 and 1 January 2022 | 966,508 | 313,202 | 961,749 | 93,894 | 171,823 | 109,268 | 857,852 | 3,474,296 |
| Additions | **10,956** | **65,762** | **105,775** | **15,926** | **20,923** | **5,834** | **326,409** | **551,585** |
| Additions through acquisition of a subsidiary | **–** | **–** | **122** | **–** | **–** | **–** | **–** | **122** |
| Disposals | **(5,201)** | **(56,565)** | **(24,067)** | **(2,098)** | **(1,350)** | **–** | **–** | **(89,281)** |
| Written-off | **–** | **–** | **(1,237)** | **–** | **–** | **–** | **–** | **(1,237)** |
| Transfer in/(out) | **198,109** | **–** | **43,771** | **157** | **–** | **–** | **(242,037)** | **–** |
| At 31 December 2022 | **1,170,372** | **322,399** | **1,086,113** | **107,879** | **191,396** | **115,102** | **942,224** | **3,935,485** |
| **Accumulated depreciation:** | | | | | | | | |
| At 1 January 2021 | (143,941) | (60,564) | (452,898) | (46,053) | (71,328) | (45,645) | – | (820,429) |
| Charge for the year | (31,994) | (32,469) | (82,661) | (4,890) | (12,522) | (13,941) | – | (178,477) |
| Written back on disposals | 293 | 16,720 | 14,178 | 2,439 | 3,927 | – | – | 37,557 |
| At 31 December 2021 and 1 January 2022 | (175,642) | (76,313) | (521,381) | (48,504) | (79,923) | (59,586) | – | (961,349) |
| Charge for the year | **(38,099)** | **(32,438)** | **(84,193)** | **(13,225)** | **(18,056)** | **(16,353)** | **–** | **(202,364)** |
| Written off | **–** | **–** | **577** | **–** | **–** | **–** | **–** | **577** |
| Written back on disposals | **432** | **23,395** | **21,542** | **1,847** | **1,184** | **–** | **–** | **48,400** |
| At 31 December 2022 | **(213,309)** | **(85,356)** | **(583,455)** | **(59,882)** | **(96,795)** | **(75,939)** | **–** | **(1,114,736)** |
| **Net book value:** | | | | | | | | |
| At 31 December 2022 | **957,063** | **237,043** | **502,658** | **47,997** | **94,601** | **39,163** | **942,224** | **2,820,749** |
| At 31 December 2021 | 790,866 | 236,889 | 440,368 | 45,390 | 91,900 | 49,682 | 857,852 | 2,512,947 |

The Group's property, plant and buildings are all allocated in the PRC.

## 12. PROPERTY, PLANT AND EQUIPMENT (CONTINUED)

Notes:

(i) During the year ended 31 December 2022, the Group's current lease contract with original expiry date on 31 December 2024 has been early terminated, resulting in a derecognition of right-of-use assets and lease liabilities of approximately RMB33,170,000 and RMB25,193,000 respectively, the loss on early termination of lease of approximately RMB7,977,000 is recognised in the line item of administrative expenses in the consolidated statement of profit or loss.

(ii) The analysis of the net book value of right-of-use assets by class of underlying asset is as follows:

| | **At 31 December 2022 RMB'000** | At 31 December 2021 RMB'000 |
|---|---|---|
| Property leased for own use, carried at depreciation cost: | | |
| – ownership interests in leasehold land held for own use, with remaining lease terms between 10 and 50 years | **152,056** | 136,854 |
| – buildings | **62,807** | 47,213 |
| – equipment and others | **22,180** | 52,822 |
| | **237,043** | 236,889 |

The remaining lease periods of the existing leases on buildings and plants and equipments and others range from 3 to 30 years.

During the year ended 31 December 2022, additions to right-of-use assets were approximately RMB65,762,000 (2021: RMB60,377,000). This amount included additions of equipment of approximately RMB4,478,000 (2021: RMB18,646,000), buildings of approximately RMB40,778,000 (2021: RMB25,331,000 and ownership interests in leasehold land held for own use of approximately RMB20,506,000 (2021: RMB16,933,000).

(iii) The analysis of expense items in relation to leases recognised in profit or loss are as follows:

| | **2022 RMB'000** | 2021 RMB'000 |
|---|---|---|
| Depreciation charge of right of use assets by class of underlying assets: | | |
| – ownership interests in leasehold land held for own use, with remaining lease terms between 10 and 50 years | **5,304** | 3,661 |
| – buildings | **22,068** | 22,954 |
| – equipment and others | **5,066** | 5,854 |
| | **32,438** | 32,469 |
| Interest on lease liabilities (Note 6(a)) | **4,696** | 5,649 |
| Expense relating to short-term leases | **9,033** | 2,912 |

Details of total cash outflow for leases, the maturity analysis of lease liabilities and the future cash outflows arising from lease that are not yet commenced are set out in Note 23(c), Note 35(b) and Note 28, respectively.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

## 13. INVESTMENT PROPERTIES

| | RMB'000 |
|---|---|
| **Cost** | |
| At 1 January 2021 and 31 December 2021 | 37,339 |
| Additions | 4,715 |
| Acquired on acquisition of a subsidiary (note 34(a)) | 27,611 |
| At 31 December 2022 | 69,665 |
| **Accumulated depreciation and impairment** | |
| At 1 January 2021 | 16,571 |
| Provided for the year | 1,098 |
| At 31 December 2021 | 17,669 |
| Provided for the year | 2,392 |
| At 31 December 2022 | 20,061 |
| **Carrying amount:** | |
| At 31 December 2022 | 49,604 |
| At 31 December 2021 | 19,670 |

The fair value of the Group's investment properties as at 31 December 2022 was approximately RMB154,005,000 (2021: RMB62,664,000). The fair value has been arrived at based on valuations carried out by China Alliance Appraisal Co., Ltd., an independent valuer not connected with the Group. The valuation was determined by reference to recent market prices for similar properties in the similar locations and conditions.

There has been no change from the valuation technique used in the prior year. In estimating the fair value of the properties, the highest and best use of the properties is their current use.

The above investment properties are depreciated on a straight-line basis at the following rates per annum:

| | |
|---|---|
| Leasehold land | Over the term of the lease |
| Buildings | Over the shorter term of the lease or 20-40 years |

## 14. INTANGIBLE ASSETS

| | Patents and know-how RMB'000 | Royalty RMB'000 | Software and others RMB'000 | Customer relationship RMB'000 | Total RMB'000 |
|---|---|---|---|---|---|
| **Cost:** | | | | | |
| At 1 January 2021 | 123,559 | 9,480 | 34,746 | 23,300 | 191,085 |
| Additions | 20,091 | – | 13,150 | – | 33,241 |
| At 31 December 2021 and 1 January 2022 | 143,650 | 9,480 | 47,896 | 23,300 | 224,326 |
| Additions | **17,814** | **–** | **5,785** | **–** | **23,599** |
| Write-off | **–** | **–** | **(21)** | **–** | **(21)** |
| At 31 December 2022 | **161,464** | **9,480** | **53,660** | **23,300** | **247,904** |
| **Accumulated amortisation and impairment losses:** | | | | | |
| At 1 January 2021 | (17,347) | (5,290) | (14,260) | (5,825) | (42,722) |
| Charge for the year | (7,350) | (798) | (6,185) | (3,329) | (17,662) |
| Impairment losses | – | – | – | (7,446) | (7,446) |
| At 31 December 2021 and 1 January 2022 | **(24,697)** | **(6,088)** | **(20,445)** | **(16,600)** | **(67,830)** |
| Charge for the year | **(5,866)** | **(798)** | **(7,547)** | **(1,608)** | **(15,819)** |
| Eliminated through write-off | **–** | **–** | **13** | **–** | **13** |
| Impairment losses | **–** | **–** | **–** | **(3,392)** | **(3,392)** |
| At 31 December 2022 | **(30,563)** | **(6,886)** | **(27,979)** | **(21,600)** | **(87,028)** |
| **Net book value:** | | | | | |
| At 31 December 2022 | **130,901** | **2,594** | **25,681** | **1,700** | **160,876** |
| At 31 December 2021 | 118,953 | 3,392 | 27,451 | 6,700 | 156,496 |

The amortisation charges are included in "cost of sales" in the consolidated statement of profit or loss.

During the year ended 31 December 2022, impairment loss of intangible assets attributable to the customer relationship of approximately RMB3,392,000 (2021: RMB7,446,000) is recognised due to the sales volume from the respective cash-generating units was less than expected resulting in downward adjustment on the estimated net cash inflows from those customers.

The recoverable amounts of the relevant intangible assets were determined based on value-in-use calculations. These calculations use cash flow projections based on financial budgets approved by management covering a five-year period. These cash flow projections adopted annual sales growth rates, which are based on the Group's historical experience with these operations and adjusted for other factors that are specific to each cash-generating unit. The discount rates of 16.9% (2021: 15.8%) used are pre-taxed and reflect specific risks relating to the respective cash generating units.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

## 15. INVESTMENTS IN SUBSIDIARIES

| | 2022<br>RMB'000 | 2021<br>RMB'000 |
|---|---|---|
| Unlisted shares, at cost | **1,289,779** | 1,234,864 |
| Listed shares, at cost | **606,085** | 606,085 |
| | **1,895,864** | 1,840,949 |
| Less: impairment loss | **(32,590)** | (32,590) |
| | **1,863,274** | 1,808,359 |

The following list contains only the particulars of principal subsidiaries as at 31 December 2022 and 2021 which principally affected the results, assets or liabilities of the Group.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

## 15. INVESTMENTS IN SUBSIDIARIES (CONTINUED)

| Name of the company | Place of establishment and operation | Issued and fully paid-up capital RMB | The Group's effective interest 2022 | The Group's effective interest 2021 | Voting power attributable to the Group 2022 | Voting power attributable to the Group 2021 | Principal activities |
|---|---|---|---|---|---|---|---|
| Beijing North Institute of Biological Technology Co., Ltd. 北京北方生物技術研究所有限公司 | The PRC | 69,305,800 | **100%** | 100% | **100%** | 100% | Production and sale of bio-pharmaceuticals |
| Beijing Clae-riar Rediosotope Technique Co., Ltd. (Note (ii)) 北京雙原同位素技術有限公司 | The PRC | 11,000,000 | **34.75%** | 34.75% | **100%** | 100% | Production and sale of radioactive sources |
| Shanghai Yuanzi Kexing (Note (iv)) 上海原子科興藥業有限公司 | The PRC | 84,320,000 | **48.64%** | 48.64% | **70%** | 70% | Sale of radioactive medicine |
| Shenzhen Zhonghe Headway Bio-Sci & Tech Co., Ltd. (Note (iv)) 深圳市中核海得威生物科技有限公司 | The PRC | 200,000,000 | **48.00%** | 48.00% | **54.1%** | 54.1% | Production and sale of bio-pharmaceuticals |
| HTA Co., Ltd. (Note (iii) and (iv)) 原子高科股份有限公司 | The PRC | 161,784,136 | **69.49%** | 69.49% | **80%** | 80% | Application of nuclear technology |
| Anhui Young-Hearty Medical Appliance & Equipment Co., Ltd. (Note (ii)) 安徽養和醫療器械設備有限公司 | The PRC | 7,750,000 | **48.00%** | 48.00% | **100%** | 100% | Medical diagnostic equipment manufacturing |
| Chengdu Gaotong Isotope Co., Ltd. (Note (iii)) 成都中核高通同位素股份有限公司 | The PRC | 70,583,407 | **93.15%** | 93.15% | **93.15%** | 93.15% | Application of nuclear technology |
| CNNC Tongxing (Beijing) Nuclear Technology Co., Ltd. 中核同興(北京)核技術有限公司 | The PRC | 30,000,000 | **51%** | 51% | **51%** | 51% | Application of nuclear technology |
| Beijing CIC Clinical Laboratory 北京中同藍博臨床檢驗所有限公司 | The PRC | 103,600,000 | **100%** | 100% | **100%** | 100% | Independent clinical laboratory services |
| Ningbo Junan Pharmaceuticals Technology Co., Ltd. 寧波君安藥業科技有限公司 | The PRC | 80,000,000 | **100%** | 100% | **100%** | 100% | Production and sale of radioactive medicine |
| CNNC Accuray (Tianjin) Medical Technology Co., Ltd. 中核安科銳(天津)醫療科技有限公司 | The PRC | 193,700,990 | **51%** | 51% | **51%** | 51% | Production and sale of radiation therapy equipments |

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

## 15. INVESTMENTS IN SUBSIDIARIES (CONTINUED)

Notes:

(i) The official names of all these entities are in Chinese. The English translation of these entities are for identification only.

(ii) The Group is exposed, or has rights, to variable returns from its involvement with these companies and has the ability to affect those returns through its power over these companies based on the contractual terms agreed by the parties in the subsidiaries' memorandum of association which stated that the Group has right to direct the relevant activities unilaterally.

(iii) These subsidiaries represent companies limited by shares established in the PRC. Other subsidiaries are companies with limited liability established in the PRC.

(iv) The Group has more than half of the voting power over these subsidiaries since the holding companies of the subsidiaries are controlled by the Group.

