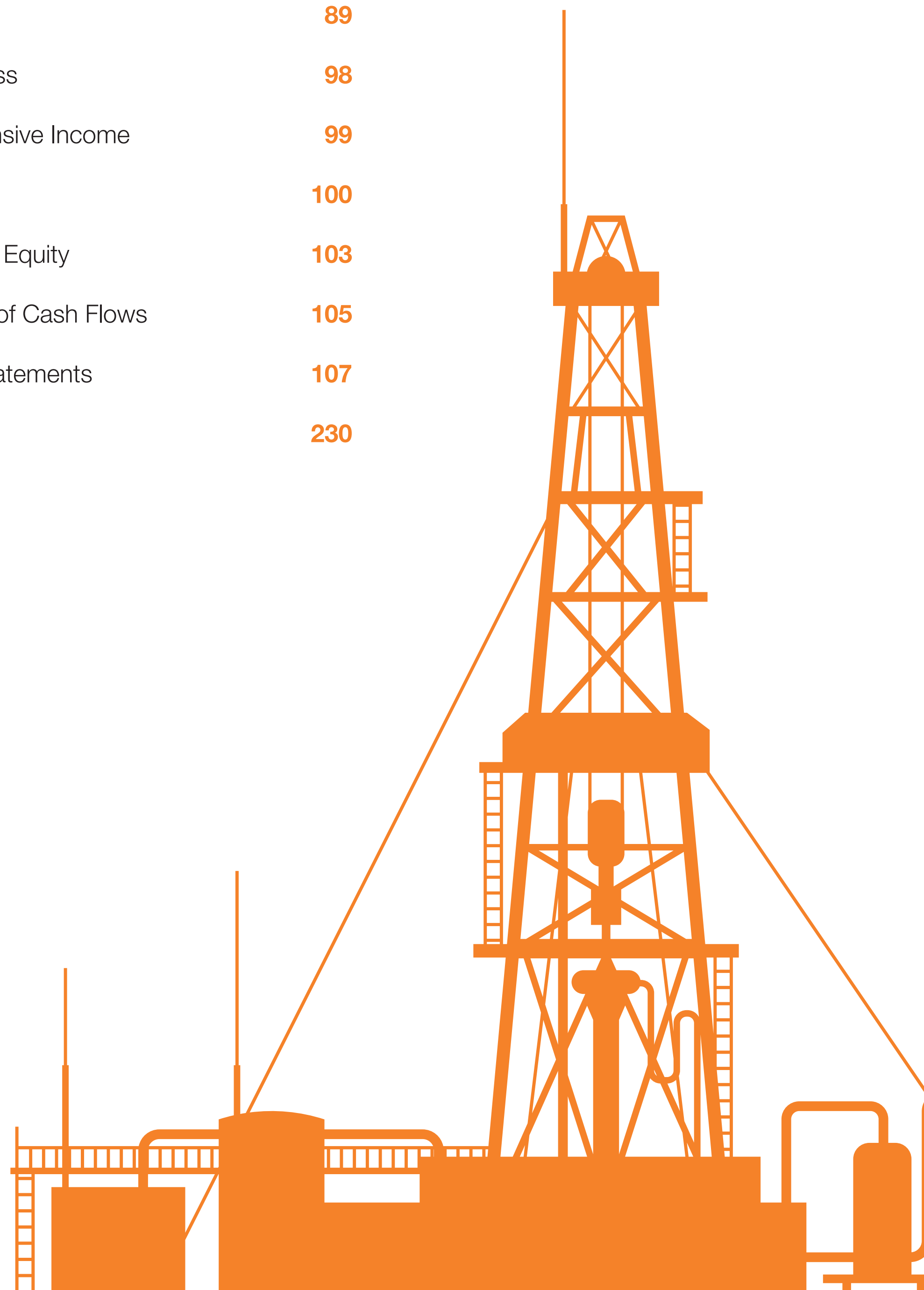
宏华集团有限公司
HONGHUA GROUP LIMITED

(incorporated in the Cayman Islands with limited liability)

Stock Code: 196

2021
ANNUAL REPORT

CONTENTS



CORPORATE INFORMATION

BOARD OF DIRECTORS

EXECUTIVE DIRECTORS

Jin Liliang *(Chairman)*
Ren Jie

NON-EXECUTIVE DIRECTORS

Zhang Mi *(Re-designated with effect from 1 January 2022)*
Han Guangrong *(Resigned with effect from 28 October 2021)*
Chen Wenle
Wang Xiuchang *(Appointed with effect from 28 October 2021)*

INDEPENDENT NON-EXECUTIVE DIRECTORS

Liu Xiaofeng *(Resigned with effect from 19 November 2021)*
Chen Guoming
Su Mei
Poon Chiu Kwok *(Resigned with effect from 1 December 2021)*
Chang Qing
Wei Bin

SECRETARY OF BOARD OF DIRECTOR

Zhuang Wenmin

BOARD COMMITTEES

AUDIT COMMITTEE

Wei Bin *(Committee Chairman)*
Liu Xiaofeng *(Resigned with effect from 19 November 2021)*
Chen Guoming
Su Mei
Poon Chiu Kwok *(Resigned with effect from 1 December 2021)*
Chang Qing

REMUNERATION COMMITTEE

Su Mei *(Committee Chairman, Appointed with effect from19 November 2021)*
Liu Xiaofeng *(Resigned with effect from 19 November 2021)*
Zhang Mi
Jin Liliang
Wei Bin

NOMINATION COMMITTEE (Formed on 29 December 2021)

Jin Liiang *(Committee Chairman, Appointed with effect from 29 December 2021)*
Chen Guoming *(Appointed with effect from 29 December 2021)*
Chang Qing *(Appointed with effect from 29 December 2021)*

STRATEGIC INVESTMENT AND RISK CONTROL COMMITTEE

Jin Liliang *(Committee Chairman)*
Zhang Mi
Ren Jie
Liu Xiaofeng *(Resigned with effect from 19 November 2021)*
Poon Chiu Kwok *(Resigned with effect from 1 December 2021)*
Chang Qing

JOINT COMPANY SECRETARIES

Zhuang Wenmin
Lee Mei Yi

LEGAL ADVISOR

AS TO HONG KONG LAW

Herbert Smith Freehills

PRINCIPAL BANKERS AND NON-BANK FINANCIAL INSTITUTIONS

Bank of China Limited
Industrial Bank Co., Ltd.
Agricultural Bank of China Limited
China Citic Bank Co., Ltd.
Ping An Bank Co., Ltd.
Evergrowing Bank Co., Ltd.
Industrial and Commercial Bank of China Limited
The Export-Import Bank of China
China Development Bank
Industrial and Commercial Bank of China (Asia) Limited
China Citic Bank International Limited
China Development Fund Co., Ltd.
Shanghai Pudong Development Bank Co., Ltd.
BankSinoPac（China）Ltd.,
Bank of Kunlun Co., Ltd.
Standard Chartered Bank (China) Limited

CORPORATE INFORMATION

AUDITOR

PricewaterhouseCoopers
Certified Public Accountants
22nd Floor, Prince's Building
Central
Hong Kong

REGISTERED OFFICE

Clifton House, 75 Fort Street
PO Box 1350
Grand Cayman, KY1-1108
Cayman Islands

HEAD OFFICE

99 East Road, Information Park,
Jinniu District
Chengdu, Sichuan, PRC
Post code: 610036

PLACE OF BUSINESS IN HONG KONG

Level 54, Hopewell Centre,
183 Queen's Road East
Hong Kong

PRINCIPAL SHARE REGISTRAR AND TRANSFER OFFICE

Ocorian Trust (Cayman) Limited
Windward 3, Regatta Office Park
PO Box 1350
Grand Cayman, KY1-1108
Cayman Islands

HONG KONG BRANCH SHARE REGISTRAR AND TRANSFER OFFICE

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

STOCK CODE

The Stock Exchange of Hong Kong Limited: 0196

WEBSITE

http://www.hh-gltd.com

FINANCIAL HIGHLIGHTS

	Year ended 31 December		
	2021	2020	
	RMB'000	RMB'000	Changes
OPERATING RESULTS			
Turnover	**2,936,604**	3,931,492	-25.3%
Operating (loss)/profit	**(610,213)**	227,416	-368.3%
(Loss)/profit before income tax	**(745,344)**	86,090	-965.8%
(Loss)/profit attributable to owners of the company	**(717,191)**	49,660	-1,544.2%
Figures per Share			
(Loss)/earnings per share-Basic (RMB cents)	**(13.54)**	0.94	-1,540.4%
(Loss)/earnings per share-Diluted (RMB cents)	**(13.54)**	0.94	-1,540.4%
FINANCIAL POSITION			
Total non-current assets	**4,998,483**	4,240,975	17.9%
Total current assets	**6,749,427**	7,771,402	-13.2%
Total assets	**11,747,910**	12,012,377	-2.2%
Total current liabilities	**7,793,243**	5,170,292	50.7%
Total non-current liabilities	**208,271**	2,347,458	-91.1%
Total liabilities	**8,001,514**	7,517,750	6.4%
Total equity	**3,746,396**	4,494,627	-16.6%

FINANCIAL HIGHLIGHTS

	Year ended 31 December		
	2021	2020	Changes
KEY FINANCIAL RATIOS*			
Gross profit margin	**12.4%**	30.0%	-17.6 percentage points
Net Margin	**(24.4%)**	1.3%	-25.7 percentage points
Return on average assets	**(6.0%)**	0.4%	-6.4 percentage points
Return on average equity	**(18.4%)**	1.2%	-19.6 percentage points
Current ratio	**0.87**	1.50	-42.0%
Quick ratio	**0.63**	1.24	-49.2%
Total debt/Total assets	**43.8%**	37.3%	6.5 percentage points
Total liabilities/Total assets	**68.1%**	62.6%	5.5 percentage points

* (Loss)/earnings exclude non-controlling interests
Equity excludes non-controlling interests

CHAIRMAN'S STATEMENT

DEAR SHAREHOLDERS AND FRIENDS,

In 2022, in the face of the extremely challenging industry environment such as repeated global epidemics, cautious capital expenditure worldwide and the policy vacuum period after the "rush of installation" in the offshore wind power business, we faced challenges with determination and confidence, and pursued a mindset of starting from zero as if we had started a new business. Identifying innovation as the key, we accelerated the transformation in "from equipment manufacturer to comprehensive solution provider", "from equipment sales to service-driven equipment sales", and from "equipment supply" to the dual-mode service of "equipment + software" containing both software and equipment manufacturing. However, due to the financial loss incurred from a debt default in the offshore segment, as well as the impact of repeated COVID-19 outbreaks and cautious capital expenditure worldwide, the exports of drilling equipment (especially drilling rigs) of the Group which had advantages traditionally bore the brunt in terms of number of orders, and thus the operating revenue still recorded a year-on-year decrease despite our proactive adjustment to the business structure during the year, resulting in the net loss attributable to shareholders of the Company.

During the Period, the Group demonstrated quite a few bright highlights in terms of market expansion, technological research and development, digital transformation, risk management and internal operations, which laid a foundation for our development in 2022. The major bright highlights are as follows:

1. **Made greater breakthroughs in market expansion over last year**. In terms of international market expansion, the total amount of new overseas drilling equipment orders signed throughout the year was RMB1.626 billion, representing an increase of 122% over 2020. As to the oil and gas engineering service segment, we managed to obtain a drilling service project comprising 96 wells, which had the longest operation cycle and the highest contract amount since our incorporation, with a total amount of approximately USD0.1 billion. Leveraging our comprehensive competitiveness based upon digital upgrade of electric fracturing, improved efficiency in pumping operations, and in combination with gas-fired power generation solutions, the electric fracturing business achieved sizeable and healthy development over the last three years. During the Period, the amount of new electric fracturing service orders was RMB0.8 billion, and the volume of operations increased by 24% year on year. For the offshore wind power segment, we successfully delivered the Qingzhou III booster station which was the largest and heaviest in Asia. Our large equipment construction capability was highly recognized, and we recorded an annual revenue of RMB600 million.

2. **Further strengthened our industrial layout in core parts and components**. We stepped up our efforts in the technological research and development of core parts and components, including the independent research and development and the production capabilities under our own control for top drives, five-cylinder pumps, automatic machine tools and other core parts and components, so as to further improve our layout along the industrial chain, increase the rate of in-house manufacturing of drilling rig parts, and enhance our product competitiveness. Three sets of lift-type "one-key linkage" system, with the tripping speed reaching 27 columns/hour, were sold through foreign sales. The advanced technology of the second-generation five-cylinder pump filled the gap in the industry and achieved sales of 30 sets.

3. **Accelerated digital transformation in the field of digitalization**. In respect of business layout, the Group made every effort to expand the automated drilling rig interaction system, and deepen cooperation with Schlumberger in the field of drilling digitalization, with the Drillops system being successfully deployed in the Middle East and broke into the Russian market for the first time. Meanwhile, the digital product OPERA was recognized and successfully bid by a foreign customer. In respect of business management and control, following the main lines of smart enterprise and digital system engineering, we completed the "14th Five-Year" implementation plan for digital construction, which strengthened data governance, and also completed the construction of an enterprise brain standard model linking two levels. Focusing on supply chain optimization, SRM and WMS had been fully launched in core units to realize monitoring throughout the procurement process. We introduced the preliminary application of the TCM structured process management system, and promoted PLM in all respects, which continued to improve the efficiency of digital scientific research and production.

4. **Persisted in fortifying the construction of our internal risk control system**. We improved our internal risk prevention system by establishing and refining the Group's management system and risk control system which were in line with the Group's international development and management across various sectors. First, we continued to rationalize the future development strategies of the Group and various business segments, explore the approach for our principal business to innovate and upgrade, and examine the development opportunities of emerging industries. Second, taking informatization as the main starting point for the Group's management and control, and centering on "strengthening internal control, preventing risks, and promoting compliance", we fully initiated the integration of legal compliance and risk control, thereby achieving online collaboration of contract management and litigation management, three unified audit standards with 100% legal compliance, and full-cycle information management in terms of rules, regulations and systems. Third, we continued to strengthen the establishment of our talent pool, introduce high-end talents through different channels, and improve our three-dimensional talent training system covering the entire career path. Fourth, we continued to make use of the synergy arising from the connection between our internal audit and the monitoring by the Supervisory Committee and the discipline inspection department, so as to give full play to the overall results of supervision, and prevent and control risks.

5. **Continued to improve our fundamental operational management capabilities**. We preliminarily established our value-oriented appraisal and incentive mechanism. By establishing a set of appraisal and evaluation standards centered on return on net assets, and increasing the weight of net profit and sales receipts in appraisals, we formed a more targeted indicator system, with a more specific operation and management direction created by business values. We also further optimized our human resource structure, and steadily promoted headcount reduction and efficiency enhancement. We currently have 2,838 employees (excluding Jiangsu Honghua), a decrease of 25.8% from the beginning of the year, while the proportion of professional and technical personnel increased by 4%, and the proportion of employees with Bachelor Degree or above increased by 6%.

CHAIRMAN'S STATEMENT

The world today is marked by changes unseen in a century. We are confronted with the in-depth development in the new round of technological revolution and industry reform, and an increasingly complex international environment with much further instability and more uncertainties, coupled with the far-reaching impact of the COVID-19 outbreak. The structural adjustment in the global energy industry has been accelerating. However, even though the industry market environment in 2022 has shown improvement compared to the previous two years, due to a combination of factors such as the Russo-Ukrainian War and the global pandemic, uncertainty remains the keynote of the global market.

2022 is a year of reinforcing the "14th Five-Year Plan", a year of ending "The Three-year Action Plan" for the Reform of State-owned Enterprises, and a year of being critical for the Group to adjust its industrial structure in response to the changes in the external environment. Regarding business expansion, leveraging its existing advantages of the oil and gas industry and its international business presence, the Group will pursue the development initiatives of "platform+industry" and "manufacturing+service," restoring the fundamentals of the international drilling equipment business. The Group will give full play to its advantages of pumping services on the basis of the electric fracturing equipment industry, so as to promote the service-driven sales of fracturing equipment. The Group will enhance the efficiency of market transformation of new products and technology, and increase the proportion of new products in sales revenue. The Group will innovate its marketing model and pursue online and offline integrated marketing for improvement in both product sales and publicity. The Group will revitalize assets of the onshore business in an orderly manner and continuously improve the overall profitability of Honghua Group. The Group will strengthen its cooperation with Dongfang Electric Corporation to expand the market together.

Regarding internal management, the Group will keep paying close attention to the pandemic dynamics at home and abroad as well as macroeconomic policies, analyze and examine macroeconomic trends, and formulate corresponding prevention and adjustment strategies and measures. The Group will increase investment in research and development and the application of new technologies, and further improve technological innovation. The Group will innovate its business model to improve the profitability of value-added services and after-market services. The Group will build an efficient operation and management body which adapts to market competition, strengthen benchmarking management, and improve operational efficiency. The Group will continue to strengthen scientific research and innovation, pursue the incubation of core technologies, new products and new industries, and make technological innovation the source of sustainable development of the Company. With reference to the development and changes of the industry and the operating conditions of each subsidiary, the Group will dynamically optimize its evaluation standards on value creation capability centered on the return on net assets, and continue to improve the operating results and process evaluation standard system.

Lastly, on behalf of the Board of Directors, I would like to express our sincere gratitude towards all shareholders, extensive customers, cooperation partners, the general public, and all the staff of Honghua Group for their continual care and support to our development.

Chairman
Jin Liliang

29 March 2022

MANAGEMENT DISCUSSION AND ANALYSIS

MANAGEMENT DISCUSSION AND ANALYSIS

In 2021, the Group's revenue amounted to RMB2,937 million, representing a decrease of 25.3% from RMB3,931 million for Previous Year. Gross profit was approximately RMB363 million, representing a decrease of 69.2% from RMB1,180 million for Previous Year. The loss attributable to equity shareholders was approximately RMB717 million.

MARKET REVIEW

After the massive lockdown measures in 2020 and early 2021, global economic activities gradually recovered by mid-year. At the end of 2021, many countries and regions tightened their epidemic prevention measures, including strengthening border epidemic prevention and control, against the Omicron strain, a variant of COVID-19, which brought pressure on the global economic recovery to a certain extent.

Despite the continuous spread of the global COVID-19 epidemic in 2021, WTI oil prices went up by more than 55% in a year, the greatest annual growth in 12 years; and Brent oil prices rose by more than 50% in a year, the largest annual increase in five years, due to multiple factors such as the increase in international crude oil demand brought about by the economic recovery in many countries, inadequate inventories, the relatively insufficient crude oil supply and a low oil price base in 2020. Crude oil prices continuously picked up in 2021, but global oil and gas capital expenditure remained tight as oil companies were still cautious about investing in upstream oil and gas exploration and development. According to the statistics of the IEA World Energy Investment report, in 2021, the capital expenditure for major upstream oil and gas projects worldwide only increased slightly by 8% year-on-year to USD350 billion, down 27% from 2019 and far below the average level of the past decade.

Domestically, in order to implement the "Seven-Year E&P Action Plan" to secure national energy security and boost reserves and output, each of the so-called China's "Three Barrels of Oil" increased its investments in upstream exploration, and continued with steady onshore oil and gas production with growing output. In 2021, the crude oil production of China was 198.976 million tons, representing a year-on-year increase of 2.4%, and the natural gas production was 205.26 billion cubic meters, representing a year-on-year increase of 8.2%. Shale gas was the driving force behind the unconventional gas reserves and output increase during the "14th Five-Year Plan" period. In 2021, the domestic shale gas production reached 23 billion cubic meters, representing a year-on-year increase of 15%.

In the wind power market, a "rush of installation" boom had been ignited in the PRC's offshore wind power industry since 2020 due to the phasing out of government subsidies for offshore wind power in 2022. In 2021, the PRC's newly commissioned offshore wind power reached 16.9 million kilowatts, representing a year-on-year increase of approximately 340%, and the total installed capacity reached 26.38 million kilowatts, ranking first in the world.

MANAGEMENT DISCUSSION AND ANALYSIS

BUSINESS REVIEW

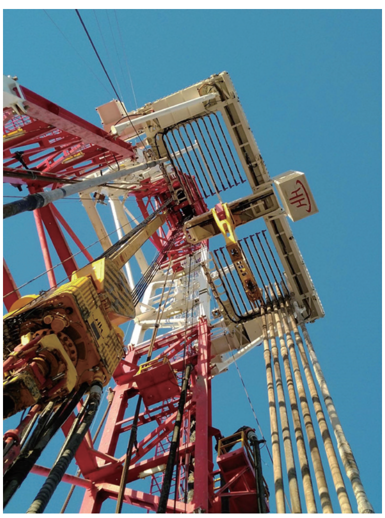
In the face of the extremely challenging industry environment such as repeated global epidemics, cautious capital expenditure worldwide and the policy vacuum period after the “rush of installation” in the offshore wind power business, the Group adjusted its market layout and sales strategy in a timely manner to strengthen its overseas market expansion, with overseas sales growing against the overall downward trend. Domestically, it intensified the execution of projects and resumed work and production efficiently, ensuring the stability of the supply chain and the timely delivery of orders. The Group firmly promoted its transformation in “from equipment manufacturer to comprehensive solution provider”, “from equipment sales to service-driven equipment sales”, and from “equipment supply” to the dual-mode service of “equipment + software” containing both software and equipment manufacturing, and made significant progress in digital transformation, new product development and new business expansion.