The following table lists out the information relating to subsidiaries of the Group which have material non-controlling interests ("NCI"). The summarised financial information presented below represents the amounts before any intercompany elimination.

### HTA Co., Ltd. and its subsidiaries

| | **2022** | 2021 |
|---|---|---|
| | **RMB'000** | RMB'000 |
| NCI percentage | **30.51%** | 30.51% |
| Current assets | **778,850** | 973,919 |
| Non-current assets | **1,698,007** | 1,459,517 |
| Current liabilities | **(364,065)** | (563,495) |
| Non-current liabilities | **(243,038)** | (131,892) |
| Net assets | **1,869,754** | 1,738,049 |
| Carrying amount of NCI | **570,462** | 530,279 |

| | **2022** | 2021 |
|---|---|---|
| | **RMB'000** | RMB'000 |
| Revenue | **766,678** | 826,551 |
| Profit for the year | **215,024** | 218,941 |
| Other comprehensive income for the year | **(4,528)** | (167) |
| Total comprehensive income for the year | **210,496** | 218,774 |
| Total comprehensive income for the year allocated to NCI | **64,222** | 66,748 |
| Dividend paid to NCI | **24,680** | 21,225 |
| Cash flows from operating activities | **64,308** | 69,082 |
| Cash flows from investing activities | **(116,260)** | (168,373) |
| Cash flows from financing activities | **(114,194)** | (53,726) |

## 15. INVESTMENTS IN SUBSIDIARIES (CONTINUED)

Shenzhen Zhonghe Headway Bio-Sci & Tech Co., Ltd.

| | **2022** | 2021 |
|---|---|---|
| | **RMB'000** | RMB'000 |
| NCI percentage | **52.00%** | 52.00% |
| Current assets | **2,925,456** | 2,434,757 |
| Non-current assets | **435,604** | 423,961 |
| Current liabilities | **(1,774,081)** | (1,552,251) |
| Non-current liabilities | **(7,935)** | (6,391) |
| Net assets | **1,579,044** | 1,300,076 |
| Carrying amount of NCI | **821,103** | 676,040 |

| | **2022** | 2021 |
|---|---|---|
| | **RMB'000** | RMB'000 |
| Revenue | **2,198,849** | 2,001,550 |
| Profit and total comprehensive income for the year | **483,774** | 360,508 |
| Profit and total comprehensive income for the year allocated to NCI | **251,562** | 187,464 |
| Dividend paid to NCI | **59,512** | 49,092 |
| Cash flows from operating activities | **397,137** | 387,923 |
| Cash flows from investing activities | **5,750** | 5,330 |
| Cash flows from financing activities | **(210,410)** | (95,077) |

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

## 15. INVESTMENTS IN SUBSIDIARIES (CONTINUED)

Anhui Young-Hearty Medical Appliance & Equipment Co., Ltd

| | 2022<br>RMB'000 | 2021<br>RMB'000 |
|---|---|---|
| NCI percentage | 52.00% | 52.00% |
| Current assets | 282,005 | 312,750 |
| Non-current assets | 36,122 | 38,655 |
| Current liabilities | (64,042) | (85,037) |
| Net assets | 254,085 | 266,368 |
| Carrying amount of NCI | 132,124 | 138,511 |

| | 2022<br>RMB'000 | 2021<br>RMB'000 |
|---|---|---|
| Revenue | 234,879 | 228,393 |
| Profit and Total comprehensive income for the year | 101,289 | 102,663 |
| Profit and total comprehensive income for the year allocated to NCI | 52,670 | 53,384 |
| Dividend paid to NCI | 59,759 | 28,497 |
| Cash flows from operating activities | 98,318 | 97,386 |
| Cash flows from investing activities | (36,089) | (16,164) |
| Cash flows from financing activities | (114,921) | (54,802) |

## 16. INTERESTS IN ASSOCIATES

| | 2022<br>RMB'000 | 2021<br>RMB'000 |
|---|---|---|
| Costs of interests in associates | 146,699 | 42,505 |
| Share of post-acquisition results and other comprehensive income, net of dividends received | 18,397 | 9,995 |
| | 165,096 | 52,500 |

During the year ended 31 December 2022, the addition of interest in 中核秦山同位素有限公司 and 江蘇高同裝備有限公司 amounted to approximately RMB72,000,000 (2021: nil) and the dividend received amounted to approximately RMB216,000 (2021: RMB4,461,000).

Details of the Group's interest in the associates, which is accounted for using the equity method in the consolidated financial statements, are as follows:

| Name of the company | Place of establishment | Issued and fully paid-up capital | Group's effective interest 2022 | Group's effective interest 2021 | Principal activities |
|---|---|---|---|---|---|
| 中核秦山同位素有限公司<br>China Nuclear Qinshan Isotope Co., Ltd.* | The PRC | RMB47,000,000 | 47% | – | Production and sales of radioisotope |
| 廣州中山醫藥科技發展有限公司<br>Guangzhou Zhongshan Medicine Technology Co., Ltd. | The PRC | RMB2,300,000 | 20.54% | 20.54% | Provision of health consultation services and information consultation services |
| 江蘇高同裝備有限公司<br>Jiangsu Gaotong Equipment Co., Ltd. | The PRC | RMB25,000,000 | 40.92% | – | Business of class III medical device |
| 上海深景醫藥科技有限公司<br>Shanghai Vista Pharmaceutical Technology Co., Ltd.* | The PRC | RMB28,800,000 | 40.00% | 40.00% | Provision of technical service and consultation |
| 南京慈基醫學技術服務有限公司<br>Nanjing Ciji Medical Technology Service Co., Ltd* | The PRC | RMB255,000 | 33.64% | 33.64% | Sales of medical devices |
| 中核核素醫療投資有限公司<br>CNNC Nuclide Medical Investment Co., Ltd.* | The PRC | RMB4,900,000 | 49.00% | 49.00% | Assets and investment management |

* The English translation of the name is for identification only. The official name of the entity is in Chinese.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

## 16. INTERESTS IN ASSOCIATES (CONTINUED)

Aggregate information of associates of the Group that are not individually material:

| | 2022<br>RMB'000 | 2021<br>RMB'000 |
|---|---|---|
| Aggregate carrying amount of individually immaterial associates in the consolidated financial statements | 165,096 | 52,500 |

| | 2022<br>RMB'000 | 2021<br>RMB'000 |
|---|---|---|
| Aggregate amounts of the Group's share of those associates' profit and total comprehensive income | 8,618 | 6,962 |

## 17. INTERESTS IN JOINT VENTURES

| | 2022<br>RMB'000 | 2021<br>RMB'000 |
|---|---|---|
| Costs of interests in joint ventures | 485,637 | 486,671 |
| Share of post-acquisition results, net of dividends received | 27,230 | 107,581 |
| | 512,867 | 594,252 |

Details of the Group's interest in the joint ventures, which is accounted for using the equity method in the consolidated financial statements, are as follows:

| Name of the company | Place of establishment | Issued and fully paid-up capital | Group's effective interest<br>2022 & 2021 | Principal activities |
|---|---|---|---|---|
| Shanghai GMS Pharmaceutical Co., Ltd.<br>上海欣科醫藥有限公司* | The PRC | USD1,530,000 | 49% | Production and sales of bio-pharmaceuticals |
| Beijing Tongfu Innovation Industrial Investment Fund Partnership (Limited Partnership) ("Beijing Tongfu")<br>北京同輻創新產業投資基金合夥企業(有限合夥)* | The PRC | RMB2,500,000,000 (2021: RMB2,463,860,000) | 30% | The application areas of nuclear technology investments |

The Group's joint ventures are accounted for using the equity method in the consolidated financial statements as in accordance with the contractual terms of the arrangements that the relevant activities require unanimous consent of the parties sharing control.

* The English translation of the name is for identification only. The official name of the entity is in Chinese.

## 17. INTERESTS IN JOINT VENTURES (CONTINUED)

During the year ended 31 December 2022, there is a capital refund by Beijing Tongfu. The capital refund received by the Group amounting to approximately RMB36,140,000 (2021: nil) in proportion to the respective shareholding in Beijing Tongfu.

Accounting policies, and reconciled to the carrying amounts in the consolidated financial statements, are disclosed below:

### Shanghai GMS Pharmaceutical Co., Ltd.

| | 2022<br>RMB'000 | 2021<br>RMB'000 |
|---|---|---|
| Current assets | **217,431** | 285,023 |
| Non-current assets | **30,364** | 28,641 |
| Current liabilities | **(161,614)** | (107,347) |
| Non-current liabilities | **(1,295)** | (1,483) |
| Net assets | **84,886** | 204,834 |

| | 2022<br>RMB'000 | 2021<br>RMB'000 |
|---|---|---|
| **Gross amounts** | | |
| Revenue | **224,512** | 264,859 |
| Profit and total comprehensive income | **32,704** | 56,052 |
| Dividend received | **49,649** | – |
| **Reconciled to the Group's interest** | | |
| Gross amounts of net assets | **84,886** | 204,834 |
| The Group's effective interest | **49%** | 49% |
| The Group's share of net assets | **41,594** | 100,369 |
| Carrying amount in the consolidated financial statements | **41,594** | 100,369 |

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

## 17. INTERESTS IN JOINT VENTURES (CONTINUED)

Beijing Tongfu Innovation Industrial Investment Fund Partnership (Limited Partnership)

| | 2022<br>RMB'000 | 2021<br>RMB'000 |
|---|---|---|
| Current assets | 1,256,731 | 524,815 |
| Non-current assets | 325,210 | 1,130,928 |
| Current liabilities | (25) | – |
| Net assets | 1,581,916 | 1,655,743 |

| | 2022<br>RMB'000 | 2021<br>RMB'000 |
|---|---|---|
| **Gross amounts** | | |
| Revenue | 59,779 | 110,927 |
| Profit and total comprehensive income | 58,448 | 87,441 |
| Dividend received | 3,994 | 12,193 |
| **Reconciled to the Group's interest** | | |
| Gross amounts of net assets | 1,581,916 | 1,655,743 |
| The Group's effective interest | 30% | 30% |
| The Group's share of net assets | 474,575 | 496,723 |
| Carrying amount in the consolidated financial statements | 471,273 | 493,883 |

## 18. GOODWILL

| | RMB'000 |
|---|---|
| **Cost** | |
| At 1 January, 31 December 2021 and 2022 | 48,349 |
| **Impairment:** | |
| At 1 January 2021 | – |
| Addition | (4,313) |
| At 31 December 2021 | (4,313) |
| Addition | (13,272) |
| At 31 December 2022 | (17,585) |
| **Carrying amount:** | |
| At 31 December 2022 | 30,764 |
| At 31 December 2021 | 44,036 |

## 18. GOODWILL (CONTINUED)

Goodwill is allocated to the Group's cash-generating units identified according to operation and operating segment as follows:

| | 2022<br>RMB'000 | 2021<br>RMB'000 |
|---|---|---|
| Pharmaceuticals | 25,206 | 38,478 |
| Irradiation | 1,084 | 1,084 |
| Radiation therapy equipment and related services | 4,474 | 4,474 |
| | 30,764 | 44,036 |

The recoverable amounts of the cash-generating units were determined based on value-in-use calculations. These calculations use cash flow projections based on financial budgets approved by management covering a five-year period. These cash flow projections adopted annual sales growth rates, which are based on the Group's historical experience with these operations and adjusted for other factors that are specific to each cash-generating unit. The discount rates used are pre-taxed and reflect specific risks relating to the respective cash generating units.

During the year ended 31 December 2022, impairment loss of goodwill attributable to the cash-generating unit on pharmaceuticals of approximately RMB13,272,000 (2021: RMB4,313,000) is recognised. No impairment loss of goodwill attributable to the cash-generating units on irradiation and radiation therapy equipment and related services is recognised during the years ended 31 December 2022 and 2021.

| | 2022 | 2021 |
|---|---|---|
| **Pharmaceuticals** | | |
| Annual sales growth rate for the first five-year period | 1%-17% | 1%-19% |
| Annual sales growth rate beyond five-year period | 0% | 0% |
| Discount rate | 11.9%, 14.8% | 7.9%, 11.0% |
| **Irradiation** | | |
| Annual sales growth rate for the first five-year period | 1%-5% | 1%-5% |
| Annual sales growth rate beyond five-year period | 0% | 0% |
| Discount rate | 10.77% | 7.9% |
| **Radiation therapy equipment and related services** | | |
| Annual sales growth rate for the first five-year period | 1%-50% | 1%-50% |
| Annual sales growth rate beyond five-year period | 0% | 0% |
| Discount rate | 13.9% | 14.3% |

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

## 19. UNQUOTED EQUITY INVESTMENTS

| | 2022<br>RMB'000 | 2021<br>RMB'000 |
|---|---|---|
| **Equity securities designated at FVOCI (non-recycling)** | | |
| – Unquoted equity investments | **162,494** | 150,410 |

Note:

The unquoted equity investments are shares in CNNC Financial Leasing Co., Ltd. ("CNNC Financial Leasing Company"), CNNC Finance Co., Ltd. ("CNNC Finance Company") and Tongchuang Investment Partnership (Limited Partnership) ("Tongchuang Investment Partnership"), three related parties under CNNC.

The Group designated its unquoted equity investments at FVOCI (non-recycling), as the investments are held for strategic purposes. The Group received dividends of approximately RMB4,427,000 (2021: RMB2,708,000), RMB1,948,000 (2021: RMB1,942,000) and RMB29,000 (2021: RMB90,000) from CNNC Financial Leasing Company, CNNC Finance Company and Tongchuang Investment Partnership during the year, respectively.

## 20. INVENTORIES

### (a) Inventories comprise:

| | 2022<br>RMB'000 | 2021<br>RMB'000 |
|---|---|---|
| Raw materials | **158,183** | 199,053 |
| Work in progress | **111,703** | 87,229 |
| Finished goods | **399,738** | 394,612 |
| Others | **8,619** | 12,364 |
| | **678,243** | 693,258 |
| Less: write-down of inventories | **(607)** | (1,335) |
| | **677,636** | 691,923 |

### (b) The analyses of the amounts of inventories recognised as expenses and included in the consolidated statement of profit or loss are as follows:

| | 2022<br>RMB'000 | 2021<br>RMB'000 |
|---|---|---|
| Carrying amount of inventories sold | **2,468,283** | 1,700,338 |
| Reversed (write-down)of inventories | **(728)** | 3,216 |
| | **2,467,555** | 1,703,554 |

## 21. TRADE AND BILL RECEIVALES AND CONTRACT ASSETS

### (a) Trade and bill receivables

| | **2022** **RMB'000** | 2021 RMB'000 |
|---|---|---|
| Bill receivables | **96,794** | 90,876 |
| Trade receivables due from | | |
| – related parties under CNNC | **57,596** | 37,867 |
| – associates and joint ventures | **20,583** | 29,943 |
| – third parties | **3,511,727** | 2,819,517 |
| | **3,686,700** | 2,978,203 |
| Less: loss allowance | **(185,362)** | (157,050) |
| | **3,501,338** | 2,821,153 |

As at 1 January 2021, the gross amount of trade receivables arising from contracts with customers amounted to approximately RMB2,368,502,000.

*Aging analysis*

The aging analyses of trade and bill receivables, based on the invoice dates and net of loss allowance, are as follows:

| | **2022** **RMB'000** | 2021 RMB'000 |
|---|---|---|
| Within 1 year | **3,028,761** | 2,520,825 |
| 1 to 2 years | **384,896** | 231,773 |
| 2 to 3 years | **66,112** | 54,667 |
| Over 3 years | **21,569** | 13,888 |
| | **3,501,338** | 2,821,153 |

The Group granted credit term on a case by case basis and trade and bills receivables are required to be settled in accordance with credit terms as stipulated in the contract and invoice due to issuance.

Further details on the Group's credit policy and credit risk arising from trade debtors are set out in Note 35(a). There has been no change in the estimation techniques or significant assumptions made during the current reporting period.

As at 31 December 2022, bill receivables amounting to approximately RMB19,174,000 (2021: RMB7,987,000) was measured at FVOCI because the bill receivables are held within a business model whose objective of both collect contractual cash flows or to sell. The fair value of bill receivables was at a level 2 fair value measurement which has been calculated by discounting the expected future cash flows using rates currently available for instruments with similar terms, credit risk and remaining maturities.

During the years ended 31 December 2022 and 2021, there was no transfer between level 1 and level 2 fair value hierarchy or transfer into or out of level 3.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

## 21. TRADE AND BILL RECEIVALES AND CONTRACT ASSETS (CONTINUED)

### (b) Contract assets

| | 2022<br>HK$'000 | 2021<br>HK$'000 |
|---|---|---|
| **Analysed as current:** | | |
| Retention receivables of construction contracts (note a) | **1,269** | 1,119 |
| Unbilled revenue of construction contracts (note b) | **26,238** | 28,375 |
| | **27,507** | 29,494 |
| Less: Impairment loss | **(148)** | – |
| | **27,359** | 29,494 |

As at 1 January 2021, contract assets amounted to nil.

Notes:

(a) Retention receivables included in contract assets represent the Group's right to receive consideration for work performed because the rights are conditional on the satisfaction of the service quality by the customers over a certain period as stipulated in the contracts. The contract assets are transferred to the trade receivables when the rights become unconditional, which is typically at the expiry date of the period for the provision of assurance by the Group on the service quality of the construction work performed by the Group. The due dates for retention receivables are usually one to two years after the completion of construction work.

(b) Unbilled revenue included in contract assets represents the Group's right to receive consideration for work completed but not yet billed because the rights are conditional upon the satisfaction by the customers on the construction work completed by the Group and the work is pending for the certification by the customers. The contract assets are transferred to the trade receivables when the rights become unconditional, which is typically at the time the Group obtains the certification of the completed construction work from the customers.

Contract assets are included in current assets as the Group expects to realise these within its normal operating cycle.

The recovery or settlement for contract assets pursuant to the terms of contracts as at 31 December 2022 and 2021 is as follows:

| | 2022<br>HK$'000 | 2021<br>HK$'000 |
|---|---|---|
| Within one year | **19,374** | 13,553 |
| Over one year | **8,133** | 15,941 |
| | **27,507** | 29,494 |

## 22. PREPAYMENT, DEPOSITS AND OTHER RECEIVABLES

### (a) Deposits and other receivables:

| | 2022<br>RMB'000 | 2021<br>RMB'000 |
|---|---|---|
| Advance to | | |
| – CNNC | 4 | 4 |
| – related parties under CNNC | 2,494 | 1,649 |
| Deposits | | |
| – related parties under CNNC | 1,614 | 3,828 |
| – third parties | 23,792 | 36,795 |
| Staff advance | 2,524 | 2,214 |
| Others | 42,377 | 28,742 |
| Dividends receivables | | |
| – associates, joint ventures and unquoted equity investments | 27,729 | 2,579 |
| | 100,534 | 75,811 |
| Less: allowance for doubtful debts | (10,397) | (8,135) |
| Financial assets measured at amortised cost | 90,137 | 67,676 |
| Deductible input VAT | 56,325 | 86,057 |
| | 146,462 | 153,733 |

Notes:

(i) All of the deposits and other receivables are expected to be recovered or recognised as expenses within one year.

(ii) Deposits mainly represent rental deposit and deposits for bidding.

### (b) Prepayment:

| | 2022<br>RMB'000 | 2021<br>RMB'000 |
|---|---|---|
| Prepayments for purchase of inventories from | | |
| – related parties under CNNC | 6,601 | 14,983 |
| – associates and a joint venture | – | 30 |
| – third parties | 230,123 | 197,345 |
| | 236,724 | 212,358 |

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

## 23. CASH AT BANK AND ON HAND AND OTHER CASH FLOW INFORMATION

### (a) Cash at bank and on hand comprised:

| | 2022<br>RMB'000 | 2021<br>RMB'000 |
|---|---|---|
| Cash on hand | – | 17 |
| Cash at bank | 493,328 | 519,456 |
| Cash at CNNC Finance Company | 2,429,863 | 2,228,717 |
| | 2,923,191 | 2,748,190 |
| Representing: | | |
| Cash and cash equivalents | 2,205,988 | 2,141,450 |
| Time deposits with original maturity over three months | 692,402 | 573,002 |
| Restricted deposits (Note) | 24,801 | 33,738 |
| | 2,923,191 | 2,748,190 |

Cash and cash equivalents include demand deposits and short-term bank deposits for the purpose of meeting the Group's short term cash commitment, which carry interest at market rates which range from 0.25% to 3.025% (2021: 0.3% to 1.65%) per annum.

Time deposits with original maturity over three months and restricted deposits, which carry interest at market rates which range from 1.49% to 3.02% (2021: 1.49% to 3.02%) and 0.25% to 1.75% (2021:0.3% to 1.75%) per annum respectively.

Note:

Restricted deposits mainly represent deposits for guarantee of letters of credit.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

## 23. CASH AT BANK AND ON HAND AND OTHER CASH FLOW INFORMATION (CONTINUED)

### (b) Reconciliation of liabilities arising from financing activities

The table below details changes in the Group's liabilities arising from financing activities. Liabilities arising from financing activities are liabilities for which cash flows were, or future cash flows will be, classified in the Group's consolidated cash flow statement as cash flows from financing activities.

| | Bank loans RMB'000 | Corporate bond RMB'000 | Interest payable RMB'000 | Lease liabilities RMB'000 | Total RMB'000 |
|---|---|---|---|---|---|
| At 1 January 2022 | 262,764 | 499,996 | – | 93,868 | 856,628 |
| Changes from financing cash flows: | | | | | |
| Proceeds from new bank loans | 734,560 | – | – | – | 734,560 |
| Repayment of bank loans | (193,467) | – | – | – | (193,467) |
| Principal amount paid for corporate bonds | – | (500,000) | – | – | (500,000) |
| Interest paid on corporate bond | – | (19,000) | – | – | (19,000) |
| Borrowing costs paid | (7,534) | – | – | | (7,534) |
| Capital element of lease rentals paid | – | – | – | (54,286) | (54,286) |
| Interest element of lease rentals paid | – | – | – | (4,696) | (4,696) |
| Total changes from financing cash flows | 533,559 | (519,000) | – | (58,982) | (44,423) |
| Other changes: | | | | | |
| Increase in lease liabilities from entering into new leases during the year | – | – | – | 65,762 | 65,762 |
| Early termination of a lease | – | – | – | (25,193) | (25,193) |
| Interest expenses | 8,386 | 19,004 | – | 4,696 | 32,086 |
| Total other changes | 8,386 | 19,004 | – | 45,265 | 72,655 |
| At 31 December 2022 | 804,709 | – | – | 80,151 | 884,860 |

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

## 23. CASH AT BANK AND ON HAND AND OTHER CASH FLOW INFORMATION (CONTINUED)

### (b) Reconciliation of liabilities arising from financing activities (Continued)

| | Bank loans RMB'000 | Corporate bond RMB'000 | Interest payable RMB'000 | Lease liabilities RMB'000 | Total RMB'000 |
|---|---|---|---|---|---|
| At 1 January 2021 | 162,982 | 499,784 | 845 | 86,878 | 750,489 |
| Changes from financing cash flows: | | | | | |
| Proceeds from new bank loans | 194,900 | – | – | – | 194,900 |
| Repayment of bank loans | (102,758) | – | – | – | (102,758) |
| Interest paid on corporate bond | – | (18,893) | – | – | (18,893) |
| Borrowing costs paid | – | – | (9,697) | – | (9,697) |
| Capital element of lease rentals paid | – | – | – | (28,791) | (28,791) |
| Interest element of lease rentals paid | – | – | – | (5,649) | (5,649) |
| Total changes from financing cash flows | 92,142 | (18,893) | (9,697) | (34,440) | 29,112 |
| Other changes: | | | | | |
| Increase in bank loans from the acquisition of a subsidiary during the year | 7,640 | – | – | – | 7,640 |
| Increase in lease liabilities from entering into new leases during the year | – | – | – | 35,781 | 35,781 |
| Interest expenses | – | 19,105 | 8,852 | 5,649 | 33,606 |
| Total other changes | 7,640 | 19,105 | 8,852 | 41,430 | 77,027 |
| At 31 December 2021 | 262,764 | 499,996 | – | 93,868 | 856,628 |

## 23. CASH AT BANK AND ON HAND AND OTHER CASH FLOW INFORMATION (CONTINUED)

### (c) Total cash outflow for leases

Amounts included in the cash flow statement for leases comprise the following:

| | **2022** | 2021 |
|---|---|---|
| | **RMB'000** | RMB'000 |
| Within operating cash flows (short-term lease expenses) | **9,033** | 2,912 |
| Within financing cash flows | **58,982** | 34,440 |
| | **68,015** | 37,352 |

There amounts relate to the following:

| | **2022** | 2021 |
|---|---|---|
| | **RMB'000** | RMB'000 |
| Lease rentals paid | **68,015** | 37,352 |

## 24. BANK LOANS

### (a) The long-term bank loans comprised:

| | **2022** | 2021 |
|---|---|---|
| | **RMB'000** | RMB'000 |
| Bank loan | | |
| – secured (Note) | **26,442** | 17,752 |
| – unsecured | **770,259** | 132,911 |
| | **796,701** | 150,663 |
| Less: current portion of long-term bank loans | **(10,188)** | (5,983) |
| Non-current portion of long term bank loans | **786,513** | 144,680 |

Note:

At 31 December 2022, the aggregate carrying value of the secured property, plant and equipment and investment property for the Group's bank loans is approximately RMB80,701,000 (2021: RMB189,370,000).

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

## 24. BANK LOANS (CONTINUED)

(b) The short-term bank loans comprised:

| | 2022<br>RMB'000 | 2021<br>RMB'000 |
|---|---|---|
| Bank loan | | |
| – secured (Note) | – | 5,000 |
| – unsecured | 8,008 | 107,101 |
| | 8,008 | 112,101 |
| Add: current portion of long-term bank loans | 10,188 | 5,983 |
| | 18,196 | 118,084 |

Note:

As of 31 December 2021, the Group had the short-term loans guaranteed by a third-party guarantee company.