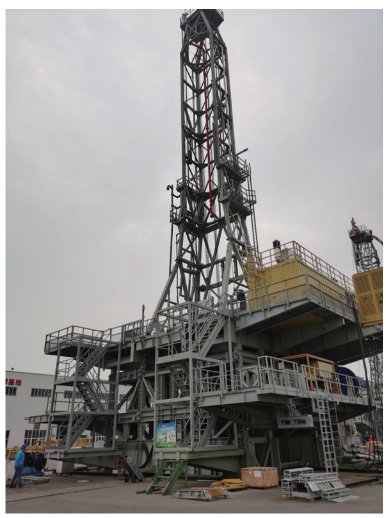
1. Drilling Equipment and Related Product Business Segment

In 2021, Honghua recorded the total number of 4 drilling rigs sold with an aggregate amount of approximately RMB60 million, representing a decrease of 90.35% from RMB622 million in the corresponding period of Previous Year. Sales return of a set of drilling rig amounted to approximately RMB72 million. Total sales of parts and components amounted to RMB1,693 million, representing a decrease of 1.7% from RMB1,722 million in the corresponding period of Previous Year.

During the Period, the international business of drilling equipment was greatly impacted, especially the business of complete drilling rigs which declined drastically, due to the persistent epidemic and the cautious capital expenditure of customers. The total amount of new overseas drilling equipment orders signed throughout the year was RMB1.626 billion, representing an increase of 122% over 2020. In particular, orders amounted to RMB1.1 billion, which accounted for nearly two-thirds of the total, were signed solely in the fourth quarter. As the newly signed drilling equipment orders were concentrated in the fourth quarter, they were not able to form a strong support for the revenue for the year.

For new products, novel products such as “one-key linkage” automated machines, second-generation five-cylinder pumps and coiled tubing machines achieved major market breakthroughs. The Group’s push-and-support “one-key linkage” system accumulated nearly one million meters of tripping in aggregate, and more than five sets were promoted in China; the lift-type “one-key linkage” system, with the tripping speed reaching 27 columns per hour and three sets sold through foreign sales, laid a solid foundation for the subsequent overseas market promotion of new products; the advanced technology of the second-generation five-cylinder pump filled the gap in the industry and achieved sales of 30 sets; the PRC’s first electric-driven coiled tubing machine developed by the Group achieved commercial sales immediately upon completion of the industrial test.





Under the philosophy of onshore manufacturing of offshore equipment and with the support of Honghua's onshore manufacturing base, the Group set records in offshore wind power equipment manufacturing. For instance, Qingzhou III Offshore Wind Power Project, in which Honghua participated, had been the tallest deep-water offshore wind power jacket in Asia and the deep-water offshore wind power project with the farthest offshore, the deepest water depth, the largest single-machine capacity and the largest total installed capacity in China. For the first time in China, Honghua adopted the method of vertical joining of an onshore gantry crane to build a suction jacket, which helped effectively reduce the project duration and safety risks. The Group recorded an annual revenue of RMB600 million.

In the digitalization field, the Group made every effort to expand the automated drilling rig interaction system, and deepen cooperation with Schlumberger in the field of drilling digitalization, with the Drillops system being successfully deployed in the Middle East and broke into the Russian market for the first time. Meanwhile, the digital product OPERA was recognized and successfully bid by a foreign customer. During the Period, the scope expansion of "double soft certification" of software enterprises and software products, plus ISO9001, the three-certificate "system integration", was completed. The African project signed with Sinopec during the Year imposed high requirements on environmental protection, animal friendliness and noise, with a total contract value of RMB230 million. The drilling rig was not only equipped with the one-button linkage automatic machine tool, direct-drive pump and pump quick release tool independently developed by the Group, but also adopted the Group's automated drilling solutions, including the integrated drilling intelligence system, regional management system and drilling rig automation control platform, which could improve the automation control level of drilling rigs and enhance the safety protection between equipment.

As at 28 February 2022, Honghua's total contract backlog of drilling rigs and related products amounted to approximately RMB1,675 million, including onshore drilling rigs of approximately RMB772 million.

2. Fracturing Equipment and Service Business

During the Period, Honghua Electric further consolidated the market competitiveness of Honghua's fracturing equipment and services through digital upgrade of electric fracturing, high-efficiency pumping construction operations, in combination with gas-fired power generation solutions and special power grid electricity framework services. The equipment and engineering services provided during the Period achieved a total sales amount of approximately RMB1,019 million, an decrease of 24% over the corresponding period of Previous Year.

The Group had a total of 16 pumping teams which completed more than 5,400 fracturing operations during the Year, representing an increase of 24% over the corresponding period of Previous Year, including more than 4,700 shale gas operations and 700 shale oil operations. In terms of operation efficiency, a platform of Sinopec in Nanchuan area of Chongqing, in which the Group participated, set a national fracturing operation speed record of 12 fracturing stages per day per well per machine; a well with a total length of 3,583 meters in which the Group participated successfully completed 50 stages of staged fracturing operations, hitting a new record for the longest horizontal shale gas well construction in which the Group participated. In 2021, the full-process electric fracturing automation successfully realized industrialized application in Sinopec's southeastern Sichuan block, with smart fracturing achieving a staged breakthrough; the domestic shale oil market achieved a breakthrough by obtaining the Hua H100 project, the largest onshore horizontal shale oil well in Asia.

In respect of fracturing equipment for unconventional oil and gas development, Honghua carried out a comprehensive digital upgrade of the first-generation electric fracturing pump and its supporting equipment manufactured in the early stage to realize sales, with a sales amount of approximately RMB322 million. In specialty power, Honghua entered into grid power frameworks and service contracts for multiple projects with subsidiaries of Sinopec and PetroChina, and completed the qualifications for electricity sales in five regions; and it promoted the successful application of the all-gas power supply mode with Sinopec's first electric fracturing platform in southwest China.

As at 28 February 2022, Honghua's total contract backlog of fracturing equipment and service business amounted to approximately RMB290 million.

3. Oil and gas engineering service business

The total sales amount of oil and gas engineering services provided by the Group amounted to approximately RMB237 million, representing a decrease of 4.4% from RMB248 million in the corresponding period of Previous Year.

During the Period, the overseas market grew well, and the sales amount of international oil and gas engineering services was approximately RMB209 million, representing a year-on-year increase of 59.5%. The newly signed overseas oil and gas engineering services orders amounted to approximately USD120 million, hitting a new high in recent years. The Iraqi HH029 team, which was established less than two and a half years ago, was the only well team that did not suspend operations during the epidemic. Handing over a total of 20 wells with a cumulative footage of 67,177 meters, the team constantly refreshed the moving records as well as the drilling and completion records, without any lost-time incident for 920 consecutive days. With its excellent operational capabilities, Honghua signed long-term service agreements with various internationally renowned oilfield service companies, with one of the drilling rig agreements having a service period of 54 months, as the contract with the longest service period and the highest amount in the history of Honghuao's oil services. The project commenced operation in November 2021 to bring stable and continuous cash flow to Honghua.

In the domestic market, customers significantly reduced their investments. Service prices also continuously decreased. Domestic oil and gas engineering services achieved sales of approximately RMB28 million, representing a year-on-year decrease of 76.1%. When the Southwest shale gas market began to fully recover, the Group planned ahead, actively participated in the market and seized the opportunities to acquire two integrated drilling and fracturing projects for deep shale gas, and 12 wells on two platforms with a workload of RMB540 million. For the first time, the Group realized direct cooperation with a subsidiary of CNPC.

As at 28 February 2022, the Group's total contract backlog of drilling engineering services business amounted to approximately RMB1.03 billion.

QUALITY MANAGEMENT AND RESEARCH & DEVELOPMENT

During the Period, Honghua continued to ensure the effective operation of its quality control system and made a breakthrough in obtaining certifications for its product. We obtained 9 product certificates, successfully passed API 8C inspection standard audit, added 77 CMA inspection standards, participated in the formulation and revision of 5 national and industry standards and issued 3 national and industry standards. We also achieved refined quality management, and improved the quality of high-power fracturing equipment and high-power and high-voltage pump products, which was well received by users. The product system of the "one-key linkage" series maintained stable and efficient operation, placing it in a leading position in the industry. We continuously carried out "zero defect" quality activities to create a quality atmosphere in which everyone was able to achieve 100% quality, and fulfill the development requirements of improving the quality of all staff.

In 2021, centering around the deep integration of machine, electricity, liquid, as well as the idea of automation, information and intelligence of drilling and well completion equipment and services, the Group developed the application technology for the fully electric technology in powered catwalks and piping machines, and developed a "one-button" connection machine and equipment system with the characteristics of increase in speed and efficiency, decrease in headcount and safety. The intelligent drilling machine project completed the prototype testing of key systems and key components, the intelligent electric fracturing system project established a digital fracturing simulation laboratory and the comprehensive drilling intelligent system UNISON project launched the OPERA product and drilling expert system.

During the Period, the Group had a total of 617 effective patents, including a total of 189 effective invention patents, applied for 167 new patents, including 99 invention patents, and were granted 103 patents, including 16 invention patents.

HUMAN RESOURCES MANAGEMENT

To better support industry transformation and upgrade and promote the achievement of high-quality development goals, the Group steadily adjusted its staff structure, improved talent quality and improved average efficiency. At the end of 2021, the total headcount of the Group was 2,838 (2,953, including Jiangsu Honghua), representing a decrease of 732 (617, including Jiangsu Honghua) or 25.8% (20.9%, including Jiangsu Honghua) as compared with the corresponding period of Previous Year, mainly due to the reduction and optimization of non-key business, redundancy and staff with poor performance. The Group had a total of 542 R&D staff (551, including R&D staff in Jiangsu Honghua), representing an increase of 3.62% as compared with the corresponding period of Previous Year (an increase of 5.35%, including R&D staff in Jiangsu Honghua), which mainly due to the replenishment of young technological talents for strategic business, emerging industries and key projects. The Group fully implemented the management of employment system and contracts for management members across all levels, closely connected the performance appraisal, compensation and incentive, duties and positions and the operating performance of the Company to ensure that managers can be promoted and demoted, and their compensation can be increased or decreased. We continued to strengthen the establishment of the key talent teams in technology, marketing, quality and process. In addition, experts that enjoy State Council's special subsidies, academic and technology leaders in Sichuan Province, as well as experts and talents with Aerospace National Award for Excellence (航天報國英才獎) and Aerospace Contribution Award (航天貢獻獎) continued to emerge.

The Group continued to vigorously implement talent training and nurturing, increased 691 training sessions for its business capacity, covering talents in management, professional technology and skills, obtained 1,424 qualification certificates and ensured its staff to have required certificates. The Group implemented precision training with an aim to problem-solving, conducted special training on enhancing the performance of external directors and supervisors, supply chain system management and corporate operation, upgrading innovation ability and constructing new development direction, so as to improve the operation and management ability of the management and their ability in response to urgent and difficult tasks. The Group focused on improvement in its professional ability and comprehensive quality, conducted special training on product knowledge, process, cost management, digital transformation to ensure that the capacity structure of the employees is in line with the industry structure of the Company. The Group built the Honghua digital education and training platform, which integrated high-quality training resources in the market and the industry, so as to promote training digitization and information transformation. The Group continued to engage industry-leading talents and young innovative technology talents in automation, software development, cloud computing, big data, etc. The Group strengthened the core organizational capacity of the Honghua Group by optimizing the performance appraisal system, incentive allocation and talent selection evaluation system under the value chain-oriented principle.

FUTURE OUTLOOK

The overall pandemic trend in 2022 is likely to improve, which will have a positive impact on oil prices. While the Delta and Omicron variants persist, vaccination and herd immunity will continue to weaken the pandemic, and the global economy is likely to remain on the way to recovery. In 2022, the global crude oil supply will continue to increase and shift towards pre-pandemic levels. Capital expenditure in the oil and gas sector worldwide is expected to return to USD400 billion, which remains to be a significant decrease of 19% as compared with 2019. The prudent production control policy of OPEC+ may continue, and the pursuit of high oil prices by oil-producing countries will, to a certain extent, limit the crude oil supply. The Russian-Ukrainian conflict has become an uncertainty in the future oil and gas supply. Although negotiation between Russia and Ukraine is now underway, it is unlikely that an agreement can be reached in the short term. Under the limitation of oil and gas safety, the domestic markets will continue to implement plans to increase production. In addition to shale gas, shale oil and tight gas are important sources in growth in 2022.

In the offshore wind power market, cost reduction and efficiency increase have become common pursuits. After the record-breaking centralized production of offshore wind farms in 2021, the new production scale is expected to slow down in 2022, with a compound annual growth rate of approximately 23% in the next four years. With the full withdrawal of the “national subsidy” policy, the development of wind-photovoltaic hybrid power storage advanced rapidly, the shift towards large-scale wind turbines is accelerating, and all aspects of the wind power industry chain are facing fierce competition.

Leveraging its existing advantages of the oil and gas industry and its international business presence, the Group will pursue the development initiatives of "platform+industry" and "manufacturing+service," restoring the fundamentals of the international drilling equipment business and increasing the proportion of its international business. The Group will give full play to its advantages of fracturing services and pumping services on the basis of the electric fracturing equipment industry, so as to promote the service-driven sales of fracturing equipment. The Group will enhance the efficiency of market transformation of new products and technology, making the one-key linkage automation tools and new five-cylinder pumps important factors to promote the transformation and upgrade of drilling equipment business and optimize industry development. The Group will concentrate its resources to cultivate 1-2 new product lines to support high-quality development in the next 3-5 years. In the wind power business, the Group will strengthen its cooperation with Dongfang Electric, increase the market share of its wind power business, and gradually restore the profitability of Honghua Offshore.

With regard to internal management, the Group will strengthen the refined management across all procedures and aspects, continue to implement strict cost planning and integrate cost control into design, R&D, production, logistics, which together will optimize cost structure. With regard to supply chain management, the Group will implement the efficient synergy among its procurement plan, production plan and sales plan, and establish a win-win mechanism of the long-term development and synergetic growth between the Group and its strategic suppliers, so as to meet the diverse business needs and facilitate business growth with high-quality supply chain resources. With regard to internal resource allocation, investments will be made according to production, and internal resources will shift towards companies, businesses and teams that generate higher values. With regard to turnover, the Group will strengthen the revitalization of the inventory and relevant business of Honghua Offshore, improve the efficiency of asset utilization, and continuously enhance the overall profitability of Honghua. With regard to culture establishment, the Group will continuously improve the Group's cultural management system, deepen its core values, enhance staff satisfaction and dedication, enhance their sense of honor and mission, and build a more active, transparent, fair and honest corporate culture. At the same time, the Company will also continue to strengthen its requirements in labor, occupational health and environmental protection to ensure sustainable development.

FINANCIAL REVIEW

During the Year, the Group's gross profit and loss attributable to shareholders of the Company amounted to approximately RMB363 million and RMB717 million respectively, and gross margin and net loss margin amounted to approximately 12.4% and 24.4% respectively. In the Previous Year, the gross profit and profit attributable to shareholders of the Company amounted to approximately RMB1,180 million and RMB50 million respectively, and gross margin and net profit margin amounted to approximately 30.0% and 1.3% respectively. The loss attributable to shareholders of the Company is primarily due to the financial losses caused by the debt default of the Offshore Segment,and the combined impact of the COVID-19 pandemic and the cautious capital expenditure worldwide, the exports of petroleum equipment (especially drilling rigs) of the Group which had advantages traditionally bore the brunt in terms of number of orders, thus the operating revenue still recorded a year-on-year decrease despite our proactive adjustment to the business structure during the Year.

Turnover

During the Year, the Group's revenue amounted to approximately RMB2,937 million, representing a decrease of RMB994 million or 25.3% from RMB3,931 million for Previous Year. Due to the influence of the COVID-19 epidemic, overseas orders for rigs and business performance in international markets decreased, resulting in a decrease compared with the Previous Year.

(i) Revenue by geographical locations

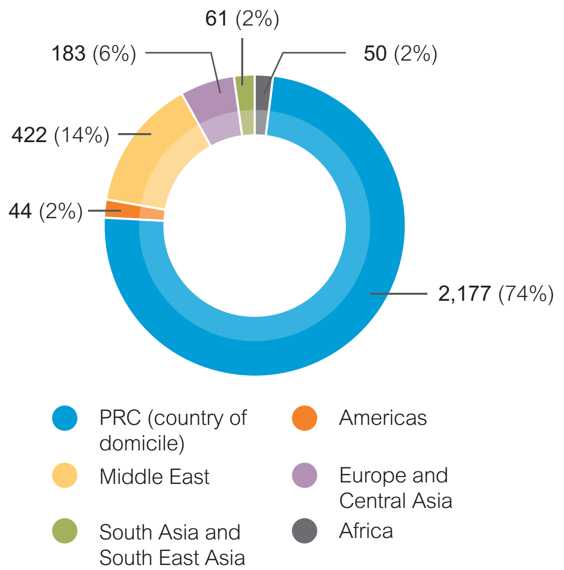
The Group's revenue by geographical segment during the Year: (1) revenue generated from the PRC amounted to approximately RMB2,177 million, accounting for approximately 74.1% of the total revenue, representing a decrease of RMB729 million as compared to Previous Year; (2) The Group's export revenue amounted to approximately RMB760 million, accounting for approximately 25.9% of the total revenue, representing a decrease of RMB265 million as compared to Previous Year.

The regional distribution of the Group's sales revenue is influenced by the changes of oil and gas exploitation activities in various regions of the world. The Group continues to adhere to technological innovation, improve the quality of products and services and strictly control operating costs. At the same time, the Group adheres to promote sustained growth in the domestic market and have become the new performance cornerstone, by continuously expanding the domestic market, the domestic shale gas market and offshore wind power projects.

Revenue by geographical locations

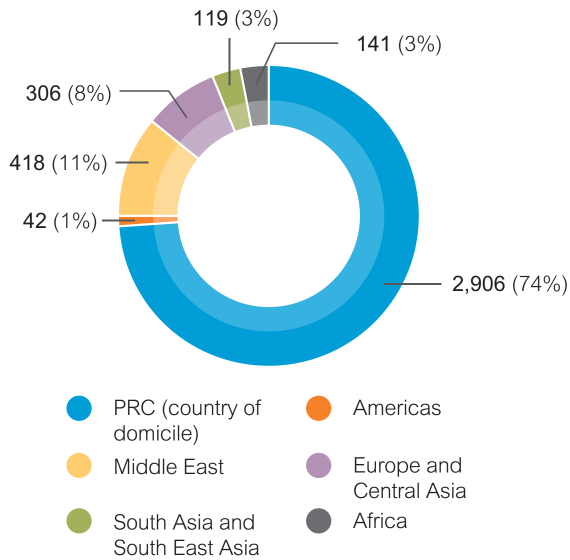
Ended 31 December 2021

(Expressed in RMB'million)



Ended 31 December 2020

(Expressed in RMB'million)



(ii) Revenue by operating segments

The Group's business are divided into four segments, namely, land drilling rigs, parts and components and others, drilling engineering service business and fracturing business.

During the Year, external revenue from land drilling rigs amounted to approximately RMB60 million, sales return from Previous Year amounted to approximately RMB72 million, representing a decrease of RMB634 million or 101.9% from approximately RMB622 million for Previous Year.

During the Year, external revenue from parts and components and others amounted to approximately RMB1,693 million, representing a decrease of RMB29 million or 1.7% from approximately RMB1,722 million for Previous Year.

During the Year, external revenue from drilling engineering service business amounted to approximately RMB237 million, representing a decrease of RMB11 million or 4.4% from approximately RMB248 million for Previous Year.

During the Year, external revenue from fracturing business amounted to approximately RMB1,019 million, representing a decrease of RMB320 million or 23.9% from approximately RMB1,339 million for Previous Year.

Cost of Sales

During the Year, the Group's cost of sales amounted to approximately RMB2,574 million, representing a decrease of RMB177 million or approximately 6.4% as compared to RMB2,751 million in the Previous Year. Mainly affected by the reduction of sales scale, the cost of sales of each sector has also decreased.

Gross Profit and Gross Margin

During the Year, the Group's gross profit amounted to approximately RMB363 million, representing a decrease of RMB817 million or 69.2% from RMB1,180 million for Previous Year.

During the Year, the Group overall gross margin was 12.4%, representing a decrease of 17.6 percentage points from 30.0% for Previous Year. These were mainly due to the restructuring of the group's business, the decrease in drilling rig sales and the increase in the proportion of products with low gross margin.

Expenses in the Year

During the Year, the Group's distribution expenses amounted to approximately RMB162 million, representing a decrease of RMB16 million or 9.0% from RMB178 million for Previous Year. This was mainly due to the decrease in related project expenses affected by decrease in sales revenues.

During the Year, the Group's administrative expenses amounted to approximately RMB481 million, representing a decrease of RMB67 million or 12.2 % from RMB548 million for Previous Year. This was mainly due to the continuing effect of the Group's cost-cutting and efficiency-improving measures and the strict control and management of administrative expenses,and the adjustment in R&D investment.

During the Year, the Group's net finance expenses amounted to approximately RMB133 million, representing a increase of RMB7 million or 5.6% from RMB126 million for Previous Year. This was mainly due to the increase of financing cost affected by the increase in financing scale.

Loss before Income Tax

During the Year, the Group's loss before income tax amounted to approximately RMB745 million, representing a decrease of RMB831 million or 966.3% as compared to the profit before income tax of RMB86 million in the Previous Year.