(c) The long-term bank loans are repayable as follows:

| | 2022<br>RMB'000 | 2021<br>RMB'000 |
|---|---|---|
| After 1 year but within 2 years | – | 8,408 |
| After 2 years but within 5 years | 600,272 | 79,142 |
| Over 5 years | 186,241 | 57,130 |
| | 786,513 | 144,680 |

(d) The ranges of effective interest rates (which are also equal to contracted interest rates) on the Group's borrowings are as follows:

| | 2022<br>RMB'000 | 2021<br>RMB'000 |
|---|---|---|
| Fixed-rate borrowings | 775,391 | 262,764 |
| Variable-rate borrowings | 29,318 | – |
| | 804,709 | 262,764 |

| | 2022 | 2021 |
|---|---|---|
| Effective interest rate: (per annum) | | |
| Fixed-rate borrowings | 2.7% to 4.4% | 3.8% to 5.44% |
| Variable-rate borrowings* | 3.8% to 5.085% | – |

* These borrowings bear floating rate on benchmark interest rates quoted by PBOC

## 25. CORPORATE BOND

| | **2022** | 2021 |
|---|---|---|
| | **RMB'000** | RMB'000 |
| Public issuance of corporate bond | **–** | 499,996 |
| Less: current portion of corporate bond | **–** | (499,996) |
| | **–** | – |

In December 2019, the Group issued a 3-year corporate bond of RMB500,000,000 with an interest rate of 3.80% per annum. The corporate bond was repaid in full during the year ended 31 December 2022.

## 26. TRADE PAYABLES

| | **2022** | 2021 |
|---|---|---|
| | **RMB'000** | RMB'000 |
| Trade payables due to | | |
| – related parties under CNNC | **32,236** | 43,675 |
| – associates and joint ventures | **2,769** | 3,711 |
| – third parties | **453,283** | 290,470 |
| | **488,288** | 337,856 |

### (a) Aging analysis

As of the end of the reporting period, the aging analyses of trade payables, based on the invoice dates, are as follows:

| | **2022** | 2021 |
|---|---|---|
| | **RMB'000** | RMB'000 |
| Within 1 year | **444,316** | 311,583 |
| 1 to 2 years | **36,536** | 18,777 |
| 2 to 3 years | **4,576** | 7,496 |
| over 3 years | **2,860** | – |
| | **488,288** | 337,856 |

All of the trade payables are usually for settlement within one year or are repayable on demand.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

## 27. ACCRUALS AND OTHER PAYABLES, DEFERRED INCOME AND OTHER LONG-TERM PAYABLES

### (a) Accruals and other payables

| | 2022<br>RMB'000 | 2021<br>RMB'000 |
|---|---|---|
| Deposits from promoters (note (i)) | 614,914 | 514,372 |
| Payables to promoters (note (ii)) | 1,742,976 | 1,568,682 |
| Payables for staff related costs | 160,202 | 133,806 |
| Dividends payables | 7,302 | 14,505 |
| Other accruals and payables: (note (iii)) | | |
| – CNNC | 5,088 | 4,885 |
| – related parties under CNNC | 4,628 | 7,621 |
| – An associate | – | 100 |
| – third parties | 139,056 | 139,460 |
| Total financial liabilities measured at amortised cost | 2,674,166 | 2,383,431 |
| Other taxes payables | 112,363 | 92,199 |
| Contract liabilities (note (iv)) | | |
| – related parties under CNNC | 13,561 | 16,351 |
| – third parties | 470,645 | 324,425 |
| | 3,270,735 | 2,816,406 |

Notes:

(i) The balances represent deposits from promoters for ordering goods which will be repaid to promoters after the trade receivables have been paid by customers. These deposits are unsecured, interest-free and have no fixed repayment terms.

(ii) The balances represent service fee and commission payables to promoters.

(iii) All of the accruals and other payables are expected to be settled within one year or are repayable on demand.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

## 27. ACCRUALS AND OTHER PAYABLES, DEFERRED INCOME AND OTHER LONG-TERM PAYABLES (CONTINUED)

### (a) Accruals and other payables (continued)

Notes: (continued)

(iv) Movements in contract liabilities:

| | **2022**<br>**RMB'000** | 2021<br>RMB'000 |
|---|---|---|
| At 1 January | **340,776** | 133,576 |
| Decrease in contract liabilities as a result of Recognising revenue during the year that was included in the contract liabilities at the beginning of the year | **(297,778)** | (148,120) |
| Increase in contract liabilities as a result of receipt in advance of transferring goods | **441,208** | 355,320 |
| At 31 December | **484,206** | 340,776 |

The Group receives range from 5% to 10% of the contract values as deposits from customers when they sign the sale and purchase agreements for sales of radioactive source products and radiation therapy equipments. The deposits and advance payment schemes result in contract liabilities being recognised until the customers obtain control of the radioactive source products and radiation therapy equipments.

### (b) Deferred income

| | **RMB'000** |
|---|---|
| At 1 January 2020 | 30,773 |
| Additions during the year | 15,686 |
| Credited to profit or loss | (2,584) |
| At 31 December 2021 | 43,875 |
| Additions during the year | 18,129 |
| Credited to profit or loss | (2,003) |
| At 31 December 2022 | 60,001 |

During the years ended 31 December 2022 and 2021, subsidiaries in the PRC received subsidies from the government of the PRC for construction on acquisitions of property, plant and equipment. Deferred income is credited to profit or loss on a systematic and rational basis over the useful lives of the assets related to the government subsidies received.

### (c) Other long-term payables

Other long-term payables represent the grants for research and development projects in the medical industry which are due to CIAE, China Institute for Radiation Protection and China Baoyuan and repayable upon project completion.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

## 28. LEASE LIABILITES

At 31 December 2022, the lease liabilities were repayable as follows:

| | 2022<br>RMB'000 | 2021<br>RMB'000 |
|---|---|---|
| Within 1 year | 28,520 | 53,368 |
| After 1 year but within 2 years | 19,902 | 16,803 |
| After 2 years but within 5 years | 23,180 | 14,433 |
| After 5 years | 8,549 | 9,264 |
| | 51,631 | 40,500 |
| | 80,151 | 93,868 |

As at 31 December 2022, the weighted average incremental borrowing rate is approximately 3.38% (2021: 3.25%).

## 29. EMPLOYEE RETIREMENT BENEFITS

### (a) Defined benefit retirement plans

In addition to the government-mandated basic pension and medical program, the Group provides defined retirement benefits to civil retirees, current retirees and certain eligible active employees (the "Plan"), which covers 32% of the Group's employees as at 31 December 2022 (2021: 32%). The Plan is administered by the Group and funded by the working capital of the Group.

Under the Plan, the qualified retirees and/or employees are entitled to fixed supplemental post-retirement pension benefits, fixed death benefits and supplemental post-retirement medical benefits.

The independent actuarial valuations of the defined benefit retirement obligation at 31 December 2022 were prepared by qualified staff of Towers Watson Management Consulting (Shenzhen) Co., Ltd., Beijing Branch, who are members of the American Academy of Actuaries, using the projected unit credit method.

The Plan exposes the Group to actuarial risks, such as interest rate risk and longevity risk.

Information about the Plan disclosed below:

(i) The amounts recognised in the consolidated statement of financial position are as follows:

| | 2022<br>RMB'000 | 2021<br>RMB'000 |
|---|---|---|
| Present value of obligations | 53,940 | 49,898 |

A portion of the above liability is expected to be settled after more than one year. However, it is not practicable to segregate this amount from the amounts payable in the next twelve months. The Group expects the amount of approximately RMB3,092,000 (2021: RMB3,187,000) of the defined benefit retirement obligation to be paid in the next twelve months.

## 29. EMPLOYEE RETIREMENT BENEFITS (CONTINUED)

### (a) Defined benefit retirement plans (continued)

(ii) Movements in the present value of the defined benefit retirement obligation were as follows:

| | **2022** **RMB'000** | 2021 RMB'000 |
|---|---|---|
| At 1 January | **53,085** | 53,503 |
| Remeasurements: | | |
| – actuarial losses arising from changes in financial assumptions | **3,374** | 1,469 |
| Benefits paid by the plans | **(3,223)** | (3,231) |
| Current service cost | **876** | 894 |
| Effect of change of participants and payment rates | **1,245** | (1,312) |
| Interest expenses | **1,675** | 1,762 |
| At 31 December | **57,032** | 53,085 |
| Less: due within one year | **(3,092)** | (3,187) |
| Due after one year | **53,940** | 49,898 |

The effect of change of participants and payment rates is the change in the present value of the defined benefit obligation resulting from changes of number of employee covered by the Plan and increasing the benefits that are payable after retirement.

(iii) Amounts recognised in the consolidated statement of profit or loss and the consolidated statement of profit or loss and other comprehensive income are as follows:

| | **2022** **RMB'000** | 2021 RMB'000 |
|---|---|---|
| Service cost | **876** | 894 |
| Net interest on net defined benefit liability | **1,675** | 1,762 |
| Total amounts recognised in profit or loss | **2,551** | 2,656 |
| Total amounts recognised in other comprehensive income | | |
| – Actuarial losses | **3,374** | 1,469 |
| Total defined benefit costs | **5,925** | 4,125 |

The costs are recognised in the following line items in the consolidated statement of profit or loss:

| | **2022** **RMB'000** | 2021 RMB'000 |
|---|---|---|
| Finance costs | **1,675** | 1,762 |
| Administrative expenses | **876** | 894 |
| | **2,551** | 2,656 |

## 29. EMPLOYEE RETIREMENT BENEFITS (CONTINUED)

### (a) Defined benefit retirement plans (continued)

(iv) Significant actuarial assumptions (expressed as weighted averages) are as follows:

| | **2022 RMB'000** | 2021 RMB'000 |
|---|---|---|
| Discount rates | **3.0%** | 3.25% |
| Future salary increases | **6.0%** | 6.0% |
| Annual turnover rates of active employees | **5.0%** | 5.0% |

The below analyses show how the defined benefit obligation would have increased (decreased) as a result of 1% change in the significant actuarial assumptions:

| | **Increase by 1%** | |
|---|---|---|
| | **2022 RMB'000** | 2021 RMB'000 |
| Discount rates | **(7,975)** | (6,796) |
| Future salary increases | **5,716** | 4,368 |
| Annual turnover rates of active employees | **(1,900)** | (1,446) |

| | **Decrease by 1%** | |
|---|---|---|
| | **2022 RMB'000** | 2021 RMB'000 |
| Discount rates | **10,596** | 8,870 |
| Future salary increases | **(2,216)** | (3,208) |
| Annual turnover rates of active employees | **4,158** | 1,681 |

The above sensitivity analyses is based on the assumption that changes in actuarial assumptions are not correlated and therefore it does not take into account the correlations between the actuarial assumptions.

## 29. EMPLOYEE RETIREMENT BENEFITS (CONTINUED)

### (b) Defined contribution retirement plan

Pursuant to the relevant laws and regulations of the PRC, the Company and its subsidiaries participate in defined contribution retirement benefit schemes managed by government organisations. The Group makes contributions to basic pension insurance plans based on the applicable benchmarks and rates stipulated by the government authorities, whereby these entities are required to contribute to the schemes at a rate of 19% of the employees' basic salaries. Employees of these entities are entitled to retirement benefits, calculated based on a percentage of the average salaries level in the PRC, from the above-mentioned retirement schemes at their normal retirement. During the year ended 31 December 2021, the entities established in the PRC have been granted certain exception on the contributions to defined contribution retirement plans by the local government authority as a result of the COVID-19 impact for the period from February 2021 to December 2021 (2022: nil).

## 30. SHARE-BASED TRANSACTION

The Group has a plan for share appreciation rights (the "Plan") which was adopted on 30 June 2020, whereby the directors of the Group are authorised, at their discretion, to invite senior management talents and high-level technicians of the Group. Pursuant to the Plan, each share appreciation right is related to a share, and it will be settled in cash, and thus there will be no influence on the total number of issued shares or dilution effect on shares.

The total number of share appreciation right is 8,607,700. The share appreciation rights will be vested upon the achievement of performance conditions of the Group, service conditions and personal performance conditions agreed by the scheme.

### (a) The terms and conditions of the options granted are as follows:

Share appreciation rights granted to directors

| Date of grant | Number of instruments | Vesting conditions | Contractual life of share appreciation rights |
|---|---|---|---|
| – on 30 June 2020 | 119,900 | Two years from the date of grant | 6 years |
| – on 30 June 2020 | 119,000 | Three years from the date of grant | 6 years |
| – on 30 June 2020 | 119,000 | Four years from the date of grant | 6 years |

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

## 30. SHARE-BASED TRANSACTION (CONTINUED)

### (a) The terms and conditions of the options granted are as follows: (Continued)

Share appreciation rights granted to employees

| Date of grant | Number of instruments | Vesting conditions | Contractual life of share appreciation rights |
|---|---|---|---|
| – on 30 June 2020 | 2,749,333 | Two years from the date of grant | 6 years |
| – on 30 June 2020 | 2,749,333 | Three years from the date of grant | 6 years |
| – on 30 June 2020 | 2,749,333 | Four years from the date of grant | 6 years |

### (b) Reconciliation of outstanding share appreciation rights

| | 2022 | | 2021 | |
|---|---|---|---|---|
| | **Weight average exercise price HKD** | **Number of share appreciation rights** | Weight average exercise price HKD | Number of share appreciation rights |
| Outstanding at the beginning of the year | **–** | **–** | 22 | 8,607,700 |
| Terminated during the year | **–** | **–** | (22) | (8,607,700) |
| Exercisable at the end of the year | **–** | **–** | – | – |

According to the latest requirements of relevant laws and regulations of China and the actual situation of the Company, the Board of Directors of the Company has decided to terminate the share appreciation right incentive plan on 9 November 2021. After the termination, the participants will cease to be entitled to the share appreciation rights that have been granted.