Income Tax Credit

During the Year, the Group's income tax credit amounted to approximately RMB11 million, compared to the income tax expense of approximately RMB26 million in the Previous Year.

Loss for the Year

During the Year, the Group's loss for the Year amounted to approximately RMB734 million compared with the profit of approximately RMB60 million for Previous Year. Specifically, loss attributable to equity shareholders of the Company was approximately RMB717 million, and the loss attributable to non-controlling interests was approximately RMB17 million. During the Year, the net loss margin was 24.4%, compared with the net profit margin of 1.3% for Previous Year.

Earnings before Interest, Taxes, Depreciation and Amortization ("EBITDA") and EBITDA Margin

During the Year, EBITDA amounted to RMB -432 million, compared with approximately RMB408 million for Previous Year. This was mainly attributable to the reduction in oversea orders and sales revenues, and the financial losses caused by the debt default of the Offshore Segment. The EBITDA margin was -14.7%, compared with 10.4% for Previous Year.

Dividends

As at 31 December 2021, the Board does not recommend distribution of annual dividends.

Source of Capital and Borrowings

The Group's principal sources of capital include cash from operations, bank borrowings and securities financing.

As at 31 December 2021, the Group's bank borrowings and senior notes amounted to approximately RMB5,146 million, representing an increase of RMB661 million as compared to the amount as at 31 December 2020. Specifically, borrowings repayable within one year amounted to approximately RMB5,146 million, representing an increase of RMB2,891 million or 128.2%, as compared to 31 December 2020.

Deposits and Cash Flow

As at 31 December 2021, the Group's cash and cash equivalents amounted to approximately RMB703 million, representing a decrease of approximately RMB249 million as compared to 31 December 2020.

During the Year, the Group's net cash outflow from operating activities amounted to approximately RMB983 million; net cash inflow from investing activities amounted to approximately RMB9 million; and net cash inflow from financing activities amounted to approximately RMB730 million.

Assets Structure and Changes

As at 31 December 2021, the Group's total assets amounted to approximately RMB11,748 million. Specifically, current assets amounted to approximately RMB6,750 million, accounting for 57.5% of total assets, representing a decrease of RMB1,021 million as compared to the amount as at 31 December 2020. This was mainly due to the decrease in contract assets, trade and other receivables. Non-current assets amounted to approximately RMB4,998 million, accounting for 42.5% of total assets, representing an increase of approximately RMB757 million as compared to the amount as at 31 December 2020. This was mainly due to the increase in real estates, plant and equipment in the Offshore Segment.

Liabilities

As at 31 December 2021, the Group's total liabilities amounted to approximately RMB8,002 million. Specifically, current liabilities amounted to approximately RMB7,793 million, accounting for approximately 97.4% of total liabilities, representing an increase of approximately RMB2,623 million as compared to 31 December 2020. And non-current liabilities amounted to approximately RMB209 million, accounting for approximately 2.6% of total liabilities, representing a decrease of approximately RMB2,138 million as compared to 31 December 2020. As at 30 December 2021, the Group's total liabilities/total assets ratio was 68.1%, representing an increase of 5.5 percentage points as compared to 31 December 2020.

Equity

As at 31 December 2021, the total equity amounted to approximately RMB3,746 million, representing a decrease of RMB749 million as compared to 31 December 2020. The total equity attributable to equity shareholders of the company amounted to approximately RMB3,537 million, representing a decrease of RMB732 million as compared to 31 December 2020. Non-controlling interests amounted to approximately RMB209 million, representing a decrease of RMB16 million as compared to 31 December 2020. During the Period, the Group's basic loss per share was RMB13.54 cent, and diluted loss per share was RMB13.54 cent.

Capital Expenditure, Major Investment and Capital Commitments

During the Year, capital expenditure of the Group on infrastructure and technical improvements amounted to approximately RMB151 million, representing a decrease of approximately RMB32 million as compared to Previous Year.

As at 31 December 2021,the capital commitment of the Group amounted to approximately RMB10 million, which was used to optimize and adjust the Group's business and production capacity.

BIOGRAPHICAL DETAILS OF DIRECTORS AND SENIOR MANAGEMENT

EXECUTIVE DIRECTORS

Mr. Jin Liliang (金立亮先生), aged 55, has been an Executive Director of the Company and chairman of the Board since 24 August 2018. Mr. Jin joined in China Aerospace Science and Industry Corporation Limited ("CASIC") in1993. He was a vice president of a subsidiary of CASIC. Mr. Jin has rich experience of corporate operation and management. He holds a Master's Degree of Engineering from Harbin Institute of Technology. Positions held by Mr. Jin in the Company's subsidiaries are set forth in the table below.

Subsidiary	Position	Term of Office
Honghua Holdings Limited	Chairman	Since 29 December 2018
Honghua (China) Investment Co., Ltd.	Chairman	Since 10 October 2018

Mr. Ren Jie (任杰先生), aged 55, has been an Executive Director of the Company since 18 January 2008. He has been the senior vice-president of the Company since 1 January 2016. In 1990, Mr. Ren earned a Bachelor's Degree in mining machinery from Southwest Petroleum University, located in Sichuan Province, specializing in petroleum and natural gas. In 1995, Mr. Ren obtained an engineering qualification, granted by the China National Petroleum Corp., Sichuan Petroleum Administration. In November 2007, he also became a member of the 5th Edition Committee of the Oil Field Equipment Journal, and in 2012, he earned a Doctor's Degree in Mechanical Design and Theory from Southwest Petroleum University. Positions held by Mr. Ren in the Company's subsidiaries are set forth in the table below.

Subsidiary	Position	Term of Office
Honghua Holdings Limited	Director	Since 18 August 2006
Sichuan Honghua Petroleum Equipment Co.,Ltd.	Director	Since 31 December 1997
	Chairman	Since 1 January 2018
Honghua International Co., Ltd.	Director	Since 13 January 2004
Honghua (China) Investment Co., Ltd.	Director	Since 19 October 2009
Honghua America, LLC.	Director	Since 10 October 2008

BIOGRAPHICAL DETAILS OF DIRECTORS AND SENIOR MANAGEMENT

NON-EXECUTIVE DIRECTORS

Mr. Zhang Mi (張弭先生), aged 65, has been re-designated from Executive Director to the Non-Executive Director of the Company and resigned as the President of the Company and vice Chairman of the Board on 1 January 2022. He was the Executive Director from June 2007 to December 2021, the Chairman of the Board from June 2007 to March 2017 and the vice Chairman of the Board from March 2017 to December 2021. Mr. Zhang graduated from the Sichuan Petroleum Administration Vocational University in 1982, with a diploma in machinery manufacture, design and equipment. He graduated from the Party Institute of Sichuan Provincial Committee Correspondence College in 1998, with a Degree in Economics and Management. In 2004, he then obtained a senior engineer qualification granted by the Committee for Evaluation of Senior Technical Positions of the China National Petroleum Corp. He has been receiving special subsidies granted by the State Council of the PRC government since February 2007, for his significant contribution to the development of machinery engineering in the PRC. Positions held by Mr. Zhang in the Company's subsidiaries are set forth in the table below.

Subsidiary	Position	Term of Office
Honghua Holdings Limited	Director	Since 18 August 2006
	Chief Executive Officer	Since 8 September 2009
Sichuan Honghua Petroleum Equipment Co.,Ltd.	Director	Since 31 December 1997
Honghua International Co., Ltd.	Director	Since 13 January 2004
Honghua (China) Investment Co., Ltd.	Director	Since 19 October 2009
Honghua Oil & Gas Engineering Services Co., Ltd.	Director	Since 14 April 2009
Honghua America, LLC.	Chairman	Since 11 October 2004

Mr. Chen Wenle (陳文樂先生), aged 42, has been a Non-executive Director of the Company since 29 March 2017. Mr. Chen is currently the vice general manager of Shenzhen Aerospace Industry Technology Research Institute Co., Ltd. Mr. Chen has worked in Shum Yip Group Limited and joined in CASIC in 2011. Mr. Chen obtained Bachelor of Finance Degree from Shandong University in 2003 and Master of Economics Degree from Shanghai University of Finance and Economics in 2006.

Mr. Wang Xiuchang (王秀昌先生), aged 58, has been the Non-executive Director of the Company since 28 October 2021. Mr. Wang is currently the senior specialist of China Volant Industry Co., Ltd.. He obtained a Bachelor of Engineering Degree from the Harbin Institute of Technology in 1987. He was the director and president of China Volant Industry Co., Ltd. and the vice chairman and general manager of China Aerospace Automobile Co., Ltd..

BIOGRAPHICAL DETAILS OF DIRECTORS AND SENIOR MANAGEMENT

INDEPENDENT NON-EXECUTIVE DIRECTORS

Mr. Chen Guoming (陳國明先生), aged 59, has been an Independent Non-executive Director of the Company since 18 January 2008. Mr. Chen is now a Professor, a Ph.D. candidate supervisor, a member of the Academic Committee, the Chief officer of Research Centre of Security technique of the Offshore Oil & Gas Equipment, the Chief officer of Professor Committee in the Department of Mechanical and Electrical Engineering of China University of Petroleum. Mr. Chen is Currently the Chief officer of Shandong Key Laboratory of Petroleum Mechanical Engineering; a member of the Quality & Reliability Committee of the China Petroleum Society, the Offshore Engineering Committee of China Naval Architects and Marine Engineers' Society and China Mechanical Engineering Society. He has been receiving special subsidies granted by the State Council of the PRC government (政府特殊津貼) since August 2005. In 1982, Mr. Chen graduated from the Mechanical Department of the East China Petroleum Institute with a Bachelor's Degree. He earned his Master's Degree in 1986, from the Beijing Graduate School of East China Petroleum Institute. He obtained his Ph.D. Degree in 1999, and was promoted to Ph.D. candidate supervisor in 2000.

Ms. Su Mei (蘇梅女士), aged 53, has been an Independent Non-executive Director of the Company since 29 March 2017. Ms. Su is currently the chief executive officer of Beijing YaMeiHeZhong Consultanting Co., Ltd.. Ms. Su once had leaderships in Discipline Inspection Commission of Sichuan Province and Sichuan Development and Reform Commission and State-owned Assets Supervision and Administration Commission of State Council, worked as the vice-president in Sichuan Provincial Investment Group, the chairman of Sichuan Chuantou Water Group and vice president of Joneson Group. Ms. Su obtained Doctor's Degree in finance from Sichuan University in 2013, and obtained Bachelor's Degree of Chinese from Shandong University in 1991.

Mr. Chang Qing (常清先生), aged 65, has been an Independent Non-executive Director of the Company since 15 June 2017. Mr Chang is currently the chairman of Jinpeng International Futures Co., Ltd. and a professor of College of Economics and Management of China Agricultural University. Mr. Chang is now acting as an independent non-executive director of Kangda International Environmental Company Limited and China Chengtong Development Group Limited. He previously served as independent non-executive directors of Tibet Summit Resources Co., Ltd., TBEA Co., Ltd., Shenwu Environmental Technology Co., Ltd. and Yuan Long Ping High-Tech Agriculture Co., Ltd. respectively. Mr. Chang graduated from the Chinese Academy of Social Sciences with a Doctorate Degree in agricultural economics and management in 2001, graduated from Jilin University with both a Master's Degree in national economics in 1985 and a Bachelor's Degree in economics in 1982.

Mr. Wei Bin (魏斌先生), aged 52, has been an Independent Non-executive Director of the Company since 29 August 2019. Mr. Wei is currently the asset management senior partner of CDH Investments Management (Hong Kong) Limited and executive director of OCI International Holdings Limited. Mr. Wei was the chief accountant and the chief financial officer of the China Resources (Holdings) Company Limited. In the past three years, he has been a non-executive director of two listed companies of the Stock Exchange of Hong Kong. He was a non-executive director of China Resources Cement Holdings Limited (stock code: 01313) from August 2008 to January 2018, a non-executive director of China Resources Gas Group Limited (stock code: 01193) from November 2008 to January 2018. Mr. Wei holds a Bachelor's Degree in Auditing from Zhongnan University of Economics in China and a Master's Degree in Finance from Jinan University in China, and is a Senior Accountant and a Senior Auditor in China. He is also a non-practicing member of the Chinese Institute of Certified Public Accountants.

SENIOR MANAGEMENT

Mr. Jiang Fuhao (姜福灝先生), aged 45, has been the President of the Company since 1 January 2022. Mr. Jiang has been the General Manager of Honghua (China) Investment Co., Ltd, a wholly-owned subsidiary of the Company since October 2021. Mr. Jiang obtained a Master's Degree in Engineering from the Harbin Institute of Technology. Prior to joining the Company, he was the director of the institute which subordinate to China Aerospace Science and Industry Corporation Limited, the substantial shareholder of the Company. Mr. Jiang has extensive experience in management of the project and scientific research and production.

Mr. Yang Yunqing (楊運青先生), aged 44, has been the Vice-president of the Company since August 2018. Mr. Yang had been working at the CASIC Group since 2001. Before joining the Company, Mr. Yang once served as the Deputy Director of the Development and Planning Department of the CASIC and has rich experiences in planning and operation management. Mr. Yang holds a Bachelor's Degree from Harbin Engineering University.

Mr. Dang Nan (黨楠先生), aged 57, has been the Vice-president of the Company since March 2017. Mr. Dang had been working at the CASIC Group since 1989. Before joining the Company, Mr. Dang once served as the Vice president of a subordinate unit of the CASIC. Mr. Dang holds a Master's Degree from Beihang University.

Ms. Xu Xiufang (許秀芳女士), aged 50, has been the Chief Financial Officer of the Company since March 2017. Ms. Xu had been working at the CASIC Group since August 1994 and was engaged in accounting and financing. Before joining the Company, Ms. Xu once served as the chief accountant of a subordinate unit of the CASIC. Ms. Xu holds a Master's Degree from Huazhong University of Science and Technology and a Bachelor's Degree from Beijing Forestry University.

Ms. Yao Yuhong (姚宇紅女士), aged 53, has been the Vice president of the Company since August 2018. Ms. Yao had been working at the CASIC since 1991. Before joining the Company, Ms. Yao once served as the Deputy Director of the Asset Operation Department of the CASIC. She has rich experiences in asset operation, investment, mergers and acquisitions and financial management. Ms. Yao holds a Master's Degree from the Business School of Renmin University of China.

Mr. He Bin (何斌先生), aged 48, has been the Vice-president since August 2018. He joined the Group in 2008 as the director of Strategic Investment Department and assistant president and the secretary of Board and a Joint Company Secretary of the Company. Mr. He has more than 10 years of investment and management experience, once was engaged in venture capital, investment consulting and other related work in Samsung Company. He holds a Bachelor's Degree from Renmin University of China and a Master's Degree in Business Administration from University of Alberta in Canada.

Mr. Di Xiaohong (狄曉宏先生), aged 58, has been the Senior Administration Director of the Company since September 2018. Mr. Di joined the Company in January 2000 and once served as the vice general Manager of Sichuan Honghua Petroleum Equipment Co., Ltd (四川宏華石油設備有限公司). He has rich experiences in Corporate Management and Administration.

Ms. Zhuang Wenmin (莊文敏女士), aged 41, has been the secretary of Board and a Joint Company Secretary of the Company since August 2018. Ms. Zhuang Joined the Company since 2009, has been the director of the Legal & Securities Department of the Company since January 2016. She is responsible for corporate governance and compliance, risk management and legal affairs of the Company. Ms. Zhuang holds a Master's Degree in Law from Southwestern University of Finance and Economics.

Ms. Lee Mei Yi (李美儀女士), aged 54, has been a Joint Company Secretaries of the Company since 7 July 2015. Ms. Lee is an executive director of corporate services division of Tricor Services Limited and a fellow member of both The Hong Kong Chartered Governance Institute (formerly known as The Hong Kong Institute of Chartered Secretaries) and The Chartered Governance Institute (formerly known as The Institute of Chartered Secretaries and Administrators). Ms. Lee has over 28 years' experience in company secretarial area.

The Board is pleased to present this Corporate Governance Report in the Group's annual report for the year ended 31 December 2021.

CORPORATE GOVERNANCE PRACTICES

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

The Group strives to attain and maintain high standards of corporate governance to enhance Shareholder value and safeguard Shareholder interests. The Group's corporate governance principles emphasize a quality Board, effective internal controls and accountability to Shareholders.

The Board believes that good corporate governance practices are increasingly important for maintaining and promoting Shareholder value and investor confidence.

The Company has adopted and complied with the principles and code provisions of the Corporate Governance Code (the "CG Code") contained in Appendix 14 to the Listing Rules as basis of the company's corporate governance practices.

The CG Code set out the principles of good corporate governance and two levels of corporate governance practices:

a) code provisions, which listed issuers are expected to comply with or to give considered reasons for any deviation; and

b) recommended best practices for guidance only, which listed issuers are encouraged to comply with or to give considered reasons for deviation.

The Company has devised its own code of corporate governance based on the principles and practices as set out in the CG Code.

In the opinion of the Directors, the Company has complied with the code provisions as set out in the CG Code throughout the year ended 31 December 2021, except that the Company dismissed the Nomination Committee until 28 December 2021 (code provision A.5.1 of the CG Code was deleted) and fails to meet the requirement set out in Rule 3.25 of the Listing Rules which provides that the Remuneration Committee must comprise a majority of independent non-executive directors. Details of the above deviations are set out under sections "Remuneration Committee" on page 34 and "Nomination Committee" on page 35 of this Corporate Governance Report.

The Company reviews its corporate governance practices regularly to ensure compliance with the CG Code.

The Company is committed to enhancing its corporate governance practices appropriate to the conduct and growth of its business and to reviewing its corporate governance practices from time to time to ensure that they comply with the statutory and professional standards and align with the latest developments.

MODEL CODE FOR SECURITIES TRANSACTIONS

The Company has adopted a set of code regarding Directors' dealings in the Company's securities (the "Code for Securities Trading") with terms no less exacting than the Model Code for Securities Transactions by Directors of Listed Issuers (the "Model Code") as set out in Appendix 10 to the Listing Rules.

After the specific enquiries made by the Company, all Directors have confirmed that they have complied with the standards specified in both the Code for Securities Trading and the Model Code throughout the year ended 31 December 2021.

The Company has also established written guidelines no less exacting than the Model Code (the "Employees Written Guidelines") for securities transactions by employees who are likely to be in possession of unpublished inside information of the Company.

No incident of non-compliance of the Employees Written Guidelines by the employees was noted by the Company.

BOARD OF DIRECTORS

The Board oversees the Group's businesses, strategic decisions and performance and should take decisions objectively in the best interests of the Company.

The Board should regularly review the contribution required from a Director to perform his responsibilities to the Company, and whether the Director is spending sufficient time performing them.

BOARD COMPOSITION

The Board currently comprises nine Directors, consisting of two executive Directors, three non-executive Directors and four independent non-executive Directors.

Executive Directors
Mr. Jin Liliang *(Chairman)*
Mr. Ren Jie

Non-executive Directors
Mr. Zhang Mi
Mr. Chen Wenle
Mr. Wang Xiuchang

Independent non-executive Directors
Mr. Chen Guoming
Ms. Su Mei
Mr. Chang Qing
Mr. Wei Bin

The biographical information of Directors are set out under "Biographical Details of Directors and Senior Management" on pages 22 to 26 of this annual report.

None of the members of the Board is related to one another.

CHAIRMAN AND PRESIDENT

The positions of Chairman and President are held by Mr. Jin Liliang and Mr. Zhang Mi respectively throughout the year ended 31 December 2021. The Chairman provides leadership and is responsible for the effective functioning and leadership of the Board. The President focuses on the Company's business development and daily management and operations generally.

On 1 January 2022, Mr. Zhang Mi stepped down from the position as President of the Company and ceased to be the Vice Chairman of the Board, and was re-designated a non-executive Director from an executive Director, and Mr. Jiang Fuhao was appointed as President of the Company with effect from 1 January 2022.

INDEPENDENT NON-EXECUTIVE DIRECTORS

During the year ended 31 December 2021, the Board at all times met the requirements of the Listing Rules relating to the appointment of at least four independent non-executive Directors representing one-third of the Board.

During the year ended 31 December 2021, the Company had four independent non-executive Directors with one of whom possessing appropriate professional qualifications or accounting or related financial management expertise so that there is a strong independent element on the Board, which can effectively make independent judgment.

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 considers all independent non-executive Directors are independent.

APPOINTMENT AND RE-ELECTION OF DIRECTORS

Code provision B.2.2 of the CG Code stipulates that every director, including those appointed for a specific term, should be subject to retirement by rotation at least once every three years, and code provision B.2.3 of the CG Code stipulates that if an independent non-executive director has served more than nine years, such director's further appointment should be subject to a separate resolution to be approved by shareholders.

Each of the Directors of the Company is appointed for a specific term of not exceeding three years and is subject to retirement by rotation at least once every three years.

RESPONSIBILITIES, ACCOUNTABILITIES AND CONTRIBUTIONS OF THE BOARD AND MANAGEMENT

The Board is responsible for leadership and control of the Company; is collectively responsible for directing and supervising the Company's affairs; and oversees the Group's businesses, strategic decisions and performance.

The senior management was delegated the authority and responsibility by the Board for the day-to-day management and operations of the Group. In addition, 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 has delegated to these Board committees various responsibilities as set out in their terms of reference.

All Directors have carried out duties in good faith, in compliance with the standards of applicable laws and regulations, and act in the interests of the Company and its Shareholders at all times.

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 as well as the services and advice from the company secretary and senior management. The Directors are always provided in a timely manner with comprehensive, accurate and detailed information on the Company's operation through monthly report, business operation report, important projects report and financial report so as to enable the Directors to make decisions and perform their duties and responsibilities. The Directors 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 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 co-ordinating the daily operation and management of the Company are delegated to the management.

BOARD DIVERSITY

The Company has adopted board diversity policy (the "Board Diversity Policy") for setting out the approach to achieve diversity on the Board and the Board Diversity Policy has been made available on the Company's website. 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 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 Board is committed to diversity at all levels and will consider a number of aspects, including but not limited to gender, age, cultural and educational background, professional qualifications, skills, knowledge and regional and industry experience.

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 Nomination Committee will consider setting measurable objectives to implement the Board Diversity Policy and review such objectives from time to time to ensure their appropriateness and ascertain the progress made towards achieving those objectives.

The Nomination Committee, which was established on 29 December 2021, which will review the Board Diversity Policy, from time to time as appropriate, to ensure its effectiveness.

DIRECTOR NOMINATION POLICY

The Company has adopted a director nomination policy (the "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, 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 Board committees of the Company.

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.

The Board will review the Director Nomination Policy, from time to time and as appropriate, to ensure its effectiveness.

TRAINING INDUCTION AND 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 will receive formal, comprehensive and tailored made induction on the first occasion of his/her appointment, so as to ensure that he/she has adequate understanding of the business and operations and governance of the Company and that he/she is fully aware of his/her responsibilities and obligations under the Listing Rules and relevant statutory requirements.

Directors should participate in appropriate continuous professional development to develop and refresh their knowledge and skills to ensure that their contribution to the Board remains informed and relevant. Internally-facilitated briefings for Directors would be arranged and reading materials on relevant topics will be issued to Directors where appropriate. All Directors are encouraged to attend relevant training courses at the Company's expenses.

All the Directors have actively participated in the continuous professional development by way of attending seminar and/or conferences and/or forums and/or reading materials.

During the year ended 31 December 2021, the Directors attended seminars/training sessions/in-house briefing/reading materials as set out below:

Directors	**Attending seminar and/or conferences and/or forums**	**Reading journals, updates, articles and/or materials, etc.**
Executive Directors		
Jin Liliang	✓	✓
Ren Jie	✓	✓
Zhang Mi (re-designated as a non-executive Director from an executive Director on 1 January 2022)	✓	✓
Non-Executive Directors		
Chen Wenle	✓	✓
Wang Xiuchang (appointed on 28 October 2021)	✓	✓
Han Guangrong (resigned on 28 October 2021)	✓	✓
Independent Non-Executive Directors		
Chang Qing	✓	✓
Chen Guoming	✓	✓
Su Mei	✓	✓
Wei Bin	✓	✓
Liu Xiaofeng (resigned on 19 November 2021)	✓	✓
Poon Chiu Kwok (resigned on 1 December 2021)	✓	✓

BOARD COMMITTEES

The Board has established 4 committees, namely Audit Committee, Remuneration Committee, Nomination Committee and Strategic Investment and Risk Control 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 Board committees are posted on the Company's website and 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 of this annual report.

AUDIT COMMITTEE

During the year 2021, Mr. Liu Xiaofeng and Mr. Poon Chiu Kwok resigned as independent non-executive Directors and the members of the Audit Committee on 19 November 2021 and 1 December 2021 respectively.

As at the date of publication of this annual report, the Audit Committee comprises four independent non-executive Directors, namely Mr. Wei Bin (Committee Chairman), Mr. Chen Guoming, Mr. Chang Qing and Ms. Su Mei, one of them possesses the appropriate professional qualifications or accounting or related financial management expertise.

The main duties of the Audit Committee include the following:

- To review the financial statements and reports and consider any significant or unusual items raised by the staff responsible for the accounting and financial reporting function or external auditors before submission to the Board;
- To review the relationship with the external auditors by reference to the work performed by the auditors, their fees and terms of engagement, and make recommendations to the Board on the appointment, re-appointment and removal of external auditors;
- To review the adequacy and effectiveness of the Company's financial reporting system, internal control system and risk management system and associated procedures and internal audit function; and
- To review the compliance of the corporate governance issues, the corporate governance report and the corporate governance policy.

The Audit Committee provides supervision on the internal control system of the Group and reports to the Board on any material issues, and makes recommendations to the Board.

During the year under review, the Audit Committee has reviewed the Group's interim and annual results and reports for the year ended 31 December 2021, the financial reporting and compliance procedures, the report from the management on the Company's internal control and risk management systems and processes, the compliance of the corporate governance issues, the corporate governance report and the corporate policy.

The Audit Committee held two meetings during the year ended 31 December 2021 and the attendance records are set out under "Attendance Records of Directors and Committee Members" on page 37 of this Corporate Governance Report.

REMUNERATION COMMITTEE

During the year 2021, Mr. Liu Xiaofeng resigned as an independent non-executive Director and the chairman of the Remuneration Committee on 19 November 2021. Ms. Su Mei, an independent non-executive Director, was appointed as the chairman of the Remuneration Committee on 19 November 2021.

As of the date of publication of this annual report, the Remuneration Committee comprises four members, including two independent non-executive Directors namely Ms. Su Mei (Committee Chairman) and Mr. Wei Bin, one executive Director namely Mr. Jin Liliang and one non-executive Director namely Mr. Zhang Mi.

The primary objectives of the Remuneration Committee include the following:

- To make recommendations to the Board on the remuneration policy and structure of the Directors and the senior management, the incentive mechanism, and the establishment of procedures for developing the remuneration policy and the incentive mechanism;
- To review and approve the remuneration packages of the executive Directors and the senior management by reference to the performance of the individual and the Company as well as market practice and conditions; and
- To review and approve the compensation arrangements for the executive Directors and the senior management in connection with (i) any loss or termination of their office or appointment and (ii) any dismissal or removal of directors for misconduct to ensure such arrangements are determined in accordance with contractual terms and that such compensation is reasonable and appropriate.

During the year under review, the Company failed to meet the requirement set out in Rule 3.25 of the Listing Rules which provides that the Remuneration Committee must be comprised by a majority of independent non-executive directors. The Company has made its best endeavor to identify suitable candidates to fill the causal vacancy of the membership of Remuneration Committee as soon as practicable pursuant to the Listing Rules.

The Remuneration Committee normally meets at least once a year for reviewing and making recommendation to the Board on the remuneration policy and structure and determining the annual remuneration packages of the executive Directors and the senior management and other related matters.

The Remuneration Committee held a meeting during the year ended 31 December 2021 and the attendance records are set out under "Attendance Records of Directors and Committee Members" on page 37 of this Corporate Governance Report.

Details of the remuneration of the senior management by band are set out in note 36 in the Notes to the Audited Financial Statements for the year ended 31 December 2021.

The remuneration policies of the Group focus on the efficiency of the employees and the position-value index, with reference to the individual ability and experience of an employee as well as the market value of the labour market, and emphasize on incentive-orientation and also the establishment of a fair and competitive remuneration system. For long-term incentive policies, the Company has adopted the Share Option Scheme and Restricted Share Award Scheme for eligible participants. Details are set out under the paragraphs headed “Share Option Scheme” and “Restricted Share Award Scheme” in the Report of the Directors.

The basis of determining the emolument of Directors is on various considerations, including Directors’ capability, knowledge and experience, participation to the Board, job duties and responsibilities and is also made reference to the market practices and conditions. Except Mr. Jin Liliang, the Chairman of the Board, whose remuneration consists of annual basic remuneration and annual performance appraisal remuneration, the remuneration of the executive Directors is based on their administrative management positions. Independent non-executive Directors are entitled to a fixed emolument package. Non-executive Directors may be entitled to a fixed remuneration under the service contract.

NOMINATION COMMITTEE

The Nomination Committee was dismissed on 19 March 2013. The Board has taken over the duties of the Nomination Committee in reviewing its own structure, size and composition regularly and taken into consideration of the board diversity policy, and considered that there is a balance of expertise, skills, experience and diversity among the board members appropriate for the requirements of the business of the Company for the period from 1 January 2021 to 28 December 2021.

Pursuant to Rule 3.27A of the Listing Rules (code provision A.5.1 of the CG Code was deleted) which came into effect on 1 January 2022, issuers should establish a nomination committee which is chaired by the chairman of the board or an independent non-executive director and comprises a majority of independent non-executive directors.

Therefore, on 29 December 2021, the Nomination Committee was established by the Board with written terms of reference. As of the date of publication of this annual report, the Nomination Committee comprises three members, including one executive Director namely Mr. Jin Liliang (Committee Chairman) and two independent non-executive Directors namely Mr. Chang Qing and Mr. Chen Guoming.

The primary objectives of the Nomination Committee include the following:

- To make recommendations to the Board on the composition of Board members according to the scale of the Company’s operations and corporate governance and on the appointment or re-appointment of Directors and succession planning for Directors, in particular the chairman and the chief executive;

- To review the structure, size and composition (including the skills, knowledge and experience) of the board at least annually and make recommendations on any proposed changes to the board to complement the issuer’s corporate strategy;

- To identify individuals suitably qualified to become board members and select or make recommendations to the board on the selection of individuals nominated for directorships; and

- To assess the independence of independent non-executive Directors.

The Nomination Committee normally meets at least once a year for reviewing and making recommendation to the Board on the nomination policy, diversity policy, structure, size and composition (including skills, knowledge and experience) of the Board and making recommendations on any proposed changes to the Board to complement the Company's corporate strategy.

In the view that the Nomination Committee was established in late December 2021, there was no meeting held during the year ended 31 December 2021.

STRATEGIC INVESTMENT AND RISK CONTROL COMMITTEE

During the year 2021, Mr. Liu Xiaofeng and Mr. Poon Chiu Kwok resigned as independent non-executive Directors and the members of the Strategic Investment and Risk Control Committee on 19 November 2021 and 1 December 2021 respectively.

As of the date of publication of this annual report, the Strategic Investment and Risk Control Committee comprises four members, including two executive Directors namely Mr. Jin Liliang (Committee Chairman) and Mr. Ren Jie, one non-executive Director namely Mr. Zhang Mi and one independent non-executive Director namely Mr. Chang Qing.

The main duties of the Strategic Investment and Risk Control Committee include the following:

- To review the investment strategies of the Company;
- To review the investment risk control of the Company; and
- To recommend investment strategies and risk control policy and practices to the Board.

The Strategic Investment and Risk Control Committee normally meets at least once a year for reviewing the investment and risk control issues. The Strategic Investment and Risk Control Committee held a meeting during the year ended 31 December 2021 and the attendance records are set out under "Attendance Records of Directors and Committee Members" on page 37 of this Corporate Governance Report.

ATTENDANCE RECORDS OF DIRECTORS AND COMMITTEE MEMBERS

During the year ended 31 December 2021, eight Board meetings were held for reviewing and approving the financial and operating performance, and considering and approving the overall strategies and policies of the Company.

Apart from regular Board meetings, the Chairman also held meetings with the independent non-executive Directors without the presence of executive Directors during the year ended 31 December 2021.

The summary of the attendance record of each Director at the Board meetings, Board Committee meetings and the general meetings during the year ended 31 December 2021 are set out below:

	Attendance/Number of Meetings					
Name of Director	**Board**	**Audit Committee**	**Remuneration Committee**	**Strategic Investment and Risk Control Committee**	**(note) Annual General Meeting**	**Meeting between Chairman and independent non-executive Directors**
Jin Liliang	7/8	–	1/1	1/1	1/1	1/1
Zhang Mi	7/8	–	1/1	1/1	0/1	–
Ren Jie	7/8	–	1/1	1/1	0/1	–
Han Guangrong (resigned on 28 October 2021)	3/4	–	–	–	–	–
Chen Wenle	4/8	–	–	–	0/1	–
Liu Xiaofeng (resigned on 19 November 2021)	5/5	2/2	–	–	–	–
Chen Guoming	7/8	2/2	1/1	–	0/1	1/1
Su Mei	7/8	2/2	1/1	–	0/1	1/1
Poon Chiu Kwok (resigned on 1 December 2021)	7/7	2/2	–	–	–	–
Chang Qing	8/8	2/2	1/1	1/1	0/1	1/1
Wei Bin	8/8	2/2	1/1	–	1/1	1/1
Wang Xiuchang (appointed on 28 October 2021)	2/4	–	1/1	–	–	–

The Directors attended the meetings via video or telephone conference, or in person.

Note: The annual general meeting of the Company was held on 1 June 2021.

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 2021.

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 89 to 97 of this annual report.

Where appropriate, a statement from the Audit Committee explaining its recommendation regarding the selection, appointment, resignation or dismissal of external auditors and the reasons why the Board has taken a different view from that of the Audit Committee.

AUDITORS' REMUNERATION

The Company appointed Messrs. PricewaterhouseCoopers as the external auditor for the year ended 31 December 2021. During the year ended 31 December 2021, the remuneration paid to Messrs. PricewaterhouseCoopers in respect of audit services and non-audit services is set out below:

Service Category	**Fees (in Renminbi)**
Audit Services	4,979,000

The auditors' remuneration disclosed in note 8 to the consolidated financial statements included the remuneration paid to Messrs. PricewaterhouseCoopers as detailed above.

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.

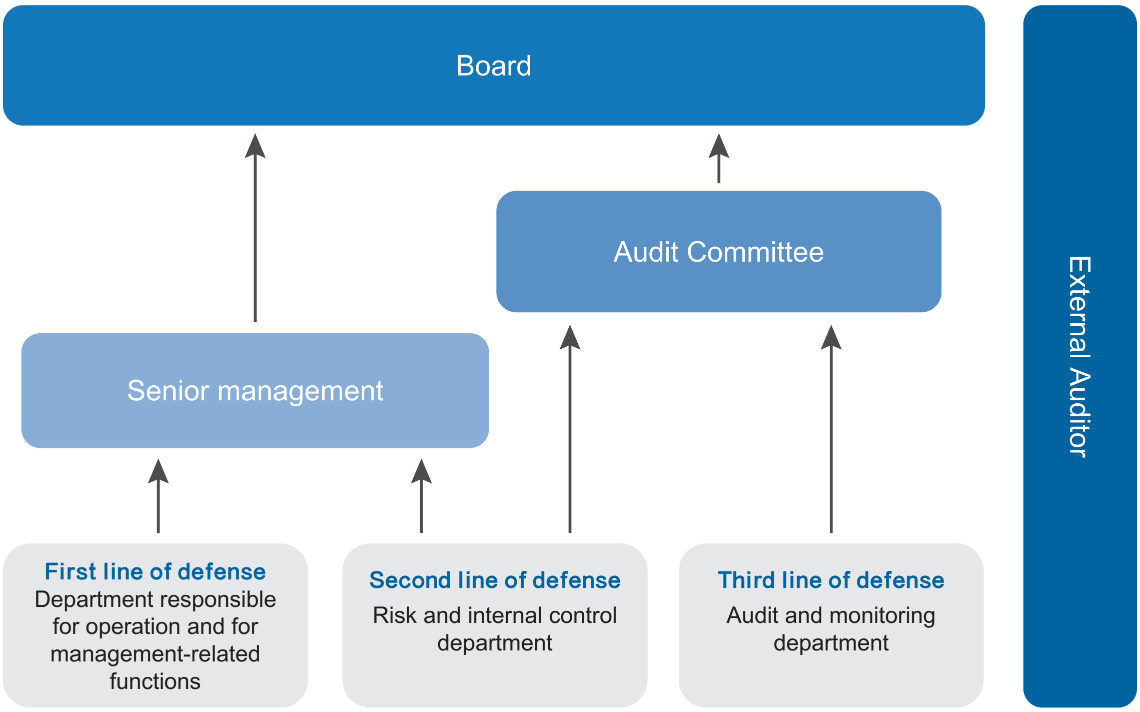
The Audit Committee assists the Board in leading the management and overseeing their design, implementation and monitoring of the risk management and internal control systems.

The Company has established and formulated appropriate policies and checks to ensure that there is no unauthorized use or disposal of asset. Reliable financial and accounting records are maintained in accordance with relevant rules and regulations, relevant accounting standards and regulatory reporting requirements. Material risks which may affect the performance of the Company are properly identified and managed. Such systems and internal controls can only provide reasonable and not absolute assurance against material misstatement or loss and are designed to manage rather than eliminate the risk of failure to achieve business objectives.

RISK MANAGEMENT AND INTERNAL CONTROL FRAMEWORK

The Company has established a risk management organizational structure with clear responsibility rank and reporting program. The risk and internal control department and the audit and monitoring department assist the Board and the Audit Committee in the continuous review of effectiveness of the Company's risk management and internal control system. The Directors regularly receive information on material risks which may affect the performance of the Company from these Committees.

The Company has adopted the following "three lines of defense" model as the guideline of risk management structure:



As the first line of defense, each department and subsidiary of the Company responsible for operation and management and internal control-related functions are the frontline of risk exposure and shall actively analyze the possibility and severity of potential/actual risks in the course of ordinary business activity. They also carry out preliminary risk information collection and identification, actively implement risk solution, participate in the development of risk management culture and receive guidance and supervision from the risk and internal control department. The management of the Company, as supported by the risk and internal control department and the audit and monitoring department, is responsible for the design, execution and monitoring of the risk management and internal control system and submits regular report on the effectiveness of such systems to the Board. The management has confirmed to the Board the effectiveness of the issuer's risk management and internal control system.

As the second line of defense, the risk and internal control department and the risk control panel of the Company are primarily responsible for the coordinated planning and development, maintenance and improvement of the risk management and internal control system. They evaluate and formulate ongoing enhancement on the compliance and reasonableness of the principal business procedures and the risk management mechanism and risk control capability of the Company and its subordinated entities. In accordance with the Company's strategic goal and business plan, they devise or arrange relevant department to devise risk management and internal control system, internal control manual and management measures, including setting up evaluation mechanism of risk management, evaluation mechanism of effectiveness of internal control, recommendation of risk management strategy and internal control improvement, and report to the management and the Audit Committee.

As the third line of defense, the Audit Committee and the audit and monitoring department of the Company are primarily responsible for the follow-up scrutiny, audit and monitoring of the tasks assigned to the first and second line of defense and reporting to the Board. The audit and monitoring department is responsible for performing independent review of the adequacy and effectiveness of the risk management and internal control systems, examining key issues in relation to the accounting practices and all material controls and providing its findings and recommendations for improvement to the Audit Committee.

The risk and internal control department and the audit and monitoring department have adopted an audit method based on risk and control. With their operation plan throughout the year, the audit and monitoring department and the risk and internal control department cover every major task and program of the operation and business of the Company and service units. They also conduct extraordinary review as requested by the management and the result of audit work is submitted to the Audit Committee and the executive and senior management of the Company. The risk and internal control department and the audit and monitoring department conduct examination and follow-up on audit matters to strive for proper execution and report to the management of the Company (as the case may be) and the Audit Committee regularly.

RISK MANAGEMENT AND INTERNAL CONTROL MEASURES

The Company has adopted several policies and programs to evaluate and prudently boost the effectiveness of the risk management and internal control system, including the requirement on the executive management of the Company to conduct evaluation and verify in person the proper and effective operation of such matters every year. The Company believes that such measure shall strengthen future corporate governance and business practice.

During the year 2021, the Company has achieved the following key results in order to strengthen the risk management system:

- The Company has optimized a series of corporate governance policies to consolidate the foundation of corporate governance, including the rules of procedure for the board of directors, the legal representative authorization (entrustment) management measures, compliance management regulations, equity investment and financing management measures, supplier black and gray list management measures etc.;

- The Company's internal audit and internal control assessment incorporated risk management to the state of audit planning, and prepared the sufficiency and effectiveness assessment report for the year based on the Company's comprehensive risk analysis; and

- The Company has optimized the risk management and internal control system, improved the risk assessment mechanism for major business decision-making matters, formulated an action plan for the prevention and settlement of major business risks, regularly tracked and monitored the progress of risk prevention and settlement, and achieved sound results in the settlement of historical risk matters. In the next step, in terms of the key work of risk management and control, the Company will focus on the objectives of "strengthening internal control, preventing risks and promoting compliance", continue to promote the integrated construction of risk control and compliance, and enhance the professional synergy of the second line of defense.

The risk and internal control department and the audit and monitoring department report their work in respect of the sufficiency and effectiveness of the risk management and internal control for the previous period to the Board and the Audit Committee at every regular meeting throughout the year, including but not limited to highlighting any failure in the implementation of these control procedures or any material deficiencies of the procedures.

The risk and internal control department takes the lead in the risk management process of the Company by identifying and assessing the material risks within the Group. The management will then discuss, agree and implement relevant risk management measures and corresponding responsive measures. Relevant risk assessment results are reported to the Board and the Audit Committee.

REVIEW OF RISK MANAGEMENT AND INTERNAL CONTROL EFFECTIVENESS

The Audit Committee and the Board were not aware of any key findings that would have any substantive impact on the business or financial condition of the Company, and of the opinion that the existing risk management and internal control system is appropriate and effective in terms of sufficiency of resources, qualification and experience of staff, training program and financial budget, internal audit and financial report.

The Management reported to the Board and the Audit Committee on the effectiveness of the risk management and internal control system of the year as at 31 December 2021.

The Board, as supported by the Audit 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, for the year ended 31 December 2021, 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.

INTERNAL AUDIT

The Company has specially established an internal audit and supervision department responsible for the internal control of the Group.