## 31. INCOME TAX IN THE CONSOLIDATED STATEMENT OF FINANCIAL POSITION

### (a) Current taxation in the consolidated statement of financial position represents:

| | 2022 RMB'000 | 2021 RMB'000 |
|---|---|---|
| At 1 January | **69,398** | 51,226 |
| Provision for the year | **173,826** | 143,718 |
| Income tax paid | **(147,518)** | (125,546) |
| Addition through acquisition of a subsidiary (note 34a) | **23** | – |
| At 31 December | **95,729** | 69,398 |

## 31. INCOME TAX IN THE CONSOLIDATED STATEMENT OF FINANCIAL POSITION (CONTINUED)

### (b) Deferred tax assets and liabilities recognised

The components of deferred tax assets/(liabilities) recognised in the consolidated statement of financial position and movements are as follows:

| | Accruals RMB'000 | Provision for impairment of assets RMB'000 | Provision for reclamation obligations RMB'000 | Tax losses RMB'000 | Fair value change in unquoted equity investments RMB'000 | Depreciation and amortisation RMB'000 | Fair value adjustments on inventories, property, plant and equipment, intangible assets and related depreciation and amortisation RMB'000 | Total RMB'000 |
|---|---|---|---|---|---|---|---|---|
| At 1 January 2021 | 146,237 | 26,498 | 24,652 | 13 | (9,780) | (902) | (348) | 186,370 |
| (Credited)/charged to profit or loss (Note 7(a)) | 12,157 | 4,617 | (56) | 327 | – | 122 | (3,090) | 14,077 |
| Charged to reserves | – | – | – | – | (3,349) | – | – | (3,349) |
| At 31 December 2021 and 1 January 2022 | 158,394 | 31,115 | 24,596 | 340 | (13,129) | (780) | (3,438) | 197,098 |
| (Credited)/charged to profit or loss (Note 7(a)) | **5,832** | **(387)** | **1,466** | **117** | **–** | **320** | **531** | **7,879** |
| Charged to reserves | **–** | **–** | **–** | **–** | **(1,813)** | **–** | **–** | **(1,813)** |
| Effect of change in tax rate | **–** | **–** | **–** | **–** | **5,252** | **–** | **–** | **5,252** |
| Addition through acquisition of a subsidiary (Note 34a) | **11** | **–** | **–** | **–** | **–** | **–** | **(5,185)** | **(5,174)** |
| At 31 December 2022 | **164,237** | **30,728** | **26,062** | **457** | **(9,690)** | **(460)** | **(8,092)** | **203,242** |

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

## 31. INCOME TAX IN THE CONSOLIDATED STATEMENT OF FINANCIAL POSITION (CONTINUED)

### (c) Deferred tax assets and not recognized

At the end of the reporting period, the Group has unused tax losses of approximately RMB508,221,000 (2021: RMB325,212,000) available for offset against future profits. A deferred tax asset has been recognised in respect of approximately RMB3,034,000 (2021: RMB2,268,000) of such losses. No deferred tax asset has been recognised in respect of the remaining RMB505,187,000 (2021: RMB322,944,000) due to the unpredictability of future profit streams. Included in unrecognised tax losses are losses of approximately RMB6,438,000 (2021: RMB8,052,000) that will expire before 2027. Other losses may be carried forward indefinitely.

## 32. PROVISIONS

### (a) The balance of provisions comprised:

| | **2022** | 2021 |
|---|---|---|
| | **RMB'000** | RMB'000 |
| Reclamation obligations (Note (b)) | **224,207** | 208,260 |
| Less: current provision | **(86,322)** | (76,554) |
| Non-current portion | **137,885** | 131,706 |

### (b) The movements of the provision for reclamation obligations are as follows:

| | **2022** | 2021 |
|---|---|---|
| | **RMB'000** | RMB'000 |
| At 1 January | **208,260** | 195,217 |
| Increase in estimated cost | **11,410** | 7,191 |
| Interest expenses | **4,537** | 5,852 |
| At 31 December | **224,207** | 208,260 |

The obligations for reclamation consist of estimated expenditures for retirement of its radioactive production facilities in accordance with the relevant rules and regulations in the PRC. The provision is therefore determined based on management's best estimates. The estimate of the associated costs may be subject to change in the near term when the reclamation on the disposal of the radioactive production facilities becomes apparent in future periods. At the end of the reporting period, the Group reassessed the estimated costs and adjusted the accrued reclamation obligations, where necessary.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

## 32. PROVISIONS (CONTINUED)

### (c) Long-term receivables

Long-term receivable represents present value of a part of reclamation obligations which is due from CIAE according to the commitment agreement between a subsidiary of the Group and CIAE.

## 33. SHARE CAPITAL,RESERVES AND DIVIDENDS

### (a) Movements in components of equity

The reconciliation between the opening and closing balances of each component of the Group's consolidated equity is set out in the consolidated statement of changes in equity. Details of the changes in the Company's individual components of equity between the beginning and the end of the year are set out below:

| | Share capital RMB'000 (Note 33(c)) | Capital reserve RMB'000 (Note 33(d)(i)) | PRC statutory reserve RMB'000 (Note 33(d)(ii)) | Fair value reserve (non-recycling) RMB'000 (Note 33(d)(iii)) | Other reserve RMB'000 (Note 33(d)(iv)) | Retained profits RMB'000 | Total equity RMB'000 |
|---|---|---|---|---|---|---|---|
| **Balance at 1 January 2021** | 319,875 | 2,239,808 | 138,594 | 29,343 | 4,192 | 201,097 | 2,932,909 |
| **Changes in equity for 2021:** | | | | | | | |
| Total comprehensive income for the year | – | – | – | 10,047 | – | 53,862 | 63,909 |
| Appropriation of maintenance and production funds | – | – | – | – | 32 | (32) | – |
| Utilisation of maintenance and production funds | – | – | – | – | (1,288) | 1,288 | – |
| Appropriation to reserves | – | – | 5,624 | – | – | (5,624) | – |
| Dividends (Note 33(b)) | – | – | – | – | – | (57,673) | (57,673) |
| **Balance at 31 December 2021 and 1 January 2022** | 319,875 | 2,239,808 | 144,218 | 39,390 | 2,936 | 192,918 | 2,939,145 |
| **Changes in equity for 2022:** | | | | | | | |
| Total comprehensive income for the year | **–** | **–** | **–** | **15,523** | **–** | **115,912** | **131,435** |
| Appropriation of maintenance and production funds | **–** | **–** | **–** | **–** | **35** | **(35)** | **–** |
| Utilisation of maintenance and production funds | **–** | **–** | **–** | **–** | **(304)** | **304** | **–** |
| Appropriation to reserves | **–** | **–** | **11,727** | **–** | **–** | **(11,727)** | **–** |
| Dividends (Note 33(b)) | **–** | **–** | **–** | **–** | **–** | **(120,881)** | **(120,881)** |
| **Balance at 31 December 2022** | **319,875** | **2,239,808** | **155,945** | **54,913** | **2,667** | **176,491** | **2,949,699** |

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

## 33. SHARE CAPITAL, RESERVES AND DIVIDENDS (CONTINUED)

### (b) Dividends

*(i) Dividends payable to equity shareholders of the Company attributable to the year*

| | 2022<br>RMB'000 | 2021<br>RMB'000 |
|---|---|---|
| Final dividend proposed after the end of the reporting period of RMB44.07 cents per ordinary share (2021: RMB37.79 cents per ordinary share) | 140,969 | 120,881 |

The final dividend proposed after the end of the reporting period has not been recognised as a liability at the end of the reporting period.

*(ii) Dividends payable to equity shareholders of the Company attributable to the previous financial year, approved and paid during the year*

| | 2022<br>RMB'000 | 2021<br>RMB'000 |
|---|---|---|
| Final dividend in respect of the previous financial year, approved and paid during the year, of RMB37.79 cents per share (2021: RMB18.03 cents per share) | 120,881 | 57,673 |

### (c) Share capital

| | No. of shares<br>'000 | RMB'000 |
|---|---|---|
| **Ordinary shares issued** | | |
| At the beginning of the financial period and the end of the financial period | 319,875 | 319,875 |

## 33. SHARE CAPITAL, RESERVES AND DIVIDENDS (CONTINUED)

### (d) Nature and purpose of reserves

#### *(i) Capital reserve*

Capital reserve represents (i) the proceeds in excess of the par value upon shares issuance received by the Company; and (ii) the amount of carrying amount of the net assets of certain subsidiaries acquired in excess of the consideration paid by the Group, as a result of business combination under common control.

#### *(ii) PRC statutory reserve*

In accordance with the relevant PRC laws and regulations and the Company's articles of association, the Company is required to transfer 10% of its net profit as determined in accordance with accounting rules and regulations of the PRC to the statutory PRC reserve until the reserve reaches 50% of the registered capital. The transfer to this reserve must be made before distributions to equity shareholders. This reserve can be utilised in setting off accumulated losses or increase capital and is non-distributable other than in liquidation.

#### *(iii) Fair value reserve (non-recycling)*

The fair value reserve (non-recycling) comprises the cumulative net change in the fair value of equity investments designated at FVOCI under IFRS 9 that are held at the end of the reporting period (see Note 2(g)).

#### *(iv) Other reserve*

Other reserve represents specific reserve for production and maintenance funds. Pursuant to the relevant PRC regulations, the Group is required to transfer production and maintenance funds at fixed rates of relevant production outputs or revenue. The maintenance and production funds could be utilised when expenses or capital expenditures on production maintenance and safety measures are incurred. The amount of production and maintenance funds utilised would be transferred from the specific reserve back to retained profits.

#### *(v) Exchange reserve*

The exchange reserve comprises all foreign exchange differences arising from the translation of the financial statements of an associate. The reserve is dealt with in accordance with the accounting policies as set out in Note 2(x).

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

## 33. SHARE CAPITAL, RESERVES AND DIVIDENDS (CONTINUED)

### (e) Capital management

The Group's primary objectives when managing capital are to safeguard the Group's ability to continue as a going concern, so that it can continue to provide returns for shareholders and benefits for other stakeholders, by pricing products and services commensurately with the level of risk and by securing access to finance at a reasonable cost.

The Group actively and regularly reviews and manages its capital structure to maintain a balance between the higher shareholder returns that might be possible with higher levels of borrowings and the advantages and security afforded by a sound capital position, and makes adjustments for the capital structure in light of changes in economic conditions.

The Group monitors its capital structure on the basis of an adjusted net debt-to-capital ratio. For this purpose, adjusted net debt is defined as total debt (which includes interest-bearing borrowings) plus unaccrued proposed dividends. Adjusted capital comprises all components of equity less unaccrued proposed dividends.

During 2022, the Group's strategy, which was unchanged from 2021, was to maintain the adjusted net debt-to-capital ratio at the lower level. In order to maintain or adjust the ratio, the Group may adjust the amount of dividends paid to shareholders, issue new shares, return capital to shareholders, raise new debt financing or sell assets to reduce debt.

The adjusted debt-to-capital ratio at 31 December 2022 and 2021 is as follows:

| | Notes | At 31 December 2022 RMB'000 | At 31 December 2021 RMB'000 |
|---|---|---|---|
| Current liabilities: | | | |
| Interest-bearing borrowings | 24(b) & 25 | **18,196** | 618,080 |
| Lease liabilities | 28 | **28,520** | 53,368 |
| | | **46,716** | 671,448 |
| Non-current liabilities: | | | |
| Interest-bearing borrowings | 24(a) | **786,513** | 144,680 |
| Lease liabilities | 28 | **51,631** | 40,500 |
| | | **838,144** | 185,180 |
| Total debt | | **884,860** | 856,628 |
| Add: proposed dividends | 33(b) | **140,969** | 120,881 |
| Adjusted net debt | | **1,025,829** | 977,509 |
| Total equity attributable to equity shareholders of the Company | | **4,465,287** | 6,031,388 |
| Less: proposed dividends | 33(b) | **140,969** | 120,881 |
| Adjusted capital | | **4,324,318** | 5,910,507 |
| Adjusted debt-to-capital ratio | | **24%** | 17% |

Neither the Company nor any of its subsidiaries are subject to externally imposed capital requirements.

## 34. ACQUISITIONS OF SUBSIDIARIES

### (a) Acquisition of a subsidiary during the year ended 31 December 2022

In October 2022, the Group acquired 100% interest in 廣州原子高科醫藥科技有限公司 Guangzhou HTA Pharmaceutical Technology Co., Ltd.* ("Guangzhou HTA") (formerly known as Guangzhou Zhongda Zhongshan Medical Technology Development Co., Ltd (廣州中大中山醫科技開發有限公司) from an independent party at a cash consideration of approximately RMB59,093,000. Guangzhou HTA is principally engaged in technical services, technology development, technical consultation, technology exchange, technology transfer, technology promotion in medical industry.