The internal audit and supervision department conducts regular supervision and examination over the business of the Group and also carries out the special supervision and examination for significant projects to regulate the management of the Group.

The internal audit and supervision department reports its work to the Audit Committee on a periodical basis while the Audit Committee reviews and approves the internal audit reports and the annual plan for internal audit annually. The audit opinions will be reported to the Board through the Audit Committee.

The Company has set up an independent reporting channel through which the staff of the Company can report the corrupt conducts of other staffs of the Company directly to the internal audit and supervision department, so that the Company can be held harmless from frauds and other misconducts.

INFORMATION DISCLOSURE

The Company has formulated a set of continuing disclosure obligation procedures in response to the inside information provisions under the SFO and the Listing Rules.

The Company proactively publishes voluntary announcements for the matters of significance involving the current development status of the Company so that Shareholders and investors can be timely aware of the current status of the business development of the Company.

COMPANY SECRETARY

Ms. Lee Mei Yi of Tricor Services Limited, an external service provider, has been appointed by the Company as one of its Joint Company Secretaries since 7 July 2015. The primary contact person at the Company is Ms. Zhuang Wenmin, one of the Joint Company Secretaries of the Company.

All Directors have access to the advice and services of the Joint Company Secretaries on corporate governance and board practices and matters.

Ms. Zhuang Wenmin and Ms. Lee Mei Yi, the current Joint Company Secretaries, have complied with Rule 3.29 of the Listing Rules by taking no less than 15 hours of the relevant professional training during the year.

SHAREHOLDERS' RIGHTS

To safeguard Shareholder's interests and rights, separate resolutions are proposed for each substantially separate issue at Shareholders' meetings, including the election of individual Directors.

All resolutions put forward at Shareholders' meetings will be taken 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 Shareholders' meeting.

CONVENING AN EXTRAORDINARY GENERAL MEETING BY SHAREHOLDERS

The Board may, whenever it thinks fit, convene an extraordinary general meeting. Extraordinary general meetings may be convened by the Board on requisition of one or more Shareholders' holding, at the date of deposit of the requisition, not less than one tenth of the paid up capital of the Company having the right of voting at general meetings. Such requisition shall be made in writing to the Board or the Secretary for the purpose of requiring an extraordinary general meeting to be called by the Board for the transaction of any business specified in such requisition. Such meeting shall be held within 2 months after the deposit of such requisition. If within 21 days of such deposit, the Board fails to proceed to convene such meeting, the requisitionist(s) himself (themselves) may do so in the same manner, and all reasonable expenses incurred by the requisitionist(s) as a result of the failure of the Board shall be reimbursed to the requisitionist(s) by the Company.

PUTTING FORWARD PROPOSALS AT GENERAL MEETINGS

There is no provision allowing Shareholders to move new resolutions at general meetings under the Cayman Islands Companies Law or the Articles of Association of the Company. Shareholders who wish to move a resolution may request the Company to convene a general meeting following the procedures set out in the preceding paragraph.

PUTTING FORWARD ENQUIRIES TO THE BOARD

For putting forward any enquiries to the Board of the Company, shareholders may send written enquiries to the Company.

Note: 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: Level 54, Hopewell Centre, 183 Queen's Road East, Hong Kong

Email: shareholder@hhcp.com.cn

For the avoidance of doubt, Shareholders must deposit and send the original duly signed written requisition, notice or statement, or enquiry (as the case may be) to the above address or 99 East Road, Information Park, Jinniu District, Chengdu, Shichuan, People's Republic of China and provide their full name, contact details and identification in order to give effect thereto. Shareholders' information may be disclosed as required by law.

COMMUNICATION WITH SHAREHOLDERS AND INVESTORS

The general meetings of the Company provide a forum for communication between the Board and the Shareholders. The Chairman of the Board as well as chairmen of the Audit Committee, Remuneration Committee, Nomination Committee and Strategic Investment and Risk Control Committee or, in their absence, other members of the respective committees normally attend the annual general meetings and other relevant Shareholders' meetings to answer questions of Shareholders. Notices to Shareholders for annual general meetings and all other general meetings will be sent to the Shareholders before such meetings pursuant to the requirement of the Listing Rules.

Information relating to the Company's financial results, corporate details, major projects and events are disseminated through publications of interim and annual reports, announcements, circulars and other corporate communications and publications available on the websites of the Stock Exchange and the Company.

During the Year under review, the Company has not made any changes to its Articles of Association. An up-to-date version of the Company's Articles of Association is also available on the websites of the Stock Exchange and the Company.

To promote effective communication, the Company maintains a website at http://www.hh-gltd.com, where up-to date information and updates on the Company's business operations and developments, financial information, corporate governance practices and other information are available for public access.

DIVIDEND POLICY

The Company has adopted a dividend policy (the "Dividend Policy"). With an emphasis on providing reasonable investment return to its Shareholders, the Company strives to implement a sustained and stable dividend policy by considering the current actual operating conditions of the Company, the sustainability and the interests of the Shareholders as a whole.

The Company may distribute dividends to the Shareholders in cash, in shares or in other forms as the Board considers appropriate.

According to the Dividend Policy, subject to the relevant criteria, based on the audited annual statements and the net profit attributable to the Shareholders for the Year and on the premise that the distributable profit is positive and there is sufficient working capital, the Company may distribute annual dividends to the Shareholders in cash in proportion to at least 30% of the annual distributable profit in principle.

In deciding whether to propose a dividend and in determining the dividend amount, the Board shall consider the following factors as a whole: the financial results, the cash flows, the future operations and revenue, the capital requirements and capital expenditure plan, the Shareholders' interests of the Company and its subsidiaries as well as any other relevant factors.

The Board will review the Dividend Policy from time to time and may exercise at its sole and absolute discretion to update, amend and/or modify the Dividend Policy at any time as it seems fit and necessary. There is no assurance that dividends will be paid in any particular amount for any given period.

SHAREHOLDERS COMMUNICATION POLICY

The Company has in place a Shareholders' Communication Policy to ensure that shareholders' views and concerns are appropriately addressed. The policy is regularly reviewed to ensure its effectiveness.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

SCOPE AND REPORTING PERIOD

This is the sixth Environmental, Social and Governance ("ESG") report by the Honghua Group Limited ("the Company"), highlighting its ESG performance, with disclosure reference made to the ESG Reporting Guide as described in Appendix 27 of the Listing Rules and Guidance set out by The Stock Exchange of Hong Kong Limited.

The Group is a large-scale equipment manufacturer and drilling service provider, specializing in the research, design, manufacture and set-assembly of drilling rigs, offshore engineering and oil & gas exploitation and production equipment.

This ESG report covers the Group's overall environmental and social performances of its major business operations which contribute to the Group's most significant environmental and social impacts. These include the business operations Honghua Group Limited and its subsidiaries Honghua (China) Investment Co., Ltd., Honghua International Co., Ltd., Sichuan Honghua Electric Co.,Ltd, Sichuan Honghua Petroleum Equipment Co., Ltd. and Honghua Oil & Gas Engineering and Technology Services Ltd. in (i) the head office in Chengdu, (ii) the office and (iii) the manufacturing plant in Guanghan, Sichuan Province of the People's Republic of China ("PRC"), from 1 January 2021 to 31 December 2021 (the "Reporting Period"), unless otherwise stated.

THE GROUP'S SUSTAINABILITY VISION AND COMMITMENT

As one of the leading land drilling rig equipment manufacturers in the world and a large land drilling rig exporter in China the Group is committed to leading the industry with the highest standards. The Group will continue to enhance collaboration and integration of industrial resources, expand market share, consolidate the international leading position of the oil and gas equipment supplier and service provider.

China's economy has been shifting from a stage of high-speed growth to high-quality development. The country will promote the realization of a more optimized economic structure, significant improvement in innovation capabilities, and substantial increase in utilization efficiency. In accordance with the requirements of the unprecedented stage, the Group will develop and promote new materials and high-end equipment, and take the initiative to achieve industrial upgrade. The Group will implement the "Belt and Road Initiative" (BRI), strengthening international capacity cooperation. To adapt to the low-carbon blueprint and meet the country's urgent need for state-of-the-art technology and products, the Group will take its advantages of equipment manufacturing enterprises to develop and enhance the capability of clean energy equipment and components.

ESG management is of great importance in the Group's business operation. The Group incorporates ESG considerations into its operation and is devoted to:

- Ensuring the occupational health and safety of employees;
- Creating a green work environment;
- Enhancing the capabilities of employees;
- Improving the quality of asset operation and the efficiency of human resources;
- Promoting industry diversification in an orderly manner; and
- Enriching corporate culture to strengthen bond among employees.

The Board of the Company understands that a sound ESG management structure is essential to the Group's development. Apart from pursuing continuous growth and success, the Group strives for excellence in its ESG management. The Group also communicates with its stakeholders in an open and transparent manner to enhance stakeholders' understanding towards the Group's operation.

STANDARDS AND CERTIFICATIONS

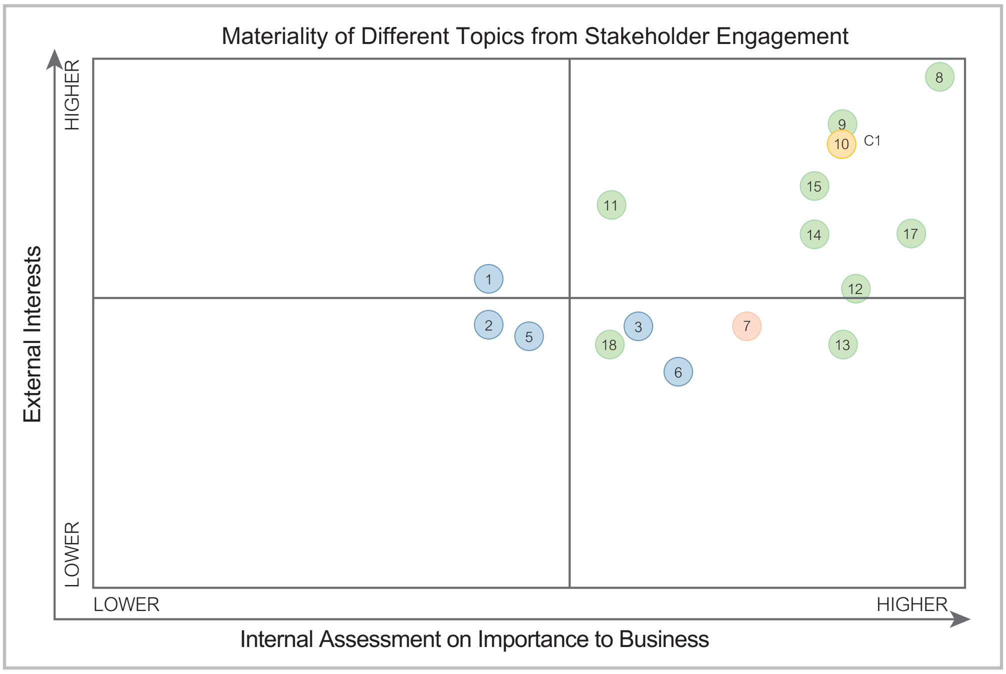
As a licensed manufacturer under the American Petroleum Institute ("API") Monogram program, the Group conforms to the specifications set out by the API. The Group's quality management system complies with the ISO 9001: 2008 and GB/T 19001-2008 standards. Its design, manufacture and service of drilling rigs and associated components conform with the API Specification Q1.

THE STATEMENT OF THE BOARD OF DIRECTORS

The Group understands that the leadership and participation of the Board is crucial to the implementation of sustainable development strategies. Therefore, the Board shoulders the responsibility of leading and supervising ESG related matters, and is responsible for leading the Group to seize the opportunities and respond to the risks brought by sustainable development. The Board regularly decides on and monitors ESG policies and strategies, including the approval and consideration of the ESG-related goals, progress review of the goals, evaluation and prioritisation of the materiality, etc. At the same time, every subsidiaries of the Group has set up its own HSE (Health, Safety and Environment) working group it to monitor and implement at the subsidiary level various occupational safety and ESG-related matters, so as to further improve the effectiveness of sustainable development governance.

STAKEHOLDER ENGAGEMENT AND MATERIALITY

The Group values feedback of its stakeholders as they bring invaluable directions for continuous development to the Group. Internal and external stakeholders have been involved in regular engagement activities to share views regarding the Group's operation and performances. The Group has specifically engaged the board members, senior management, frontline staff, regulators, clients and suppliers to gain further insights on material ESG aspects and challenges in the Reporting Period. The Materiality Matrix below shows the result of our materiality assessment process:



Environmental		Social		Others	
1	Energy	7	Employment	C1	Food Safety and Health
2	Water	8	Occupational Health and Safety		
3	Air Emission	9	Development and Training		
4	Waste and Effluent	10	Labour Standards		
5	Other Raw Materials Consumption	11	Supplier Management		
6	Environmental Protection Measures	12	Intellectual Property		
7	Climate Change	13	Data Protection		
		14	Customer Service		
		15	Product/Service Quality		
		16	Anti-corruption		
		17	Community Investment		

Among the environmental and social aspects, the followings were the most material aspects of the Group's operation:

- Employment
- Occupational Health and Safety
- Development and Training
- Climate Change
- Customer Service

The above aspects were strictly managed through strict compliance with the relevant laws and regulations, the Group's policies and guidelines. Management of the aspects has been described in separate sections below. The Group will continue to identify areas of improvement for the concerned aspects and keep close communication with its stakeholders to exchange ideas for advancing the Group's ESG management.

STAKEHOLDERS' FEEDBACK

The Group welcomes stakeholders' feedback its our ESG approach and performance. Please give your suggestions or share your views with the Group via email at shareholder@hhcp.com.cn.

A. ENVIRONMENTAL

The Group operates in accordance with its environmental and resources management policies, which are also in compliance with all applicable national laws and regulations including the *Environmental Protection Law of the PRC, the Atmospheric Pollution Prevention and Control Law of the PRC, the Water Pollution Prevention and Control Law of the PRC, Soil Pollution Prevention and Control Law of the PRC, the Law of the PRC on the Prevention, Control of Environmental Pollution Caused by Solid Wastes, and Regulation on Urban Drainage and Sewage Treatment*. All emissions and discharges meet the national statutory standards. During the Reporting Period, there was no material non-compliance issues relating to the environment.

A1. EMISSIONS

A1.1. Air Pollutant Emissions

The Group consumed natural gas, liquified petroleum gas ("LPG"), petrol and diesel in the Reporting Period, which contributed to the emission of 273.79 kg of nitrogen oxides ("NOx"), 0.49kg sulphur oxides ("SO_x") and 2.27kg respiratory suspended particles ("PM"). Emissions from the Group's operation were treated before release.

A1.2. Greenhouse Gas Emissions

Scope of Greenhouse Gas Emissions	Emission Sources	Emission (in tonnes of carbon dioxide equivalent "tCO_2e")	Total Emission (in percentage)
Scope 1 Direct Emission			
Combustion of fuel for stationary source	Natural gas	224.522	25%
	LPG	3,707.31	
Combustion of fuel for mobile sources	Petrol	72.89	
	Diesel	7.65	
Scope 2 Energy Indirect Emission			
Purchased electricity		11,212.82	70%
Scope 3 Other Indirect Emission			
Paper waste disposal		67.07	5%
Electricity used for freshwater processing		275.72	
Electricity used for sewage processing		12.21	
Business air travel		341.77	
Total		15,921.96	100%

Note1: Emission factors were referred to Appendix 27 of the Main Board Listing Rules and their referred documentation as set out by Hong Kong Exchanges and Clearing Limited, unless stated otherwise.

Note2: Emission factors for combustion of natural gas and LPG for stationary source were referred to GHG Emissions from Stationary Combustion (Chinese), provided by the Greenhouse Gas Protocol.

Note3: Emission factor of 0.6101tCO_2/MWh was used for purchased electricity, with reference to the emission factor for the National Grid of the PRC.

The Group's activities contributed to 15,921.96 tonnes of carbon dioxide equivalent (including carbon dioxide, methane and nitrous oxides) in the Reporting Period. The Group targets to reduce carbon dioxide equivalent emissions by 10%, compared with 2021 levels, in 10 years.

A1.3. Hazardous Waste

Hazardous wastes generated were stored in designated area and collected by licensed collectors. During the Reporting Period, a total of 138.49 tonnes of hazardous wastes was generated. Hazardous waste was collected by qualified collectors for treatment and recycling.

Hazardous Wastes	Wastes Generated in 2021 (in tonnes)	Wastes Generated (in percentage)
Waste mineral oil	26.45	19.10%
Waste oil paint containers	52.31	37.78%
Paint residue	47.63	34.40%
Waste activated carbon	5.00	3.60%
Waste developer/fixer solution	0.40	0.29%
Waste Emulsion	6.70	4.83%
TOTAL	138.49	100.00%

A1.4. Non-hazardous Waste

A total of 4,003.64 tonnes of non-hazardous wastes was generated by the Group during the Reporting Period. Non-hazardous waste was collected by qualified collectors. The Group targets to reduce non-hazardous waste generation by 10%, compared with 2021 levels, in 10 years.

Non-hazardous Wastes	**Waste Generated in 2021 (in tonnes)**	**Wastes Generated (in percentage)**
Scrap Steel	2,759.28	68.92%
Scrap Iron Filings	1,232.76	30.80%
Domestic Wastes	9.28	0.23%
Waste Paper	2.32	0.05%
Total	4,003.64	100.00%

A1.5. Measures to Mitigate Emissions

The health, safety and environmental ("HSE") policies of the Group were formulated with the objectives of pursuing occupational health and production safety, minimizing environmental pollution, and sustaining continuous improvement. Emissions and discharges are closely monitored, analysed, and inspected regularly by qualified specialists. If any accidents causing disruption or damage to the surrounding communities or the environment occurred, persons in charge will be subject to disciplinary actions.

The Group monitors emissions of dust and smoke, sulphur dioxide, nitrogen oxides, volatile organic compounds ("VOCs"), benzene, toluene and xylene. In the manufacturing plant, dusts are filtered by filter bags, water-based paint are used to reduce VOCs emission, and smoke generated from welding is purified by appropriate ventilation and fume extractors. The Group also adopts advanced technologies, such as activated carbon adsorption, plasma adsorption and plasma-UV catalysis treatment, to control emissions. The collection and treatment facilities have efficiencies of 95% or above.

Apart from emission control, the Group centralises coordination of vehicle arrangements to ensure that vehicles are used in the most efficient way. Engines are turned off when idling. The Group avoids air travel whenever possible, and business air travel is tracked.

A1.6. Waste Handling and Reduction Initiatives

When collecting, storing, transporting, using and treating solid wastes, the Group avoids diffusion and leakage, and does not allow any unpermitted disposal of wastes. Waste generated by the Group is stored in specified areas with strict monitoring. All kinds of waste are collected by licensed collectors. Records of waste collection are kept according to the document control procedures. Training is given to the warehouse keepers to enhance their knowledge in waste management.

The Group avoids and reduces paper use to promote a paperless office. It encourages double-sided printing and provides recycling collection trays to collect recyclable paper separately. Apart from saving paper, distribution of office resources (e.g. stationery) is strictly monitored through a registration system. When waste is inevitably generated, the Group recycles wastes to minimize the environmental impacts.

A2. USE OF RESOURCES

To reduce utilization of resources, the Group has formulated management policies regarding energy and resources use, which manages consumption of natural gas, electricity, water, raw materials, packaging materials, office paper and other office necessities.

A2.1. Energy Consumption

The energy consumption involved in the Group's operation includes the use of natural gas, petrol, diesel and electricity. Natural gas was used for central air conditioning, canteen operation, heating and forging; petrol and diesel were used for drilling rig testing and the Group's vehicles.

The Group consumed a total of 36,781,030kWh energy in the Reporting Period. The group targets to have a reduction in total energy consumption by 10%, compared with 2021 levels, in 10 years.

The detailed energy consumption is summarized in the table below.

Energy Consumption Sources	**Direct Consumption**	**Consumption (in kWh)**
Natural Gas	110,223.00m^3	1,089,492
LPG	1,228,783.6 L	17,127,534
Petrol (mobile)	27,403.25 L	242,850
Diesel (mobile)	2,783 L	27,832
Electricity	18,293,322.36kWh	18,293,322
TOTAL		36,781,030

A2.2. Water Consumption

A total of 521,738.7 m^3 of water, supplied by the municipal water suppliers, was consumed during the Reporting Period. There was no significant issue in sourcing water during the Reporting Period.

Wastewater Treatment

A total of 107,924m^3 of wastewater was generated during the Reporting Period. The Group ensures that wastewater is treated and meets the standard of the PRC before discharge. Discharging pollutants or wastewater into the surface water drainage is prohibited. Wastewater treatment facilities are regularly cleaned to enhance effectiveness. The Group holds valid discharge permit and keeps track of its discharges. It also continuously improves its production process, upgrades equipment, adopts new technologies, reinforces existing on-site wastewater treatment facilities and reuses production water after sedimentation. The Group complied with the Integrated Wastewater Discharge Standard (GB8978-1996) of the PRC during the Reporting Period.