The recognised fair values of the identifiable assets and liabilities of Guangzhou HTA as at the date of acquisition were set out as follows:

| | **Guangzhou HTA RMB'000** |
|---|---|
| Property, plant and equipment | 122 |
| Investment properties | 27,611 |
| Interest in associates | 32,194 |
| Deposits and other receivables | 6 |
| Prepayments | 1 |
| Cash at bank and on hand | 4,749 |
| Accruals and other payables | (268) |
| Income tax payable | (23) |
| Deferred tax liabilities | (5,174) |
| Total identifiable net assets at fair value | 59,218 |
| Satisfied by: | |
| Cash consideration | 59,093 |
| Gain on bargain purchase | (125) |

* English name is for identification purpose only.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

## 34. ACQUISITIONS OF SUBSIDIARIES (CONTINUED)

### (a) Acquisition of a subsidiary during the year ended 31 December 2022 (continued)

*Net cash outflow on acquisition of Guangzhou HTA*

| | RMB'000 |
|---|---|
| Cash consideration paid in 2021 | 28,930 |
| Cash consideration paid in 2022 | 30,163 |
| Total cash consideration paid | 59,093 |
| Less: cash and cash equivalent balances acquired | (4,749) |
| Less: Cash consideration paid in 2021 and included in prepayment | (28,930) |
| | 25,414 |

Since the acquisition, Guangzhou HTA contributed approximately RMB266,000 to the Group's revenue and approximately RMB119,000 loss to the consolidated profit for the year ended 31 December 2022.

Had the business combination taken place at the beginning of the period, the revenue of the Group and the profit of the Group for the year ended 31 December 2022 would had been approximately RMB6,147,594,000 and approximately RMB756,775,000.

## 34. ACQUISITIONS OF SUBSIDIARIES (CONTINUED)

### (b) Acquisition of a subsidiary during the year ended 31 December 2021

In February 2021, the Group acquired 51% interest in Hubei Zhongxun Medical Products Industry Co., Ltd. ("Hubei Zhongxun") from an independent party at a cash consideration of RMB23,460,000. Hubei Zhongxun is principally engaged in the production and sale of medical equipment related to medical purification and radiation protection in the PRC.

The recognised fair values of the identifiable assets and liabilities of Hubei Zhongxun as at the date of acquisition were set out as follows:

| | **Hubei Zhongxun** |
|---|---|
| | **RMB'000** |
| Property, plant and equipment | 16,900 |
| Intangible assets | 9,100 |
| Deferred tax assets | 219 |
| Other non-current assets | 50 |
| Inventories | 6,007 |
| Trade and bill receivables | 18,256 |
| Prepayments, deposits and other receivables | 41 |
| Cash at bank and on hand | 512 |
| Bank loans | (7,528) |
| Trade payables | (1,395) |
| Accruals and other payables | (3,180) |
| Income tax payable | (472) |
| Deferred tax liabilities | (589) |
| | 37,921 |
| Less: non-controlling interests | (18,581) |
| Total identifiable net assets at fair value | 19,340 |
| Satisfied by: | |
| Cash | 23,460 |
| Goodwill | 4,120 |

Since the acquisition, Hubei Zhongxun contributed approximately RMB42,654,000 to the Group's revenue and approximately RMB1,789,000 profit to the consolidated profit for the year ended 31 December 2021.

Had the business combination taken place at the beginning of the period, the revenue of the Group and the profit of the Group for the year ended 31 December 2021 would had been approximately RMB5,145,708,000 and approximately RMB672,268,000.

## 35. FINANCIAL RISK MANAGEMENT AND FAIR VALUES OF FINANCIAL INSTRUMENTS

Exposure to credit, liquidity, interest rate and currency risks arises in the normal course of the Group's business.

The Group's exposure to these risks and the financial risk management policies and practices used by the Group to manage these risks are described below.

### (a) Credit risk

Credit risk refers to the risk that the Group's counterparties default on its contractual obligations resulting in a financial loss to the Group. The Group's credit risk is primarily attributable to trade receivables. The Group's exposure to credit risk arising from cash and cash equivalents and bill receivables is limited because the counterparties are banks and financial institutions with sound credit standing, for which the Group considers to have low credit risk. The Group has a policy to limit the amount of credit exposure to any financial institution and management does not expect any material loss arising from non-performance by these counterparties.

*Trade receivables and contract assets*

The Group has established a credit management policy under which individual credit evaluations are performed on all customers requiring credit over a certain amount. These evaluations focus on the customer's past history of making payments when due and current ability to pay and take into account information specific to the customer as well as pertaining to the economic environment in which the customer operates. Trade receivables are due from the invoice date (or date of revenue recognition, if earlier). Normally, the Group does not obtain collateral from customers.

The Group's exposure to credit risk is influenced mainly by the individual characteristics of each customer rather than the industry or country in which the customers operate and therefore significant concentrations of credit risk primarily arise when the Group has significant exposure to individual customers. At the end of the reporting period, 1% (2021: 1%) and 4% (2021: 4%) of the total trade receivables was due from the Group's largest customer and the five largest customers, respectively.

The Group measures loss allowances for trade receivables and contract assets at an amount equal to lifetime ECLs, which is calculated using a provision matrix. As the Group's historical credit loss experience does not indicate significantly different loss patterns for different customer segments, the loss allowance based on past due status is not further distinguished between the Group's different customer bases.

## 35. FINANCIAL RISK MANAGEMENT AND FAIR VALUES OF FINANCIAL INSTRUMENTS (CONTINUED)

### (a) Credit risk (continued)

*Trade receivables and contract assets (continued)*

The following table provides information about the Group's exposure to credit risk and ECLs for trade receivables as at 31 December 2022:

| | **2022** | | |
|---|---|---|---|
| | **Expected loss rate %** | **Gross carrying amount RMB'000** | **Loss allowance RMB'000** |
| With 1 year | **0.8%** | **3,030,784** | **(23,382)** |
| 1 – 2 years | **5%** | **407,149** | **(20,398)** |
| 2 – 3 years | **18%** | **81,253** | **(14,811)** |
| More than 3 years | **85%** | **148,340** | **(126,771)** |
| | | **3,667,526** | **(185,362)** |

| | 2021 | | |
|---|---|---|---|
| | Expected loss rate % | Gross carrying amount RMB'000 | Loss allowance RMB'000 |
| With 1 year | 0.6% | 2,526,902 | (14,064) |
| 1 – 2 years | 4% | 242,519 | (10,746) |
| 2 – 3 years | 28% | 76,077 | (21,410) |
| More than 3 years | 89% | 124,718 | (110,830) |
| | | 2,970,216 | (157,050) |

The expected loss rates for contract assets aged within one year and over one year based on the recovery or settlement for contract assets pursuant to the terms of contracts are 0.8% (2021: nil) and nil (2021: nil) respectively.

Expected loss rates are based on actual loss experience over the past 3 years. These rates are adjusted to reflect differences between economic conditions during the year over which the historic data has been collected, current conditions and the Group's view of economic conditions over the expected lives of the receivables.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

## 35. FINANCIAL RISK MANAGEMENT AND FAIR VALUES OF FINANCIAL INSTRUMENTS (CONTINUED)

### (a) Credit risk (continued)

*Trade receivables and contract assets (continued)*

Movement in the loss allowance account in respect of trade receivables during the year is as follows:

| | 2022<br>RMB'000 | 2021<br>RMB'000 |
|---|---|---|
| At 1 January | 157,050 | 141,528 |
| Amounts written off during the year | (619) | (25) |
| Impairment losses recognised during the year | 28,931 | 15,547 |
| At 31 December | 185,362 | 157,050 |

Movement in the loss allowance account in respect of contract assets during the year is as follows:

| | 2022<br>RMB'000 | 2021<br>RMB'000 |
|---|---|---|
| At 1 January | – | – |
| Impairment losses recognised during the year | 148 | – |
| At 31 December | 148 | – |

*Deposits and other receivables*

The directors of the Company make periodic individual assessment on the recoverability of deposits and other receivables based on historical settlement records, past experience, and also quantitative and qualitative information that is reasonable and supportive forward-looking information. The Group measures the loss allowance equal to 12m ECL, unless when there has been a significant increase in credit risk since initial recognition, the Group recognises lifetime ECL.

The 12m ECL on deposits and other receivables is considered as insignificant for the years ended 31 December 2022 and 2021 as the counterparties involved are considered with limited credit risk and the ECL involved is not material.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

## 35. FINANCIAL RISK MANAGEMENT AND FAIR VALUES OF FINANCIAL INSTRUMENTS (CONTINUED)

### (a) Credit risk (continued)

*Trade receivables and contract assets (continued)*

Movement in the loss allowance account in respect of deposit and other receivables during the year is as follows:

| | **2022** **RMB'000** | 2021 RMB'000 |
|---|---|---|
| At 1 January | **8,135** | 12,918 |
| Amounts written off during the year | **–** | (232) |
| Impairment losses recognised(reversed) during the year | **2,262** | (4,551) |
| At 31 December | **10,397** | 8,135 |

*Cash at bank and on hand*

Credit risk on cash at bank and on hand is limited because the counterparties are reputable banks with good credit ratings assigned by international credit agencies. The Group assessed 12m ECL for cash at bank and on hand by reference to information relating to probability of default and loss given default of the respective credit rating grades published by external credit rating agencies. The 12m ECL on cash at bank and on hand is considered to be insignificant.

### (b) Liquidity risk

Individual operating entities within the Group are responsible for their own cash management, including the short-term investment of cash surpluses and the raising of loans to cover expected cash demands, subject to approval by the parent company's board when the borrowings exceed certain predetermined levels of authority. The Group's policy is to regularly monitor current and expected liquidity requirements to ensure that it maintains sufficient reserves of cash and adequate committed lines of funding from major financial institutions to meet its liquidity requirements in the short and longer term.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

## 35. FINANCIAL RISK MANAGEMENT AND FAIR VALUES OF FINANCIAL INSTRUMENTS (CONTINUED)

### (b) Liquidity risk (continued)

The following table details the remaining contractual maturities at the end of each reporting period of the Group's financial liabilities, which are based on contractual undiscounted cash flows (including interest payments computed using contractual rates or, if floating, based on rates current at the end of each reporting period) and the earliest dates the Group can be required to pay:

| | At 31 December 2022 | | | | | |
|---|---|---|---|---|---|---|
| | On demand or within 1 year RMB'000 | More than 1 year but less than 2 years RMB'000 | More than 2 years but less than 5 years RMB'000 | More than 5 years RMB'000 | Total RMB'000 | Carrying amount RMB'000 |
| Lease liabilities (Note 28) | **32,013** | **21,419** | **25,740** | **10,464** | **89,636** | **80,151** |
| Bank loans (Note 24) | **22,848** | **29,081** | **43,621** | **828,173** | **923,723** | **804,709** |
| Trade payables (Note 26) | **488,288** | **–** | **–** | **–** | **488,288** | **488,288** |
| Accruals and other payables (Note 27) | **2,674,166** | **–** | **–** | **–** | **2,674,166** | **2,674,166** |
| Other long-term payables | **–** | **42,420** | **–** | **–** | **42,420** | **36,255** |
| Total | **3,217,315** | **92,920** | **69,361** | **838,637** | **4,218,233** | **4,083,569** |

| | At 31 December 2021 | | | | | |
|---|---|---|---|---|---|---|
| | On demand or within 1 year RMB'000 | More than 1 year but less than 2 years RMB'000 | More than 2 years but less than 5 years RMB'000 | More than 5 years RMB'000 | Total RMB'000 | Carrying amount RMB'000 |
| Corporate bond (Note25) | 519,000 | – | – | – | 519,000 | 499,996 |
| Lease liabilities (Note 28) | 56,613 | 18,253 | 17,644 | 10,518 | 103,028 | 93,868 |
| Bank loans (Note 24) | 121,601 | 13,297 | 80,256 | 65,368 | 280,522 | 262,764 |
| Trade payables (Note 26) | 337,856 | – | – | – | 337,856 | 337,856 |
| Accruals and other payables (Note 27) | 2,383,431 | – | – | – | 2,383,431 | 2,383,431 |
| Other long-term payables | – | 17,000 | – | – | 17,000 | 14,614 |
| Total | 3,418,501 | 48,550 | 97,900 | 75,886 | 3,640,837 | 3,592,529 |

## 35. FINANCIAL RISK MANAGEMENT AND FAIR VALUES OF FINANCIAL INSTRUMENTS (CONTINUED)

### (c) Currency risk

The Group is exposed to currency risk primarily through bank deposits denominated in foreign currency. i.e., a currency other than the functional currency of the operations to which the transactions relate. The currencies giving rise to this risk are primarily Hong Kong dollars and United States dollars. The Group manages this risk as follows:

#### *(i) Exposure to currency risk*

The following table details the Group's exposure at the end of the reporting period to currency risk arising from recognised assets denominated in a currency other than the functional currency of the entity to which they relate. For presentation purposes, the amounts of the exposure are shown in Hong Kong dollars and United States dollars, translated using the spot rates at the year end date. Differences resulting from the translation of the financial statements of foreign operations into the Group's presentation currency are excluded.

| | **Exposure to foreign currencies** | |
|---|---|---|
| | **2022** | 2021 |
| | **RMB'000** | RMB'000 |
| Cash and cash equivalents | **11,011** | 9,355 |

#### *(ii) Sensitivity analysis*

The following table indicates the instantaneous change in the Group's profit after tax and retained profits that would arise if foreign exchange rates to which the Group has significant exposure at the end of the reporting period had changed at that date, assuming all other risk variables remained constant.

| | **2022** | | 2021 | |
|---|---|---|---|---|
| | **Increase/ (decrease) in foreign exchange rates** | **Increase/ (decrease) in profit after tax and retained profits** | Increase/ (decrease) in foreign exchange rates | Increase/ (decrease) in profit after tax and retained profits |
| | | **RMB'000** | | RMB'000 |
| HK Dollars | **10%** | **486** | 10% | 392 |
| | **(10%)** | **(486)** | (10%) | (392) |
| US Dollars | **10%** | **434** | 10% | 137 |
| | **(10%)** | **(434)** | (10%) | (137) |

## 35. FINANCIAL RISK MANAGEMENT AND FAIR VALUES OF FINANCIAL INSTRUMENTS (CONTINUED)

### (c) Currency risk (continued)

#### *(iii) Sensitivity analysis (continued)*

Results of the analysis as presented in the above table represent an aggregation of the instantaneous effects on each of the Group entities' profit after tax and retained profits measured in the respective functional currencies, translated into Hong Kong dollars at the exchange rates ruling at the end of the reporting period for presentation purposes.

The sensitivity analysis assumes that the change in foreign exchange rates had been applied to re-measure those financial instruments held by the Group which expose the Group to foreign currency risk at the end of the reporting period, including inter-company receivables within the Group which are denominated in a currency other than the functional currencies of the borrower. The analysis excludes differences that would result from the translation of the financial statements of foreign operations into the Group's presentation currency. The analysis is performed on the same basis for 2021.

### (d) Fair values measurement

#### *(i) Financial assets measured at fair value*

Fair value hierarchy

The following table presents the fair value of the Group's financial instruments measured at the end of each reporting period on a recurring basis, categorised into the three-level fair value hierarchy as defined in IFRS 13 *Fair value measurement*. The level into which a fair value measurement is classified is determined with reference to the observability and significance of the inputs used in the valuation technique as follows:

- Level 1 valuations: Fair value measured using only Level 1 inputs i.e., unadjusted quoted prices in active markets for identical assets or liabilities at the measurement date.

- Level 2 valuations: Fair value measured using Level 2 inputs i.e., observable inputs which fail to meet Level 1, and not using significant unobservable inputs. Unobservable inputs are inputs for which market data are not available.

- Level 3 valuations: Fair value measured using significant unobservable inputs.

The Group has a finance manager performing valuations for the trading securities and unquoted equity investments. The manager reports directly to the chief accountant and the audit committee. A valuation report with analysis of changes in fair value measurement is prepared by the manager at each interim and annual reporting date and is reviewed and approved by the chief financial officer. Discussion of the valuation process and results with the chief financial officer and the audit committee is held twice a year, to coincide with the reporting dates.

## 35. FINANCIAL RISK MANAGEMENT AND FAIR VALUES OF FINANCIAL INSTRUMENTS (CONTINUED)

(d) Fair values measurement (continued)

*(i) Financial assets measured at fair value (continued)*

| | | **Fair value measurements as at 31 December 2022 categorised into** | | |
|---|---|---|---|---|
| | **Fair value at 31 December 2022 RMB'000** | **Level 1 RMB'000** | **Level 2 RMB'000** | **Level 3 RMB'000** |
| Recurring fair value measurement | | | | |
| Bill receivables | **19,174** | **–** | **19,174** | **–** |
| Unquoted equity investments | **162,494** | **–** | **–** | **162,494** |
| | **181,668** | **–** | **19,174** | **162,494** |

| | | Fair value measurements as at 31 December 2021 categorised into | | |
|---|---|---|---|---|
| | Fair value at 31 December 2021 RMB'000 | Level 1 RMB'000 | Level 2 RMB'000 | Level 3 RMB'000 |
| Recurring fair value measurement | | | | |
| Bill receivables | 7,987 | – | 7,987 | – |
| Unquoted equity investments | 150,410 | – | – | 150,410 |
| | 158,397 | – | 7,987 | 150,410 |

In 2022 and 2021, there were no transfers between Level 1 and Level 2, or transfers into or out of Level 3. The Group's policy is to recognise transfers between levels of fair value hierarchy as at the end of the reporting period in which they occur.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

## 35. FINANCIAL RISK MANAGEMENT AND FAIR VALUES OF FINANCIAL INSTRUMENTS (CONTINUED)

### (d) Fair values measurement (continued)

#### *(i) Financial assets measured at fair value (continued)*

The fair value of bill receivables was at a level 2 fair value measurement which has been calculated by discounting the expected future cash flows using rates currently available for instruments with similar terms, credit risk and remaining maturities.

Information about Level 3 fair value measurements

| | **Valuation techniques** | **Significant unobservable inputs** | **Weighted average** |
|---|---|---|---|
| Unlisted equity instruments | Market comparable companies | Price-to-book ratio | 1.08 to 1.22 (2021: 1.19 to 1.25) |

The fair value of unlisted equity instruments is determined using the price to book ratio of comparable listed companies adjusted for price-to-book ratio. The fair value measurement is positively correlated to the price-to-book ratio. As at 31 December 2022, it is estimated that with all other variables held constant, a decrease/increase in price-to-book ratio ability by 5% (2021: 5%) would have increased/decreased the Group's other comprehensive income by approximately RMB18,177,000 (2021: RMB17,682,000).

The movements during the period in the balance of these Level 3 fair value measurements are as follow:

| | **2022 RMB'000** | 2021 RMB'000 |
|---|---|---|
| Unlisted equity securities | | |
| At 1 January | **150,410** | 137,014 |
| Net unrealised gains or losses recognised in other comprehensive income during the year | **12,084** | 13,396 |
| At 31 December | **162,494** | 150,410 |

Any gain or loss arising from the remeasurement of the Group's unlisted equity securities held for strategic purposes with amount of RMB15,523,000 (2021: RMB10,047,000) (net of tax) are recognised in the fair value reserve (non-recycling) in other comprehensive income. Upon disposal of the equity securities, the amount accumulated in other comprehensive income is transferred directly to retained earnings.

## 35. FINANCIAL RISK MANAGEMENT AND FAIR VALUES OF FINANCIAL INSTRUMENTS (CONTINUED)

### (d) Fair values measurement (continued)

#### *(ii) Fair values of financial liabilities carried at other than fair value*

The carrying amounts of the Group's financial instruments carried at cost or amortised cost are not materially different from their values as at 31 December 2021 and 31 December 2022 except for the following financial instruments, for which their carrying amounts and fair value are disclosed below:

| | **2022** | | 2021 | |
|---|---|---|---|---|
| | **Carrying amount RMB'000** | **Fair value RMB'000** | Carrying amount RMB'000 | Fair value RMB'000 |
| Bank loans | **804,709** | **884,198** | 144,680 | 148,399 |
| Corporate bond | **–** | **–** | 499,996 | 519,833 |
| | **804,709** | **884,198** | 644,676 | 668,232 |

Valuation techniques and inputs used in Level 3 fair value measurements.

The fair value of bank loans and corporate bond is estimated as being the present value of future cash flows, discounted at current market interest rates for similar financial instruments.

The interest rates used are as follows:

| | **2022** | 2021 |
|---|---|---|
| Bank loans | **4.75%** | 4.53% |
| Corporate bond | **N/A** | 3.78% |

### (e) Interest rate risk

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. The Group's interest rate risk arises primarily from long-term borrowings. Borrowings issued at variable rates expose the Group to cash flow interest rate risk.

The Group regularly reviews and monitors the mix of fixed and variable rate borrowings in order to manage its interest rate risks. During the year, however, management of the Group did not consider it is necessary to use interest rate swaps to hedge their exposure to interest.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

## 35. FINANCIAL RISK MANAGEMENT AND FAIR VALUES OF FINANCIAL INSTRUMENTS (CONTINUED)

### (e) Interest rate risk (continued)

#### *(i) Interest rate profile*

The following table details the interest rate profile of the Group's borrowings at the end of the reporting period.

| | **2022** | 2021 |
|---|---|---|
| | **RMB'000** | RMB'000 |
| Net fixed rate borrowings: | | |
| Corporate bond (Note 25) | **–** | 499,996 |
| Lease liability (Note 28) | **80,151** | 93,868 |
| Bank loans (Note 24) | **646,636** | 120,112 |
| | **726,787** | 713,976 |
| Net floating rate borrowings: | | |
| Bank loans (Note 24) | **158,073** | 142,652 |
| Total net borrowings | **884,860** | 856,628 |

#### *(ii) Sensitivity analysis*

At 31 December 2022, it is estimated that a general increase/decrease of 100 basis point in interest rates of net floating borrowings, with all other variables held constant, the Group's profit after tax would have decrease/increase by approximately RMB1,186,000 (2021: RMB1,070,000). Other components of consolidated equity would not be affected by the general increase/decrease in interest rates.

The sensitivity analysis above has been determined assuming that the change in interest rates had occurred at the end of the reporting period and had been applied to the exposure to interest rate risk for non-derivative financial instruments in existence at the end of the reporting period. The impact on the Group's profit after tax (and retained profits) and other components of consolidated equity is estimated as an annualized impact on interest expense or income of such a change in interest rates.

The estimated 100 basis points increase or decrease represents management's assessment of a reasonable change in interest rates over the period until the next annual statement of financial position date. The analysis is performed on the same basis for 2021.

## 36. COMMITMENTS

### Capital commitments

Capital commitments outstanding at 31 December not provided for in the financial statement were as follows:

| | 2022<br>RMB'000 | 2021<br>RMB'000 |
|---|---|---|
| Contracted for | 504,012 | 957,170 |
| Authorised but not contracted for | 13,200 | 8,000 |
| | 517,212 | 965,170 |

## 37. MATERIAL RELATED PARTY TRANSACTIONS

The Group is part of a large group of companies under CNNC and has significant transactions and relationships with CNNC and related parties under CNNC.

The principal transactions which were carried out in the ordinary course of business are as follows:

| | 2022<br>RMB'000 | 2021<br>RMB'000 |
|---|---|---|
| Sale of goods to | | |
| CNNC | 9 | 3,305 |
| Related parties under CNNC | 101,435 | 75,297 |
| Associates and joint ventures | 25,230 | 26,493 |
| Service provide to | | |
| Related parties under CNNC | 5,967 | 8,219 |
| Associates and joint ventures | – | 26,916 |
| Purchase of goods from | | |
| Related parties under CNNC | 21,634 | 19,144 |
| Associates and joint ventures | 12,277 | 12,459 |
| Purchase of property, plant and equipment from | | |
| Related parties under CNNC | 12,231 | 11,049 |
| Service provide by | | |
| CNNC | 2,330 | – |
| Related parties under CNNC | 191,079 | 116,783 |
| Associates and joint ventures | 1,539 | 700 |

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

## 37. MATERIAL RELATED PARTY TRANSACTIONS (CONTINUED)

### (a) Transaction with related parties

| | 2022<br>RMB'000 | 2021<br>RMB'000 |
|---|---|---|
| Leases from | | |
| Related parties under CNNC | | |
| – right-of-use assets recognised during the year under IFRS16 | **16,376** | 30,270 |
| – lease payments | **41,615** | 1,973 |
| Funding on researching and development project | | |
| CNNC | **8,052** | 17,107 |
| Related parties under CNNC | **2,590** | 2,223 |
| Interest expenses | | |
| Related parties under CNNC | **4,877** | 7,919 |
| Granting of loans from CNNC Finance Company | | |
| Related parties under CNNC | **42,860** | 115,000 |
| Net deposits placed with | | |
| Related parties under CNNC | **201,146** | 199,353 |
| Interest income | | |
| Related parties under CNNC | **24,433** | 21,379 |
| Dividend paid to | | |
| CNNC | **40,313** | 19,234 |
| Related parties under CNNC | **129,787** | 60,813 |
| Dividend received from | | |
| Related parties under CNNC | **6,404** | 4,739 |
| Capital investment in | | |
| Associates and joint ventures | **72,000** | – |

### (b) Balances with related parties

Details of the outstanding balance with related parties are set out in Notes 21, 22, 23, 26 and 27.

## 37. MATERIAL RELATED PARTY TRANSACTIONS (CONTINUED)

### (c) Transaction with other government-related entities in the PRC

The Group is a state-owned entity and operates in an economic regime currently dominated by entities directly or indirectly owned or controlled by the PRC government and numerous government authorities and agencies (collectively referred to as "State-Owned Entities").