A2.3. Energy Use Efficiency Initiatives

The Group keeps track of its monthly electricity consumption and controls consumption by:

- Developing electricity consumption systems to calculate, compare and analyse total electricity consumption;
- Adopting energy-saving lighting whenever possible;
- Choosing vehicles and equipment with high energy efficiency;
- Controlling the temperature of air-conditioners at the range of 23-25°C;
- Conserving fuel consumption by enforcing regulations;
- Combining trips to reduce fuel use;
- Educating employees to optimize productivity and reduce unnecessary electricity use;
- Promoting electricity conservation behaviours among employees; and
- Regularly inspecting and maintaining transmission pipelines. When leakage is identified, pipelines are repaired immediately.

A2.4. Water Use Efficiency Initiatives

The Group keeps track of its monthly water consumption and controls consumption by:

- Reusing production water after treating by sedimentation;
- Maintaining taps, fire hydrants and pipe network to avoid wastage due to leakage; and
- Promoting water conservation behaviours among employees.

A2.5. Packaging Materials

At product design stage, the Group reduces the use of raw materials whenever possible. Raw materials in stock shall be used before ordering new materials. The Group consumed mainly plastic, steel, and wooden materials for packaging during the Reporting Period. Packaging materials were mostly made up of recyclable materials. Welded parts and machined parts for packaging are processed in-house. The rest of the packaging materials are coordinated by the supply department to purchase from external suppliers. The Group repurposes waste packaging materials on site whenever possible. For instance, waste wooden boxes and scrap iron were used to make brackets and transferral trays. The amount of packaging material consumed is presented in the table below.

Packaging Materials	**Consumption**
Paper boxes	1,022 Pieces
Packing straps	29,700 Pieces
Packing buckles	4,750 Pieces
Zip bags	8,200 Pieces
Cable ties	62,000 Pieces
Woven bags	500 Pieces
Nails	1,460 Pieces
Plastic pipes	40,250 m
Plastic film	32,400 m^2
Wooden packages	1,434 m^3
Steel materials	908,564 kg
Iron wires	9,090 m
Carpet	3,300 m^2
Protection grease	1,116 kg
Paint markers	168 Pieces

A3. THE ENVIRONMENT AND NATURAL RESOURCES

A3.1. Significant Impacts of Activities on the Environment

The Group's production generates exhaust gas, dust and smoke, hazardous waste, wastewater and noise nuisance. The Group has also formulated the "Honghua Group Co., Ltd. Energy Saving and Environmental Protection Management regulations", which states the management systems, rewards and punishment scheme, and structures and responsibilities of different teams. It states clearly that units directly or indirectly discharging air emissions, wastewater, noise and solid waste during production and business operations must register the pollutant discharged at the time specified by the Environmental Protection Department of the local government and apply for pollutant discharge permits in accordance with regulations.

The Group has taken the following actions to minimize impacts on the environment and natural resources:

- Treating exhaust gas by activated carbon, UV photolysis and plasma purification;
- Treating dust and smoke by bag filters;
- Extracting ash from welding machines by purifier;
- Conducting cleaner production audits;
- Employing only licenced collectors to collect and treat hazardous waste;
- Treating wastewater through sedimentation before discharge;
- Reducing production noise level and vibration by sound insulation wall;
- Digitalizing documents to reduce paper use;
- Performing double-sided printing; and
- Recycling wastepaper.

The abovementioned emissions, hazardous waste and wastewater generation, and noise level has been monitored and assessed annually.

The Group is committed to managing its production and operations with sensitivity to environmental protection. The Group will continue to minimize its adverse impact on the environment through regular monitoring, assessment and evaluation of performances.

A4. CLIMATE CHANGE

A warming planet creates a wide range of risks for business, from disrupted supply chains to rising insurance costs to labour challenges. With the increasing threat of climate change and the associated physical damage, change in market perception and shift in preference of the public towards more environmentally friendly products and services, the financial, reputational and strategic risk implications are becoming increasingly prominent. Climate change already has far-reaching impacts on the oil industry, putting the operation, reliability, and growth of the sector at risk will undoubtedly be of increasing concern to the Group and industry as a whole for the foreseeable future. The Group has identified the following risks that climate change pose.

Physical risk

Extreme weather events such as typhoons, storm surges and rainstorms, will disrupt production and transportation, which may adversely impact both our employees and production. In addition, climate change may also exacerbate the frequency of extreme weather condition, resulting in potential financial and human capital loss. Furthermore, our Group may be requested by authorities to fully adopt renewable energy as our source of electricity and power, the transition of which may increase the cost of operations. We also foresee an increase in frequency of blackouts due to the heavy load on electricity grid as caused by climate change, which may lead to unpredictable disturbances to operations.

Climate change already has far-reaching impacts on the oil industry, putting the operation, reliability, and growth of the sector at risk. Oil infrastructure has multi-decadal lifetime projections; thus, climate change and extreme weather events such as extreme temperatures, hurricanes, high winds, lightning strikes, storm surges, flooding, etc., pose an extra challenge to the oil supply chain, from upstream to downstream. Increasing frequency and severity of wind and flood damage caused by extreme weather that may damage the oil field of our major clients which will eventually jeopardise the Group's revenue source.

Transition risk

Laws and regulations related to climate change as well as growing concern of stakeholders may adversely affect the Group's business and financial condition. Global concern over greenhouse gas ("GHG") emissions and climate change, which notably led to the signature of the Paris Agreement on 12 December 2015 as part of the United Nations Climate Change Conference (COP 21), is likely to lead to further regulation in the oil drilling industry. These additional regulatory requirements could lead the clients of the Group to curtail, change or cease certain of its operations, and submit their facilities to additional compliance obligations, which could adversely affect the Group's businesses and financial condition, including its operating income and cash flow.

Regulations designed to gradually limit fossil fuel use may, depending on the GHG emission limits and time horizons set, negatively and significantly affect the development of projects of our clients, as well as the economic value of certain of the Group's assets.

Climate change opportunities

With the consensus on global energy structural reform and transition, the market for clean and low-carbon natural gas and unconventional gas are expected to grow exponentially. China has vast reserves of shale gas resources that are commercially viable as a result of advances in horizontal drilling and hydraulic fracturing technologies. These technologies enable greater access to natural gas in shale formations. The group seized the opportunity, has accelerated its shale gas development services. The group launched the first "one-key linkage" automatic machine tool system and new equipment including electric coiled tubing in China, which were widely recognised in the market, consolidating its leading position in the drilling and fracturing market.

B. SOCIAL

1. EMPLOYMENT AND LABOUR PRACTICES

B1. Employment

The Group believes that employees are important assets. The Group complies with the Labour Law of the PRC, the Labour Contract Law of the PRC, and the Social Insurance Law of the PRC. During the Reporting Period, the Group was not aware of any material non-compliance with the relevant laws and regulations relating to employment.

Employee Benefits and Welfare

The Group's remuneration packages and fringe benefits include basic salary, overtime work compensation, allowance, award and bonus. Salary is reviewed every two years and adjusted in accordance with the overall cost of living, industrial salary trend, market trend, the Group's remuneration strategies and performance. The Group also provides social insurances (including pension, medical, work-related injury, unemployment and maternity insurances), housing fund contributions and other welfare according to the statutory requirement. Major benefits provided by the Group cover all members of the Group and vary depending on job positions. Benefits provided by the Group are listed below:

- Insurance: mandatory social insurance, supplementary medical, employer's liability and accident insurance
- Allowances: service, night shift, health care, heatstroke prevention, food, consolation, lactation and training allowances
- Bonuses: performance and examination bonuses

There was no material non-compliance with laws and regulations relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, and other benefits and welfare was recorded during the Reporting Period.

Equal Opportunity

The Group respects diversity in the workplace and treats employees equally regardless of their age, nationality, ethnicity, race, sex, religious belief and cultural background. To provide support to breastfeeding mothers when they return to work, the Group has set up a lactation room for expressing breast milk. There was no material non-compliance with laws and regulations relating to equal opportunity, diversity and anti-discrimination was recorded during the Reporting Period.

Communication with Employees

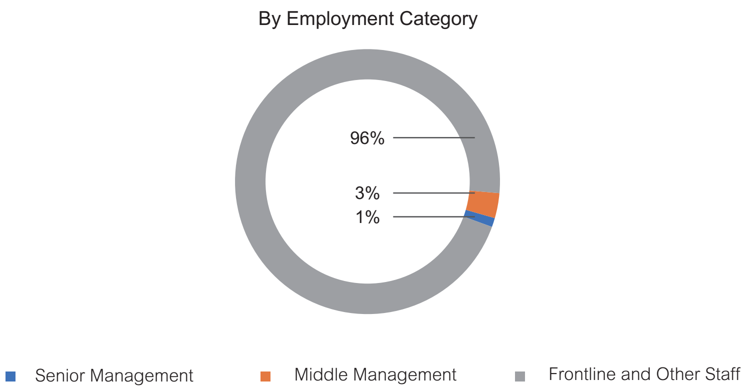
The Group attaches great importance to the health and satisfaction of its employees, and pays attention to the physical and mental wellbeing of employees and their families. During the Reporting Period, the Group maintained close communication with employees and had been doing substantive work for employees. Throughout the reporting year, more than 90 employee-oriented tasks were delivered, covering areas such as employee health, travel services, daily life, children's schooling, and improvement of office environment, etc.

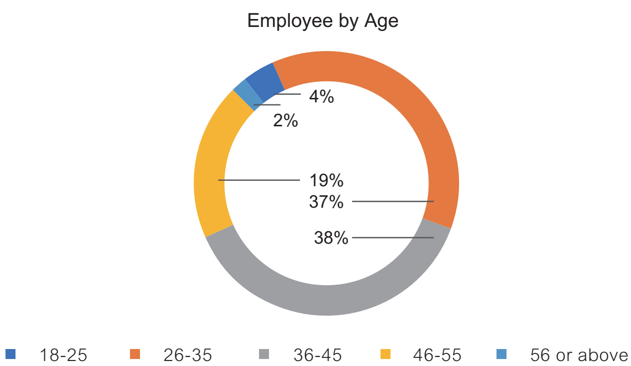
In terms of employee health and travel, free Airdoc health assessments, holiday travel insurance, physiotherapy services, psychological counseling services, and books on cancer prevention were provided to more than 500 employees. In order to take care of the daily life of employees, the Group has negotiated with car washes, restaurants and well-known supermarkets near the Guanghan production base to provide employees with concessionary offers so that they can enjoy more convenient and cost-effective services. In terms of children's education, the Group actively communicated and coordinated with the Guanghan Education Bureau to solve the problem of children's schooling of non-local employees stationed in Guanghan City. In response to the results of the employee survey, the Group has improved the office environment by implementing a full upgrade of the air-conditioning system in the office area of the Chengdu production base and by providing new facilities such as the pantry, microwave ovens, refrigerators for work break.

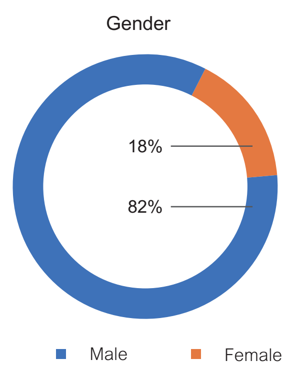
The Group also supports cultural activities organized for employees through providing funds and venues. The Group ensures that the employees are on the same page with the Group, sharing the common values, and strives to create a working environment that fosters self-motivation, harmony, optimism and confidence.

Workforce

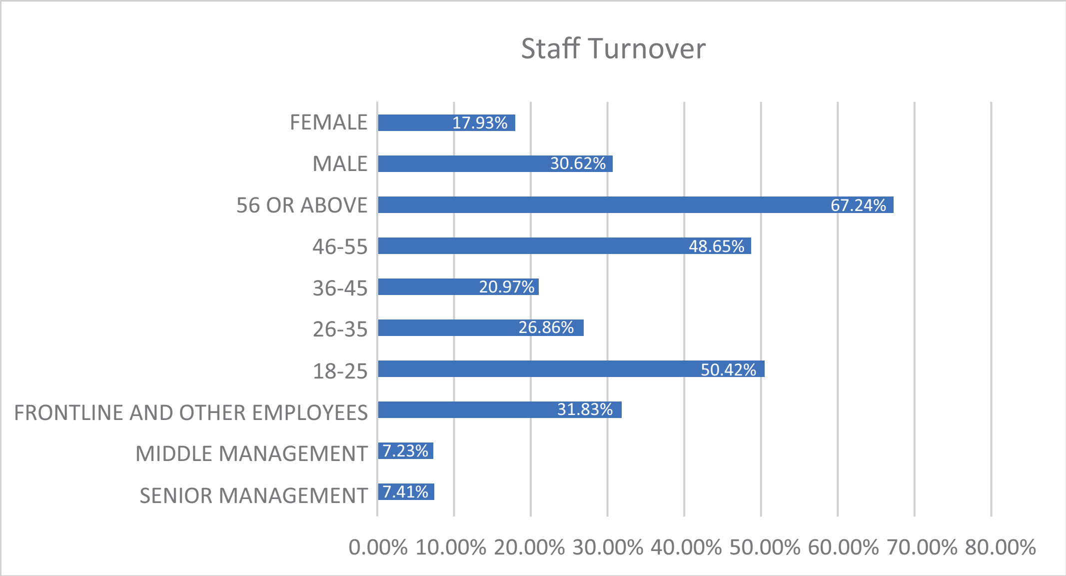
There were employees 2,579 as of 31 December 2021. All of them were full-time employees from the PRC. The total workforce by employment category, age group and gender are as follows:







A total of 792 employees left the Group, representing a turnover rate of 30.7%, during the Reporting Period. The turnover rate by gender, age group are as follows:



B2 Employee Health and Safety

Occupational Health and Safety

The Group is committed to providing a healthy and safe environment. The Group complies with the Work Safety Law of the PRC and the Law of the PRC on the prevention and Control of Occupational Diseases. Occupational health and safety issues are managed by the Group's HSE committee. Management on occupational health and safety has met the OHSAS 18001:2007 standard. To pursue occupational health and production safety, the Group has established separate policies on different aspects, including safe production, occupational hazards, hazardous chemical, fire safety, accident prevention and emergency response plan. The policies and practice are reviewed yearly. During the Reporting Period, the Group has formulated the Notice of Production Safety. The Group hopes to create a healthy and safe work environment by incorporating technologies, strengthen monitoring and inspection and providing training.

All employees are required to follow the safety measurements and guidelines strictly. Their safety practices and performances are examined regularly to ensure that they are competent for safe operation. Any staff who fail to follow correct precautions may be subject to disciplinary actions. In contrast, departments and individuals performing well in occupational safety, or providing suggestions that help to improve operational safety are rewarded. Production safety education and training are provided to employees to further equip them with knowledge of safe production regulations, technology, tools and skills. Innovative measures such as VR, simulation, experiential training methods are used to improve the training effect. The Group also checks the certificates of and provides induction training to new employees.

The Group attaches great importance to work safety, fire safety, traffic safety, disaster prevention and mitigation, as well as epidemic prevention and control. With various safety prevention and control measures implemented by the management, there were no material production safety incidents, major fire incidents and major traffic fatality accidents. No cases of collective infection of coronavirus were reported. The overall safety situation continues to be stable and controllable. The annual safety targets and key safety tasks have been completed, creating a favourable environment for scientific research, production and business development.

The Group has set six major safety targets in 2022:

(1) No production work related fatality incidents;

(2) No major criminal cases;

(3) No major fire accidents;

(4) No major traffic fatality accidents;

(5) No environmental pollution incidents; and

(6) No new confirmed cases of occupational diseases.

And ensures 100% achievement in six areas:

(1) 100% pass rate in safety inspection and rectification of hidden problems;

(2) 100% pass rate in the external audits of the safety production standardization system level two and the HSE system;

(3) 100% completion of the safety emergency rescue drill;

(4) 100% completion and implementation of the safety assessment and countermeasures for new businesses and new projects;

(5) 100% pass rate in safety training and assessment for primary responsible parties, key leaders and safety management personnel; and

(6) 100% achievement of the standardization of the work safety for groups and teams.

The Group provides health check to its employees and organizes health seminars and consultation sessions annually. Fire drills are arranged to familiarise employees with the proper evacuation routes and practices in case a fire, power outage or another disaster occurs during working hours. Personal protective equipment (PPE) is provided to employees and inspections are conducted to ensure the proper use of PPE.

There was no material non-compliance with the laws and regulations relating to providing a safe working environment and protecting employees from occupational hazards during the Reporting Period.

Occupational Health and Safety Data	**2021**	2020
Work related fatality	**0**	0
Work injury cases >3 days	**17**	10
Work injury cases <=3 days	**0**	0
Lost days due to work injury	**11,032**	2,009

Food Health and Safety

The Group has explicit contract terms with its contractors to ensure food safety. Food ingredients were fully tested before cooking. Samples of each dish are kept for the record and testing if necessary. Food premises are sanitized regularly and inspected every day.

COVID-19

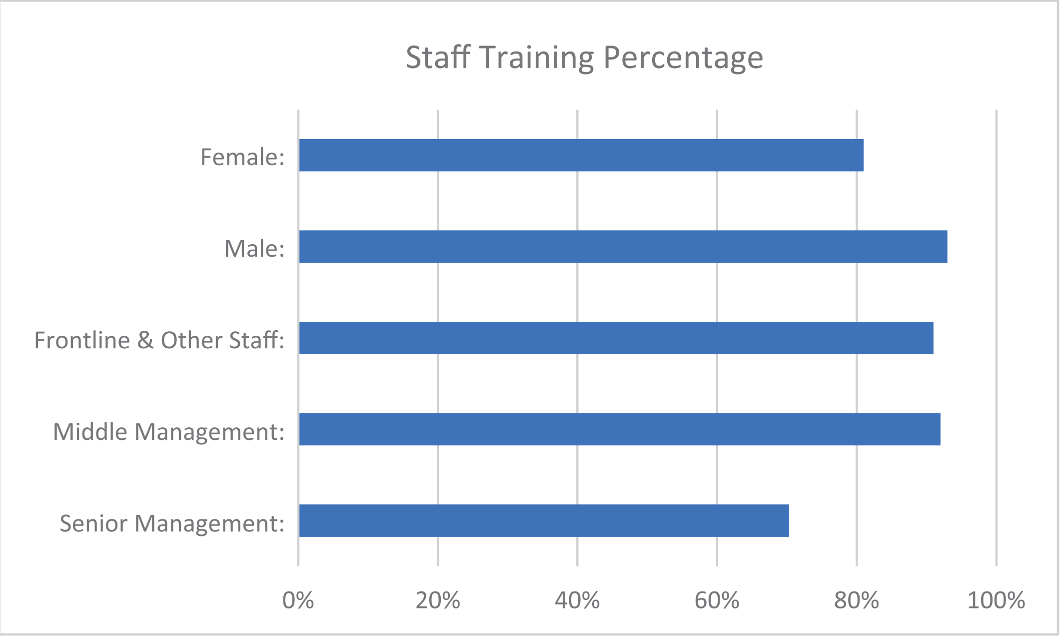
To cope with COVID-19, the Group has implemented risk mitigation precautions to maintain a healthy work environment. Cleaning and disinfection of the work environment, such as offices, bathrooms, common areas, and shared equipment, were conducted daily to minimize the potential for cross contamination. On-site symptom assessment, including temperature screening, was performed daily. Employers must wear masks and practice social distance to reduce gathering and the chances of workers infecting one another.

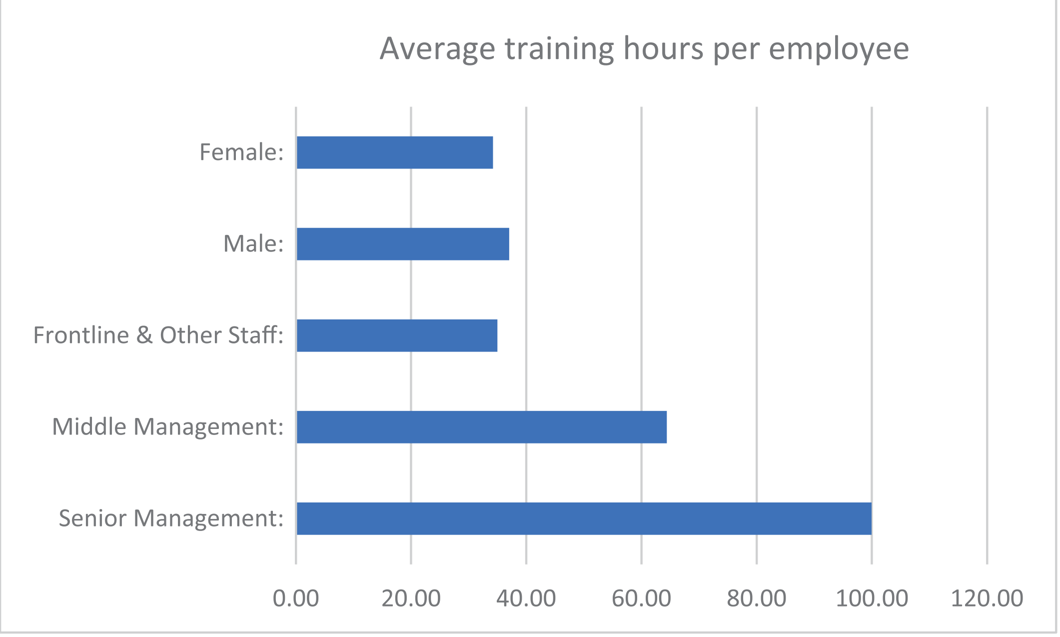
During the time when business travel has greatly reduced, employees meet with clients via teleconferencing and videoconferencing tools so as to maintain social distancing. Moreover, the Group has enforced restrictions on dine-in services and other hygiene measures at staff canteens to avoid close contact between employees.

B3. Development and Training

The Group believes that development and training are crucial for employees to discharge their duties more effectively and efficiently. During the Reporting Period, employees partook in various types of training including induction, operational, safety, quality, and management training. For instance, electrical work and welding project training courses were provided to enhance the professional skills and quality of practice. To nurture talents, the Group has established online and offline training system and conducted skills evaluation for employees. The Group provides training according to their training needs. An internal training team is established to improve and ensure the training quality.

During the Reporting Period, 86,030 hours of training had been provided to 2,353 employees. The average training hours per employee was 33.4 hours. The details of staff training for 2021 are as follows:





B4. Labour Standards

Child and forced labor are strictly prohibited within the Group. The Group strictly observes applicable laws and regulations regarding employment and labor standards, such as the Labor Law of the PRC, the Labor Contract Law of the PRC.

The Group stringently verifies their information with documents, including identity card and academic certificates, during the recruitment process to guard against child labour. No teenagers under 16 years old shall be employed by the Group. All employees have signed the employment contract and agreed on the stipulated employment terms and conditions. The rights and interests of women and minorities are protected under the Group's policies and all the applicable national regulations. All employees only work overtime voluntarily and when needed. The Group prohibits any punishments, management methods and behaviors involving verbal abuse, physical punishment, physical abuse, oppression, sexual harassment, etc. against its employees for any reasons. If a violation is found, the Group will terminate the employment of the concerned persons immediately and take necessary disciplinary action against anyone who is in breach of any applicable laws and regulations. There was no material non-compliance with applicable laws and regulations in relation to the prevention of child and forced labour during the Reporting Period.

No non-compliance with relevant laws and regulations relating to preventing child and forced labor had been identified during the Reporting Period. There were no major risks associated with incidents of child and forced labor within the Group's operation sites.

2. OPERATING PRACTICES

B5. Supply Chain Management

The Group believes that proper management of its supply chain could bring positive impact to the natural environment and the society. Policies and procedures have been established for the management of the environmental and social impact of its supply chain.

The Group only selects qualified suppliers that have passed supplier assessments. Selected suppliers are evaluated against different performance criteria monthly and annually. According to the Group's scoring system, suppliers are assessed and scored with respect to their qualifications, productivity, technology, performances, and quality management. Suggestions will be given to suppliers with unsatisfactory score for rectification. Suppliers who fail to meet the standard will have cooperation suspended until improvements are made.

The Group also aims to improve the environmental and social risk management level of its suppliers through audits, training, and other activities, and takes active measures to encourage suppliers to prevent, mitigate and remediate existing and potential negative environmental and social impacts.

The Group had 1,057 qualified suppliers in the Reporting Period. More than 90% suppliers of the Group were from the PRC.

To manage the environmental and social risks of its supply chain, the Group articulates its HSE policies to suppliers through the procurement agreement and has implemented measures to assess and monitor the environmental and social performances of suppliers as shown in the table below.

Supply Chain Management	
Environmental Aspects	• Through procurement agreement or oral communication, the Group requires suppliers to use environmentally friendly materials for packaging and minimise the adverse impact on the environment if possible. • The Group assesses the discharge permits of its suppliers when applicable. Suppliers without valid discharge permits will not pass the Group's supplier assessment. • When assessing suppliers, the Group considers whether the suppliers have been certified to any environmental management system. Suppliers with certified environmental management system attain higher scores in the scoring system. • The Group requires selected suppliers to sign the Safety, Fire and Environmental Protection Agreement.

Supply Chain Management

Social Aspects	• Suppliers supplying PPE shall possess valid LA certificates and fulfil qualification requirements set by the Group. Selected suppliers are evaluated by the safety management department and production department of the Group annually. • Before entering the manufacturing plants, suppliers must read and sign the Entry Terms or the Entry Safety Notice. They will be reminded to put on appropriate PPE and comply with the safety requirements set out by the Group. • Through agreement, the Group requires suppliers to safeguard their employees' health and safety.

B6. Product Responsibility

The Group is committed to providing products and services with high standard of quality, safety and security, and protect the intellectual property right and personal data. To provide qualified products and services to customers, the Group has established a quality management system, which follows the ISO 9000 standards and complies strictly with the API specification Q1. The quality management department establishes, implements and maintains the quality management system to promote continuous improvement.

There was no material non-compliance relating to health and safety, advertising, labelling and privacy matters regarding products and services provided and method of redress during the Reporting Period.

Product Assurance and Recall

Product quality is assured through compliance with the international standards and the stringent inspection processes. Apart from meeting the ISO 9000 standards, main components of the drilling rigs obtained the CE markings, fulfilled the state Gosstandart ("GOST") standards, API standards and all product requirements of the export markets.

The Group manages its manufacturing process and its contractors' performances effectively. Defective incoming materials, intermediate products and final products are eliminated from the production line immediately after being noticed. Substandard products are analysed and handled with corrective or preventive measures according to the Group's policy.

Complaints

During the Reporting Period, the Group has updated several product and service related documents, such as the "Implementation Rules for Processing Product and Service Information Feedback", "Customer Satisfaction Evaluation Rules", and "Customer Complaint Classification Management System". Changes included redefining the major quality issues, updating the responsibilities of the after-sales service department and marketing department, setting up of "Customer (Service) Satisfaction Survey Form", and adjusting the international after-sales service.

No complaint was received during the reporting period. No product was recalled due to safety and health reasons and no material non-compliance with laws and regulations in relation to product health and safety was recorded during the Reporting Period.

Intellectual Property ("IP") Rights

The Group protects self-owned IP rights and makes certain that its suppliers and other business partners respect the IP rights of the third parties. All drawings, ideas, manuals, designs, models, formulas provided by the Group to suppliers and other business partners shall not be copied or leaked to third parties without the Group's consent. The Group respects IP rights and prudently eliminates the risk of infringement through research and analysis. Suppliers and other business partners shall not infringe copyrights, patent rights, trademarks and other IP rights in the process of design, research and development, and manufacturing. They can be held responsible for all costs if the infringement has caused loss to the Group.

An intellectual property management team has been established for enhancing the Group's IP management, identifying risks and dealing with infringement cases. After investigation and analysis by the intellectual property management team and the legal department, the Group will take appropriate actions, including legal actions, against infringers depending on the circumstances.

During the Reporting Period, the Group obtained no new IP rights. It currently holds 165 rights which include invention and design patents. No material non-compliance with the laws and regulations in relation to IP rights was recorded.

Information Security Management

The Group has developed and implemented a comprehensive range of policies for information security management. To safeguard internal information and data assets, the Group adopted measures including:

– Control of authorities and accessibilities, USB ports and optical drive uses;

– Prohibition of the use of peer-to-peer file sharing services and installation of software at user level;

– Audit of internet access and activities; and

– Encryption of core data.

By signing the employment contract, employees also undertake to protect IP rights and not to disclose any confidential information (including customer information). Customer information includes but not limited to customers' ideas, inventions, data and models, content of documents and correspondences, financial information, marketing strategies and trade secrets. Employees in breach of the contract can be dismissed. No substantiated complaints regarding breach of client privacy, identified leak, theft, or loss of customer information was received during the Reporting Period.

B7. Anti-corruption

The Group believes that honesty, integrity and fairness are fundamental elements of the Group. It is committed to protecting the legitimate rights of shareholders and investors. Any bribery, theft, fraud and misappropriation are prohibited. Improper benefits including banquets, entertainment, cash, stocks, equities, securities, valuables and properties, etc. shall not be accepted. The Group established policies and regulations, including Regulations on the Integrity of Employees, Interim Measures for Discipline Inspection and Supervision, and Implementation Plan on the Safeguard of Supervision System, etc. The policies and regulations are regularly reviewed. This applies to all processes of its business operation including procurement, manufacturing, marketing and communication.

The Group has a discipline inspection department, which is fully responsible for the company's discipline inspection and supervision, internal audit and integrity system construction. It supervises and inspects whether its employees comply with laws and regulations, and conducts supervision and inspection of the Group's financial income, expenditure, and asset management, reducing business risks.

The Group has established a whistleblowing system. All employees are encouraged to assist in tackling fraud, corruption and other malpractice, and report any suspected cases to the auditing department through email (hhgp.jubao@hhcp.com.cn) or hotline (028-68176829). When there are alleged cases in violation of laws, regulations or the Group's policy, the Group will investigate and impose disciplinary actions (including warning, record of demerit, demotion and dismissal) upon offenders after verification.

During the Reporting Period, the Group organized anti-corruption related talks to raise employees' awareness. In 2021, the Group organised and carry out the theme education of "Send discipline and integrity to the grassroots level, and concentrate on promoting social development", and through the "Public Discipline and Clear Rules" learning activities, the theory of anti-corruption and integrity promotion will be fully incorporated into the "three meetings and one meeting" classes. Through the "Case as a Mirror" warning activity, we organize cadres and workers to watch "The Righteousness and Anti-Corruption Is Right Around You", and organized and carry out warning education at all levels.

During the Reporting Period, there was no material non-compliance with applicable laws and regulations relating to anti-corruption that could have a significant impact on the Group.

B8. Community Investment

The Group had no particular policy on community investment, but it actively supports poverty alleviation. During the Reporting Period, the Group spent over RMB50,000 to purchase agricultural products from the State's poverty counties.

The Board presents this annual report, together with the audited consolidated financial statements of the Group for the year ended 31 December 2021.

PRINCIPAL ACTIVITIES

The Company is an investment holding company. The Group principally engages in research, design, manufacture, setting and sale of land rigs and related parts and components, design and manufacture the offshore drilling module. Meanwhile it also provides clients with technical support services and drilling engineering services. During the Year, the nature of principal activities of the Group has no substantial change.

RESULTS AND DISTRIBUTION

The results of the Group for the year ended 31 December 2021 are set out in the consolidated financial statements on pages 98 to 229 of this annual report. The Board did not recommend a final dividend for the year ended 31 December 2021.

CLOSURE OF REGISTER OF THE MEMBERS

The register of members of the Company will be closed from Friday, 17 June 2022 to Wednesday, 22 June 2022, both days inclusive, for the purpose of ascertaining shareholders' entitlement to attend and vote at the Annual General Meeting. In order to be eligible to attend and vote at the Annual General Meeting, all transfer documents accompanied by the relevant share certificates must be lodged for registration with the Hong Kong branch share registrar and transfer office of the Company, Computershare Hong Kong Investor Services Limited, at Shops 1712-1716, 17th floor, Hopewell Centre, 183 Queen's Road East, Wanchai, Hong Kong for registration not later than 4:30 p.m. on Thursday, 16 June 2022.

SHARE CAPITAL

Changes in the share capital of the Company during the Year are set out in note 22 to the consolidated financial statements.

PRE-EMPTIVE RIGHT

There is no provision of pre-emptive right under the Articles of Association and the laws of the Cayman Islands stipulating that the Company shall offer new Shares to existing Shareholders in proportion.

PURCHASE, SALE OR REPURCHASE 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 shares during the year ended 31 December 2021.

RESERVES

As of 31 December 2021, the Group has a total of approximately RMB3,050 million worth of reserve. Details of movements in the reserves of the Group during the Year are set out in the consolidated statement of changes in equity in the consolidated financial statements.

SUBSIDIARIES

Details of the Company's principal subsidiaries as of 31 December 2021 are set out in note 11 to the consolidated financial statements.

DIRECTORS

The existing Directors of the Company during the Year and as of the date of this annual report are set out on page 2 the section "Corporate Information" of this annual report.

The status of all the Directors of the Company holding their offices during the year is set out in the section "Corporate Information".

In accordance with the Articles of Association, one third of the Directors (or closest to but not less than one third if the number is not three or a multiple of three) shall retire from office by rotation at each annual general meeting and each Director is required to retire at least once every three years and any Director appointed by the Board shall hold office only until the next general meeting and shall then be eligible for re-election at the meeting. Mr. Ren Jie, Mr. Chen Guoming, Mr. Chang Qing and Mr. Wang Xiuchang will retire from office by rotation at the forthcoming annual general meeting and will be eligible for re-election.

According to the independent guidelines under the Listing Rules, the Company has received the annual confirmation of their independence from each Independent Non-executive Director, and the Company still considers such Independent Non-executive Directors as independent.

DIRECTORS' SERVICE CONTRACTS

Each of the Director of the Company is engaged on a service contract for a term of 3 years. The appointment may be terminated by not less than 3 months' written notice. The Directors shall retire by rotation and be eligible for re-election subject to the Articles of Association.

None of the Directors has a service contract with the Company which is not determinable within one year without payment of compensation, other than statutory compensation.

PERMITTED INDEMNITY

Pursuant to the Company's Articles of Association, subject to the Companies Law, every Director shall be indemnified out of the assets of the Company against all costs, charges, expenses, losses and liabilities which he/she may sustain or incur in the execution of his/her office or otherwise in relation thereto. The Company has taken out insurance against the liability and costs associated with defending any proceedings which may be brought against directors of the Group.

DIRECTORS' INTERESTS IN CONTRACTS

Save as disclosed under the following "Connected connected transactions", none of the Directors directly or indirectly had any material interest in the contracts of significance in relation to the Group's business to which the Company or its holding company or any of its subsidiaries was a party at the end of the Year or at any time during the Year.

REMUNERATION FOR DIRECTORS AND SENIOR MANAGEMENT

For the year ended 31 December 2021, details of remuneration for the Directors and Senior Management of the Company are set out in notes 33(f) and 36 to the consolidated financial statements.

The emoluments of the Executive Director and Senior Management by bands are as follows:

	2021 **Number of individuals**
RMB0 to RMB1,000,000	11
RMB1,000,001 to RMB2,000,000	1
RMB2,000,001 to RMB3,000,000	–
RMB3,000,001 to RMB4,000,000	–
RMB4,000,001 to RMB5,000,000	–
RMB5,000,001 to RMB6,000,000	–

DIRECTORS' AND CHIEF EXECUTIVES' INTERESTS AND/OR SHORT POSITIONS IN THE SHARES, UNDERLYING SHARES AND DEBENTURES OF THE COMPANY OR ANY ASSOCIATED CORPORATION

At 31 December 2021, the interests and short positions of each Director and Chief Executive in the Shares, underlying Shares and debentures of the Company and its associated corporations (within the meaning of the SFO), as recorded in the register required to be kept by the Company under Section 352 of Part XV of the SFO or as notified to the Company and the Stock Exchange pursuant to the Model Code contained in Appendix 10 to the Listing Rules were as follows:

A) ORDINARY SHARES OF HK$0.1 EACH OF THE COMPANY

	Long/Short position	Nature of interest	Number of shares held	% of the issued share capital of the Company
Mr. Zhang Mi	Long	Personal interest, corporate interest and settlor of a discretionary trust	323,408,548[(1)]	6.03%
Mr. Ren Jie	Long	Personal interest, corporate interest and settlor of a discretionary trust	124,530,240[(2)]	2.32%
Ms. Su Mei	Long	Personal interest	150,000[(3)]	0.002%

(1) Zhang Mi individually owns 3,050,000 Shares. Yi Langlin, spouse of Zhang Mi owns 2,156,000 Shares. Zhang Mi is the settlor of a discretionary trust, The ZYL Family Trust, whose trustee, through Wealth Afflux Limited, holds 318,202,548 Shares.

(2) Ren Jie individually owns 1,549,000 Shares. He is the settlor of a discretionary trust. The Trustee of The RJDJ Victory Trust owns 122,981,240 Shares.

(3) Su Mei individually owns 150,000 Shares.

B) SHARE OPTIONS OF THE COMPANY

	Long/Short Position	Number of options held – Personal interest
Mr. Zhang Mi	Long	1,190,000
Mr. Ren Jie	Long	2,885,000
Mr. Chen Guoming	Long	1,050,000

Save as disclosed above, as at 31 December 2021, none of the Directors and Chief Executives (including their spouse and children under 18 years of age) had any interest in, or had been granted, or exercised, any rights to subscribe for Shares (or warrants or debentures, if applicable) of the Company and its associated corporations required to be disclosed pursuant to the SFO.

SUBSTANTIAL SHAREHOLDERS' INTERESTS OR/AND SHORT POSITIONS IN THE SHARES AND UNDERLYING SHARES OF THE COMPANY

The register of substantial shareholders required to be kept under section 336 of Part XV of the SFO shows that, as at 31 December 2021, the Company had been notified of the following substantial shareholders' interests and short positions, being 5% or more of the Company's issued share capital. These interests are in addition to those disclosed above in respect of the Directors and Chief Executives of the Company.

		Number of shares held					
		Personal interest					
Name	Long/Short Position	Share option	Shares Interest	Corporate interest	Corporate interest and settlor of a discretionary trust	Total	% of the issued share capital of the Company
Wealth Afflux Limited	Long	–	318,202,548	–	–	318,202,548[1]	5.94%
Tricor Equity Trustee Limited	Long	–	–	–	769,648,704	769,648,704[2]	14.36%
Yi Langlin	Long	–	2,156,000 322,442,548 (family interest)		–	324,598,548[3]	6.06%
Kehua Technology Co., Limited	Long	–	1,606,000,000	–	–	1,606,000,000[4]	29.98%
Shenzhen Aerospace Industry Technology Research Institute	Long	–	–	1,606,000,000	–	1,606,000,000[4]	29.98%
China Aerospace Science and Industry Corporation Limited	Long	–	–	1,606,000,000	–	1,606,000,000[4]	29.98%

Notes:

(1) Wealth Afflux Limited is held by Tricor Equity Trustee Limited (as the trustee of The ZYL Family Trust). The ZYL Family Trust is a discretionary trust established by Zhang Mi (as the settlor), with Tricor Equity Trustee Limited (as the trustee). The beneficiaries under The ZYL Family Trust are Zhang Mi and his family members.

(2) Tricor Equity Trustee Limited, as the trustee of The ZYL Family Trust and the 6 other Trusts, holds 769,648,704 Shares in total.

(3) Yi Langlin, spouse of Zhang Mi, is deemed to be interested in 324,598,548 Shares in which Zhang Mi holds 1,190,000 share options.

(4) Kehua Technology Co., Limited is owned 40% by Shenzhen Aerospace Industry Technology Research Institute and 60% by China Aerospace Science and Industry Corporation Limited and holds 1,606,000,000 Shares.

Save as disclosed above, to the best of the Directors and the Chief Executives of the Company's knowledge, as at 31 December 2021, none of the persons, other than the Directors or the Chief Executives of the Company, had interests or short positions in the Shares and underlying Shares of the Company which would fall to be disclosed to the Company under the provisions of Divisions 2 and 3 of Part XV of the SFO or recorded in the register as required under Section 336 of the SFO.

SHARE OPTION SCHEME

(A) SHARE OPTION SCHEME

Upon conditional approval by resolution in writing by all shareholders of the Company on 21 January 2008, the Company adopted a share option scheme (the "Share Option Scheme"). The vesting period of the Pre-IPO Share Option Scheme is ten years from the date of grant until 20 January 2018. Details of the grant share options under the Share Option Scheme in the validity period ended 31 December 2021 were as follows:

Date of grant	Number of grant (shares)	Exercise price per Share (HK$)	Exercise period of share options	Valid period of the share options
5 April 2012	15,400,000	1.19	Up to 30% of the share options granted to each grantee from 5 April 2013 to 4 April 2014; up to 60% of the share options granted to each grantee on or before 4 April 2015; all the remaining share options granted to each grantee on or after 5 April 2015	up to 4 April 2022
24 March 2014	3,200,000	2.024	up to 30% of the share options granted to each grantee from 24 April 2014 to 23 April 2015; up to 60% of the share options granted to each grantee on or before 23 April 2016; all the remaining share options granted to each grantee on or after 24 April 2016	up to 23 March 2024

Date of grant	Number of grant (shares)	Exercise price per Share (HK$)	Exercise period of share options	Valid period of the share options
2 July 2014	40,575,000	1.96	Vesting of the share options is conditional upon the achievement of corporate goals of the Company and the individual performance of the respective Grantees. The share options or any portion thereof shall lapse if the relevant corporate goals cannot be achieved. Up to 30% of the share options granted to each grantee after April 2015; up to 60% of the share options granted to each grantee after April 2016; all the remaining share options granted to each grantee after April 2017.	up to 1 July 2024
21 September 2016	41,350,000	0.44	up to 30% of the Share Options granted to each Grantee from 21 September 2017 to 20 September 2018;up to 60% of the Share Options granted to each Grantee on or before 20 September 2019; all the remaining Share Options granted to each Grantee on or after 21 September 2019.	up to 20 September 2026

Particulars and movements of share options under the Share Option Scheme during the year ended 31 December 2021 were as follows:

	Number of share options									
Name or category of participant	Outstanding as at 01/01/2021	Granted during the Year	Exercised during the Year	Lapsed during the Year	Cancelled during the Year	Outstanding as at 31/12/2021	Date of grant (DD/MM/YY)	Exercise period (DD/MM/YY)	Exercise price per Share HK$	Price immediately preceding the grant date of share options HK$
Directors										
Mr. Zhang Mi	1,190,000	–	–	–	–	1,190,000	02/07/2014	02/07/2014-01/07/2024	1.96	1.92
Mr. Ren Jie	885,000	–	–	–	–	885,000	02/07/2014	02/07/2014-01/07/2024	1.96	1.92
	2,000,000	–	–	–	–	2,000,000	21/09/2016	21/09/2017-20/09/2026	0.44	0.435
Mr. Chen Guoming	750,000	–	–	750,000	–	–	20/06/2011	19/07/2011-19/06/2021	0.83	0.79
	550,000	–	–	–	–	550,000	24/03/2014	24/04/2014-23/03/2024	2.024	2.02
	500,000	–	–	–	–	500,000	21/09/2016	21/09/2017-20/09/2026	0.44	0.435
Mr. Liu Xiao Feng (Resigned as Independent non-executive director with effect from 19 November 2021)	1,000,000	–	–	1,000,000	–	–	20/06/2011	19/07/2011-19/06/2021	0.83	0.79
	750,000	–	–	–	–	750,000	24/03/2014	24/04/2014- 23/03/2024	2.024	2.02
	700,000	–	–	–	–	700,000	21/09/2016	21/09/2017- 20/09/2026	0.44	0.435
Sub-total	8,325,000	–	–	1,750,000	–	6,575,000				
Other										
Employee	5,543,000	–	–	5,543,000	–	–	20/06/2011	19/07/2011-19/06/2021	0.83	0.79
Employee	10,906,000	–	–	285,000	–	10,621,000	05/04/2012	05/04/2013-04/04/2022	1.19	1.20
Employee	1,900,000	–	–	–	–	1,900,000	24/03/2014	24/04/2014-23/03/2024	2.024	2.02
Employee	13,566,536	–	–	947,168	–	12,619,368	02/07/2014	02/07/2014-01/07/2024	1.96	1.92
Employee	33,302,000	–	–	1,751,000	–	31,551,000	21/09/2016	21/09/2017-20/09/2026	0.44	0.435
Sub-total	65,217,536	–	–	8,526,168	–	56,691,368				
Total	73,542,536	–	–	10,276,168	–	63,266,368				

(B) SHARE OPTION SCHEME OF 2017

The 2017 Share Option Scheme is conditionally adopted by the Shareholders at the annual general meeting held on 14 June 2017. As at 31 December 2021, no options were granted under the 2017 Share Option Scheme. Details of the Share Option Scheme are as follows:

Purpose

The purpose of the Scheme is to provide incentives or rewards to Participants for their contribution to the Group and/or to enable the Group to recruit and retain high caliber employees and attract human resources that are available to the Group. The Scheme will give the Participants an opportunity to have a personal stake in the Company and will (a) motivate the Participants to optimise their performance and efficiency; and(b) attract and retain the Participants whose contributions are important to the long-term growth and profitability of the Group.