Since 2018, the Group had transactions with State-Owned Entities including, but not limited to, sales of goods, deposits and borrowings, purchase of materials and receiving construction work services. The directors consider that the transactions with these State-Owned Entities are activities in the ordinary course of the Group's business and that the dealings of the Group have not been significantly or unduly affected by the fact that the Group and these State-Owned Entities are ultimately controlled or owned by the PRC government. The Group has also established pricing policies for services and products, and such pricing policies do not depend on whether or not the counterparties are State-Owned Entities. Having due regard to the substance of the relationship, the directors are of the opinion that none of these transactions are material related party transactions that require separate disclosure.

### (d) Key management personnel remuneration

Key management personnel are those persons holding positions with authority and responsibility for planning, directing and controlling the activities of the Group, directly or indirectly, including the Company's directors.

Remuneration for key management personnel, including amounts paid to the Company's directors as disclosed in Note 9, and certain of the highest paid employees as disclosed in Note 10, is as follows:

| | **2022**<br>**RMB'000** | 2021<br>RMB'000 |
|---|---|---|
| Salaries and other emoluments | **3,126** | 3,225 |
| Retirement scheme contributions | **852** | 851 |
| Discretionary bonuses | **4,193** | 2,091 |
| | **8,171** | 6,167 |

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

FOR THE YEAR ENDED 31 DECEMBER 2022

## 38. STATEMENT OF FINANCIAL POSITION OF THE COMPANY

| | 31 December 2022 RMB'000 | 31 December 2021 RMB'000 |
|---|---|---|
| Non-current assets | | |
| Property, plant and equipment | **25,335** | 10,135 |
| Investment property | **62** | 67 |
| Intangible assets | **7,283** | 9,002 |
| Investments in subsidiaries | **1,863,274** | 1,808,359 |
| Interests in associates | **112,117** | 28,444 |
| Interest in joint ventures | **512,867** | 594,252 |
| Unquoted equity investments | **162,382** | 150,299 |
| Deferred tax assets | **19,508** | 28,799 |
| Other non-current assets | **7,238** | 4,846 |
| | **2,710,066** | 2,634,203 |
| Current assets | | |
| Inventories | **103,278** | 87,164 |
| Trade and bill receivables | **295,916** | 163,126 |
| Prepayments, deposits and other receivables | **469,801** | 429,252 |
| Cash at bank and on hand | **207,549** | 373,490 |
| | **1,076,544** | 1,053,032 |
| Current liabilities | | |
| Trade payables | **69,265** | 39,070 |
| Accruals and other payables | **216,950** | 154,590 |
| Corporate bond | **–** | 499,996 |
| Lease liabilities | **2,523** | – |
| Income tax payable | **3,871** | – |
| | **292,609** | 693,656 |
| Net current assets | **783,935** | 359,376 |
| Total assets less current liabilities | **3,494,001** | 2,993,579 |
| Non-current liabilities | | |
| Bank loans | **500,000** | – |
| Lease liabilities | **8,794** | – |
| Defined benefit retirement obligation | **25,216** | 25,362 |
| Deferred tax liabilities | **9,690** | 13,130 |
| Other long-term payables | **602** | 602 |
| Other non-current liabilities | **–** | 15,340 |
| | **544,302** | 54,434 |
| Net assets | **2,949,699** | 2,939,145 |
| Capital and reserves | | |
| Share capital | **319,875** | 319,875 |
| Reserves | **2,629,824** | 2,619,270 |
| Total equity | **2,949,699** | 2,939,145 |

## 39. IMMEDIATE AND ULTIMATE HOLDING COMPANY

As at 31 December 2022 and 2021, the directors of the Company consider the immediate and ultimate holding company of the Group to be CNNC, which is a state-owned enterprise established in the PRC. CNNC does not produce financial statements available for public use.

# FIVE YEAR SUMMARY

| | Note | 2022 | 2021 | 2020 | 2019 | 2018 |
|---|---|---|---|---|---|---|
| Results revenue | 4 | **6,146,172** | 5,143,694 | 4,274,183 | 3,988,904 | 3,249,708 |
| Profit from operations | | **912,744** | 777,821 | 614,775 | 720,594 | 676,100 |
| Finance costs | 6 | **(34,399)** | (35,803) | (34,977) | (18,758) | (7,714) |
| Share of profits less losses of associates | | **8,618** | 6,962 | (12,028) | 2,141 | (718) |
| Share of profits of joint ventures | | **33,548** | 53,698 | 28,393 | 29,830 | 24,952 |
| Profit before taxation | 6 | **920,511** | 802,678 | 596,163 | 733,807 | 692,620 |
| Income tax | 7 | **(165,947)** | (129,641) | (120,640) | (108,882) | (105,490) |
| Profit for the year | | **754,564** | 673,037 | 475,523 | 624,925 | 587,130 |
| Attributable to: | | | | | | |
| Equity shareholders of the Company | | **391,605** | 335,751 | 213,582 | 329,030 | 321,903 |
| Non-controlling interests | | **362,959** | 337,286 | 261,941 | 295,895 | 265,227 |
| Profit for the year | | **754,564** | 673,037 | 475,523 | 624,925 | 587,130 |
| **Assets and liabilities** | | | | | | |
| Property, plant and equipment | 12 | **2,820,749** | 2,512,947 | 2,210,150 | 1,987,037 | 1,339,798 |
| Investment property | 13 | **49,604** | 19,670 | 20,768 | 22,425 | 14,526 |
| Lease prepayments | | **–** | – | – | – | 115,925 |
| Intangible assets | | **160,876** | 156,496 | 148,363 | 108,382 | 48,928 |
| Goodwill | 18 | **30,764** | 44,036 | 43,875 | 43,875 | 5,670 |
| Interests in associates | 16 | **165,096** | 52,500 | 65,263 | 61,543 | 85,510 |
| Interests in joint ventures | 17 | **512,867** | 594,252 | 552,748 | 529,396 | 42,917 |
| Long-term receivables | | **38,997** | 37,176 | 35,440 | 33,784 | 32,206 |
| Unquoted equity investments | 19 | **162,494** | 150,410 | 137,014 | 151,492 | 125,491 |
| Other non-current assets | | **221,484** | 35,255 | – | – | – |
| Deferred tax assets | 31 | **9,899** | 214,445 | 200,556 | 265,045 | 206,263 |
| Net current assets | | **3,524,920** | 2,685,119 | 2,998,946 | 2,711,220 | 2,692,296 |
| Total assets less current liabilities | | **7,697,750** | 6,502,306 | 6,413,123 | 5,914,199 | 4,709,530 |
| Deferred tax liabilities | 31 | **(18,242)** | (17,347) | (14,186) | (18,383) | (8,347) |
| Other non-current liabilities | | **(1,126,225)** | (453,571) | (893,327) | (892,383) | (362,790) |
| **NET ASSETS** | | **6,553,283** | 6,031,388 | 5,505,610 | 5,003,433 | 4,338,393 |

# FIVE YEAR SUMMARY (CONTINUED)

| | Note | 2022 | 2021 | 2020 | 2019 | 2018 |
|---|---|---|---|---|---|---|
| **Capital and reserves** | | | | | | |
| Share capital | 33 | **319,875** | 319,875 | 319,875 | 319,875 | 319,875 |
| Reserves | 33 | **4,145,412** | 3,859,415 | 3,571,323 | 3,439,471 | 3,182,178 |
| Total equity attributable to equity shareholders of the Company | | **4,465,287** | 4,179,290 | 3,891,198 | 3,759,346 | 3,502,053 |
| Non-controlling interests | | **2,087,996** | 1,852,098 | 1,614,412 | 1,244,087 | 836,340 |
| **TOTAL EQUITY** | | **6,553,283** | 6,031,388 | 5,505,610 | 5,003,433 | 4,338,393 |
| Earnings per share | | | | | | |
| Basic and diluted (RMB) | | **1.22** | 1.05 | 0.67 | 1.03 | 1.15 |

Notes to the five year summary

1 As a result of the adoption of IFRS 16, *Leases*, with effect from 1 January 2019, the Group has changed its accounting policies in respect of the lessee accounting model. In accordance with the transitional provisions of the standard, the changes in accounting policies were adopted by way of opening balance adjustments to recognise right-of-use assets and lease liabilities as at 1 January 2019. After initial recognition of these assets and liabilities, the Group as a lessee is required to recognise interest expense accrued on the outstanding balance of the lease liabilities, and the depreciation of the right-of-use assets, instead of the previous policy of recognising rental expenses incurred under operating leases on a straight-line basis over the lease terms. Figures in years earlier than 2019 are stated in accordance with the policies applicable in those years.

2 As a result of the adoption of IFRS 15, *Revenue from contracts with customers*, with effect from 1 January 2018, the Group has changed its accounting policies in respect of revenue recognition. In accordance with the transitional provisions of the standard, the changes in accounting policies were adopted by way of opening balance adjustments to equity as at 1 January 2018. Figures in years earlier than 2018 are stated in accordance with the policies applicable in those years.

3 The Group adopted IFRS 9, *Financial instruments*, including the amendments to IFRS 9, *Prepayment features with negative compensation*, from 1 January 2018. As a result, the Group has changed its accounting policies in relation to financial instruments. As allowed by IFRS 9, the Group has not restated information relating to prior years. Differences in the carrying amounts of the financial assets resulting from the adoption of IFRS 9 were recognised in retained earnings and reserves at 1 January 2018. There was no difference in the carrying amounts of the financial liabilities. Prior to 1 January 2018, figures were stated in accordance with the policies applicable in those years.

4 As a result of the business combination under common control in 2019, figures for the years from 2017 to 2018 have been restated for comparison purposes.

# DEFINITIONS

| | |
|---|---|
| "404 Company" | CNNC 404 Company Limited |
| "AGM" | the annual general meeting of the Company |
| "Articles of Association" | the Articles of Association of China Isotope & Radiation Corporation |
| "China Baoyuan" | China Baoyuan Investment Co., Ltd. |
| "Board" or "Board of Directors" | the Board of Directors of the Company |
| "Board of Supervisors" | the Board of Supervisors of the Company |
| "China" or "PRC" | the People's Republic of China, for the purpose of this annual report, excluding Hong Kong, Macau and Taiwan |
| "CIAE" | China Institute of Atomic Energy |
| "CIRC", "Company", "our Company", "we" or "us" | China Isotope & Radiation Corporation, a joint stock company incorporated in the PRC with limited liability |
| "CNGT" | Chengdu Gaotong Isotope Co., Ltd. (CNNC) |
| "CNNC" | China National Nuclear Corporation |
| "CNNC Fund" | Beijing CNNC Industry Investment Fund (LLP) |
| "CNNC Tongxing" | CNNC Tongxing (Beijing) Nuclear Technology Co., Ltd. |
| "Company Law" | the Company Law of the People's Republic of China |
| "EGM" | the extraordinary general meeting of the Company |
| "EPC" | Engineering, procurement and construction |
| "Group" or "our Group" | the Company and its subsidiaries from time to time |
| "Listing Date" | 6 July 2018, being the date on which the H Shares are listed on the Stock Exchange |
| "Headway" | Shenzhen Zhonghe Headway Bio-Sci & Tech Co., Ltd. |
| "HTA" | HTA Co., Ltd. |
| "H Share(s)" | Overseas listed foreign shares in the ordinary share capital of the Company with a nominal value of RMB1.00 each, which are to be subscribed for and traded in HK dollars and have been approved for the granting of listing, and permission to deal, on the Stock Exchange |

# DEFINITIONS (CONTINUED)

| | |
|---|---|
| "HK$" or "HK dollars" | Hong Kong dollars and cents, respectively, the lawful currency of Hong Kong |
| "Hong Kong" or "HK" | Hong Kong Special Administrative Region of the PRC |
| "Listing Rules" | the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited |
| "Model Code" | the Model Code for Securities Transactions by Directors of Listed Issuers |
| "NPIC" | Nuclear Power Institute of China |
| "PBOC" | People's Bank of China |
| "Prospectus" | the prospectus of the Company dated 22 June 2018 |
| "Reporting Period" | the financial year ended 31 December 2021 |
| "RMB" | Renminbi, the lawful currency of the PRC |
| "Rounding" | In this report, where information is presented in hundreds, thousands, ten thousands, millions or hundred millions, certain amounts of less than one hundred, one thousand, ten thousand, one million or hundred million, as the case may be, have been rounded to the nearest hundred, thousand, ten thousand, million or hundred million, respectively. Amounts presented as percentages have, in certain cases, been rounded to the nearest tenth or hundredth of a percent. Any discrepancies in any table or chart between totals and sums of amounts listed therein are due to rounding |
| "SFO" | the Securities and Futures Ordinance (Chapter 571 of the Laws of Hong Kong), as amended, supplemented or otherwise modified from time to time |
| "Shareholder(s)" | holder(s) of the Share(s) of the Company |
| "Shenzhen CICAM" | Shenzhen CICAM Manufacturing Co., Ltd. |
| "Stock Exchange" | The Stock Exchange of Hong Kong Limited |
| "Supervisor(s)" | supervisor(s) of our Company |
| "Yunke Pharm" | Chengdu Yunke Pharmaceutical Co., Ltd. |
| "%" | per cent |

中國同輻股份有限公司
China Isotope & Radiation Corporation