Participants

(a) any Executive Director, employee or proposed employee (whether full time or part time) of any member of the Group; (b) any Non-executive Director (including Independent Non-executive Director) of any member of the Group; (c) any supplier of goods or services to any member of the Group; (d) any customer of any member of the Group; (e) any advisor, consultant, any person or entity with professional or other services who provides research, development or other technical support to any member of the Group; (f) any joint venture, business or strategic alliance partner of any member of the Group; (g) discretionary trust whose discretionary objects are as follows: any Executive Director, employee or prospective employee (whether full time or part time) and any Non – executive Director (including Independent Non-executive Director) of any member of the Group, any supplier of goods or services to any member of the Group, any customer of any member of the Group, any advisor, consultant, any person or entity with professional or other services who provides research, development or other technical support to any member of the Group, and any joint venture, business or strategic alliance partner of any member of the Group.

Total number of Shares available for issue under the Share Option Scheme and % of issued share capital as at the date of this annual report

As at the date of this annual report, no options were granted under the 2017 Share Option Scheme.

Maximum entitlement of each participant

The total number of Shares issued and to be issued upon exercise of options granted to any Participant (including both exercised and outstanding options) under the Share Option Scheme, in any 12-month period up to the date of grant shall not exceed 1% of the Shares in issue. Any further grant of options in excess of such limit must be separately approved by Shareholders in general meeting with such Participant and his associates (as defined under the Listing Rules) abstaining from voting. In such event, the Company must send a circular to the Shareholders containing the identity of the Participant, the number and terms of the options to be granted (and options previously granted to such Participant), and all other information required under the Listing Rules. The number and terms (including the exercise price) of the options to be granted must be fixed before the approval of the Shareholders and the date of the Board meeting proposing such further granted should be taken as the date of grant for the purpose of calculating the subscription price.

The period in which Shares must be taken up for under the Share Option Scheme

An offer for the grant of options must be made to a Participant on a trading day by letter in such form as the Board may from time to time determine, requiring the Participant to undertake to hold the option on the terms on which it is to be granted and to be bound by the provisions of the Share Option Scheme and shall remain open for acceptance by the Participant concerned within seven days inclusive of the day on which such offer was made.

The minimum period, if any, for which a share option must be held before it can be exercised

Unless otherwise determined by the Board and stated in the offer of grant of share options to the grantee, there is no minimum period for which a share option must be held before it can be exercised.

Amounts to be paid on acceptance of share options

Grantee of share option must pay HK$1.00 to the Company upon acceptance of share option offer.

Basis of determining the exercise price

The subscription price of the share option granted under the Share Option Scheme is solely determined and notified to the participants by the Board of Directors, but not less than the highest of (i) the closing price of the Company's Shares as stated in the daily quotations sheet of the Stock Exchange on the date of the grant; (ii) the average closing price of the Company's Shares as stated in the Stock Exchange's daily quotations sheet for the five trading days immediately preceding the date of the grant; and (iii) the nominal value of the Company's Shares as at date of grant.

The remaining life of the Share Option Scheme

Subject to early termination of the Share Option Scheme pursuant to the terms thereof, the Share Option Scheme shall remain valid and effective for 10 years commencing on the date of its adoption on 14 June 2017.

RESTRICTED SHARE AWARD SCHEME

On 30 December 2011, the Board approved and adopted a restricted share award scheme ("the Original Scheme"). The Original Scheme has expired at 30 December 2021 for a term of 10 years commencing on the Adoption Date. As at 30 December 2021, in accordance with the Original Scheme Rules, the Trustee has purchased 97,817,000 of the Company's Shares, accounting for 1.82% of the issued share capital of the Company and total of 36,917,700 shares were granted to the Selected Participants and out of which 190,000 Shares were subsequently cancelled. 61,089,300 Shares may be administered and have not yet been granted (representing approximately1.14% of the total number of issued Shares of the Company).

At the Board meeting of the Company held on 29 December 2021, the Board adopted the 2021 Restricted Share Award Scheme. The 2021 Scheme shall be effective for a term of 10 years commencing on the Adoption Date (29 December 2021).The 2021 Scheme will be as an incentive to recognise the contributions by the Eligible Participants and to give incentives in order to retain them for their continuing operation and development and to attract suitable personnel for further development of the Group, and to provide them with a direct economic interest in attaining the long-term business objectives of the Group. Any individual being a director, employee, any consultant or adviser of the Company or any of its subsidiaries is entitled to participate. With the prior approval of the Board, the Trustee may purchase Shares up to 5% of the issued share capital of the Company from time to time in accordance with the Scheme Rules (including the Shares which may be administered and have not yet been granted under the original Scheme). The Shares will be held in trust for the relevant Selected Participant until such Shares are vested with the relevant Selected Participants in accordance with the Scheme Rules. The Scheme shall be subject to the administration of the Board in accordance with the Scheme Rules. Details of the 2021 Restricted Share Award Scheme and the terms thereof are set out in the announcement of the Company dated 30 December 2021.

Particulars and movements of the Restricted Share Award Scheme during the year ended 31 December 2021 were as follows:

	Number of Shares					
	Outstanding as at 01/01/2021	Purchased during the Year	Granted during the Year	Vested during the Year	Cancelled during the Year	Outstanding as at 31/12/2021
Total	61,089,300	–	–	–	–	61,089,300

CONNECTED TRANSACTIONS

During the Year, the Group has the following connected transactions which are required to be disclosed in this report in accordance with Chapter 14A of the Listing Rules. Certain related parties transactions disclosed in note 33 to the consolidated financial statements were not disclosed below as they fulfilled the exemption requirements in Chapter 14A of the Listing Rules.

DEBT ARRANGEMENT FOR OFFSHORE SEGMENT AND SIIC GUARANTEE

(1) On 28 October 2018, Honghua (China) Investment Co., Ltd. ("Honghua Investment") entered into the Domestic Debt Repayment Agreement with Honghua Offshore Oil & Gas Equipment (Jiangsu) Co., Ltd. ("Jiangsu Offshore"), and Shanghai Honghua Offshore Oil & Gas Equipment Co. ("Shanghai Offshore"), pursuant to which Jiangsu Offshore shall repay an existing debt of an aggregated amount of RMB1,989.5049 million, together with relevant interest to Honghua Investment.

(2) On 28 October 2018, Honghua Holdings Limited ("Honghua Holdings") entered into the Overseas Debt Repayment Agreement with Honghua Holdings Limited ("Honghua Holdings"), pursuant to which Tank Tek shall repay an existing debt of an aggregated amount of USD16.9291 million, together with relevant interest to Honghua Holdings.

(3) On 5 August 2015, Honghua Investment issued an irrevocable guarantee in favor of SIIC Shanghai International Trade (Group) Co., Ltd. ("SIIC") for the debt owed by Jiangsu Offshore to SIIC ("SIIC Guarantee").

Jiangsu Offshore is owned as to 51% equity interest by Jiangsu Hongjieding Energy Technology Co., Ltd ("Jiangsu Hongjieding"). Mr. Zhang Mi, a non-executive director of the Company, through his sole proprietorship, holds 53.85% of equity interests in Jiangsu Hongjieding as of the date of this report. Accordingly, Jiangsu Offshore is a connected person of the Company. Therefore, the Domestic Debt and Overseas Debt constitute financial assistance provided by the Group to Jiangsu Offshore and Tank Tek, thus connected transactions for the Company. In addition, Jiangsu Offshore is a subsidiary of Jiangsu Hongjieding and therefore the SIIC Guarantee constitutes financial assistance provided by the Group to a connected person.

FINANCIAL COOPERATION AGREEMENT BETWEEN AEROSPACE ASIFC AND THE GROUP

On 1 June 2018, the Company and Aerospace Science and Industry Financial Corporation ("ASIFC") entered into the Financial Cooperation Agreement. According to the Financial Cooperation Agreement, ASIFC will provide the Group with deposit and settlement services. Term of the Financial Cooperation Agreement was 3 years from the date of entering into the agreement ("1 June 2018") to 31 May 2021. During the five months ended 31 May 2021, the daily maximum balance of deposits (including accrued interests) under the Financial Cooperation Agreement was RMB1.5 billion, and the actual balance of deposits was RMB58.207 million.

On 12 May 2021, the Company and ASIFC entered into the Financial Cooperation Agreement. According to the Financial Cooperation Agreement, ASIFC will provide the Group with deposit, lending and other comprehensive credit facilities services, settlement and free settlement services. Term of the Financial Cooperation Agreement was 3 years from 1 June 2021. During the seven months ended 31 December 2021, the daily maximum balance of deposits (including accrued interests) under the Financial Cooperation Agreement was RMB1.5 billion, and the actual balance of deposits was RMB119.101 million. The cap of lending and other comprehensive credit facilities services provided by ASIFC to the Group and secured by the Group's assets was RMB0.65 billion and the actual lending and other comprehensive credit facilities was RMB0 million.

CASIC indirectly holds 29.98% of the shares in the Company and therefore is a substantial shareholder and connected person of the Company. CASIC and its subsidiaries together hold a 100% equity interest in Aerospace Science and Industry Financial Corporation, thus Aerospace Science and Industry Financial Corporation is an associate of CASIC and in turn a connected person of the Company. Therefore, the deposit transactions under the Financial Cooperation Agreement constitute connected transactions.

PURCHASE FRAMEWORK AGREEMENT AND SALES FRAMEWORK AGREEMENT BETWEEN AEROSPACE JIANGNAN, AEROSPACE CLOUD, AEROSPACE SANJIANG AND THE GROUP

On 17 July 2019, the Company and Aerospace Jiangnan entered into the Purchase Framework Agreement, pursuant to which the Company will purchase equipment and products including rig parts, forged parts of solution tanks and blanks from Aerospace Jiangnan. The annual cap under the Purchase Framework Agreement for the year ended 31 December 2021 is RMB11 million. During the Year, the actual amount was RMB0.056 million;

the Company and Aerospace Cloud entered into the Purchase Framework Agreement, pursuant to which the Company will purchase products including servers and related technology services from Aerospace Cloud. The annual cap under the Purchase Framework Agreement for the year ended 31 December 2021 is RMB10 million. During the Year, the actual amount was RMB0.002 million;

and the Company and Aerospace Sanjiang entered into the Purchase Framework Agreement, pursuant to which the Company will purchase products including whole towing devices, LNG auxiliary equipment and downhole testing equipment and related services from Aerospace Sanjiang. The annual cap under the Purchase Framework Agreement for the year ended 31 December 2021 is RMB57.5 million. During the Year, the actual amount was RMB2.34 million;

and the Company and Aerospace Jiangnan entered into the Sales Framework Agreement, pursuant to which the Company will sell products including steel structure and related processing services to Aerospace Jiangnan. The annual cap under the Purchase Framework Agreement for the year ended 31 December 2021 is RMB10 million. During the Year, the actual amount was RMB0.017 million.

The term of each of the Purchase Framework Agreements and the Sales Framework Agreement will commence on the date of the agreement and expire on 31 December 2021.

CASIC indirectly holds approximately 29.98% of the shares in the Company through its wholly-owned subsidiary Kehua, and therefore is a substantial shareholder and connected person of the Company. CASIC directly holds 100%, 49.51% and 100% equity interest in Aerospace Jiangnan, Aerospace Cloud and Aerospace Sanjiang, respectively, thus Aerospace Jiangnan, Aerospace Cloud and Aerospace Sanjiang are all Associates of CASIC and in turn connected persons of the Company. Therefore, the Purchase Transactions and the Sales Transactions constitute continuing connected transactions of the Company under Chapter 14A of the Listing Rules.

PURCHASE FRAMEWORK AGREEMENT BETWEEN SHANGHAI OFFSHORE AND SICHUAN HONGHUA

On 22 January 2020, Sichuan Honghua Petroleum Equipment Co., Ltd. ("Sichuan Honghua"), entered into a purchase framework agreement ("Original Purchase Framework Agreement") with Shanghai Honghua Offshore Oil & Gas Equipment Co., Ltd. ("Shanghai Offshore"). On 25 May 2020, Sichuan Honghua and Shanghai Offshore entered into a written agreement to make amendments to the Original Purchase Framework Agreement, pursuant to which Shanghai Offshore will provide Sichuan Honghua with drilling and exploiting equipment, automation systems, vessels, other ancillary equipment and related services (including but not limited to installation, commissioning and maintenance services); large-scale steel structure processing, construction, installation and commissioning services. The term of the Purchase Framework Agreement commences at the date of the agreement and expires on 31 December 2022. The annual cap under the Purchase Framework Agreement for the year 2021 is RMB400 million. During the Year, the actual amount was RMB328.158 million.

Shanghai Offshore is owned as to 51% equity interest by Jiangsu Hongjieding. Mr. Zhang Mi, a non-executive director of the Company, through his sole proprietorship, holds 53.85% of equity interests in Jiangsu Hongjieding. Accordingly, Shanghai Offshore is a connected person of the Company, and the transactions between Sichuan Honghua and Shanghai Offshore constitute the continuing connected transaction of the Company under Chapter 14A of the Listing Rules.

STRATEGIC COOPERATION FRAMEWORK AGREEMENT BETWEEN ASIFL AND HONGHUA INVESTMENT

On 25 May 2020, Honghua (China) Investment Co., Ltd. ("Honghua Investment") and Aerospace Science & Industry Financial Leasing Co,. Ltd. ("ASIFL") entered into the Strategic Cooperation Framework Agreement, pursuant to which, ASIFL will purchase certain equipment and products from Honghua Investment and its subsidiaries for the three years ending 31 December 2022 starting from the effective date of the Strategic Cooperation Framework Agreement. The annual cap under the Strategic Cooperation Framework Agreement for the year 2021 is RMB300 million. During the Year, the actual amount was RMB0 million.

CASIC indirectly holds 29.98% of the shares in the Company through its wholly-owned subsidiary, Kehua, and therefore is a substantial shareholder and a connected person of the Company. CASIC and its subsidiaries together hold a 46.5% equity interest in ASIFL, thus ASIFL is an associate of CASIC and in turn a connected person of the Company. Therefore, the transactions under the Strategic Cooperation Framework Agreement constitute connected transactions of the Company under Chapter 14A of the Listing Rules.

SALES FRAMEWORK AGREEMENT BETWEEN CHINA AEROSPACE CONSTRUCTION AND THE GROUP

On 24 June 2020, the Company and China Aerospace Construction Group Co., Ltd. ("China Aerospace Construction") entered into the Sales Framework Agreement, pursuant to which the Group will sell equipment, parts, components or finished products and other related or similar goods, steel structure processing, construction and related services to China Aerospace Construction and its associates. The term of the Sales Framework Agreement will commence on the date of the agreement and expire on 31 December 2021. The annual cap under the Sales Framework Agreement for the year 2021 is RMB20 million. During the Year, the actual amount was RMB0 million.

CASIC indirectly holds approximately 29.98% of the Shares in the Company through its wholly-owned subsidiary Kehua, and therefore is a substantial Shareholder and connected person of the Company. CASIC directly holds 72.85% equity interest in China Aerospace Construction, thus China Aerospace Construction is an associate of CASIC, and in turn a connected person of the Company. Therefore, the Sales Transactions constitute continuing connected transactions of the Company under Chapter 14A of the Listing Rules.

ENGINEERING SALES FRAMEWORK AGREEMENT AND EQUIPMENT LEASING FRAMEWORK AGREEMENT BETWEEN JIANGSU OFFSHORE AND SICHUAN HONGHUA

On 11 December 2020, Sichuan Honghua and Jiangsu Offshore entered into the Sales Framework Agreement with a term commencing on 1 January 2021 and expiring on 31 December 2021, pursuant to which Sichuan Honghua and its associates will sell finished products including equipment, parts, components or raw materials and engineering equipment and other related or similar goods and provide technical testing and related services to Jiangsu Offshore and its associates. The annual cap under the Sales Framework Agreement for the year 2021 is RMB20 million. During the Year, the actual amount was RMB3.663 million.

On 11 December 2020, Sichuan Honghua and Jiangsu Offshore entered into the Equipment Leasing Framework Agreement with a term commencing on 1 January 2021 and expiring on 31 December 2021, pursuant to which Sichuan Honghua and its associates will lease general equipment related to production and operation, such as transportation equipment, production equipment, construction machinery and instrument meters to Jiangsu Offshore and its associates. The annual cap under the Equipment Leasing Framework Agreement for the year 2021 is RMB10 million. During the Year, the actual amount was RMB2.391 million.

Jiangsu Offshore is owned as to 51% equity interest by Jiangsu Hongjieding and as to 49% indirectly by the Company. Mr. Zhang Mi, a non-executive Director of the Company, through his sole proprietorship, holds 53.85% equity interests in Jiangsu Hongjieding. Accordingly, Jiangsu Offshore is a connected person of the Company, and the transactions under the Sales Framework Agreement and the Equipment Leasing Framework Agreement constitute connected transactions of the Company under Chapter 14A of the Listing Rules.

All the Independent Non-executive Directors have reviewed the above continuing connected transactions and confirmed that these transactions have been entered into are:

(1) in the ordinary and usual course of the business of the Group;

(2) either on normal commercial terms or on terms no less favourable to the Group than terms available to or from independent third parties; and

(3) in accordance with the relevant agreements governing them on terms that are fair and reasonable and in the interest of the Shareholders as a whole.

In accordance with Rule 14A.56 of the Listing Rules, the Company is required to obtain a letter from its auditor to confirm that nothing has come to their attention that causes them to believe that these continuing connected transactions:

(1) have not been approved by the board of directors of the company;

(2) were not made in accordance with the pricing policy of the Company;

(3) were not conducted, in all material respects, in accordance with the relevant agreement governing those transactions;

(4) have exceeded the cap disclosed in previous announcements.

The Company's auditors were engaged to report on the Group's continuing connected transactions in accordance with Hong Kong Standard on Assurance Engagements 3000 "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. The auditors have issued to the Board an unqualified letter containing their findings and conclusions in respect of the continuing connected transactions disclosed by the Group in pages 214 to 220 of this annual report in accordance with Rule 14A.56 of Listing Rules. A copy of the auditor's letter has also been provided to the Stock Exchange.

BANK LOANS

Details of our bank loans and other borrowings are set out in note 26 to the consolidated financial statements.

FINANCIAL SUMMARY

Our financial summary for the past five years are set out in the section headed "Five-Year Financial Highlights" of this annual report.

STAFF RETIREMENT AND BENEFIT SCHEME

Details of the staff retirement and benefit scheme are set out in notes 9 and 33(f) to the consolidated financial statements.

FIXED ASSETS

Details of the changes of the fixed assets of the Group are set out in note 15 to the consolidated financial statements.

MAJOR CUSTOMERS AND SUPPLIERS

1. During the Year, the Group's five largest suppliers in total accounted for approximately 14.2% of total purchase, and the largest supplier accounted for approximately 3.8% of total purchase.

2. During the Year, the Group's five largest customers accounted for approximately 31.7% of total sales and the largest customer accounted for approximately 11.1% of revenue.

3. None of the Directors of the Company, their associates or any Shareholder (which to the knowledge of the Directors owns more than 5% of the Company's share capital) had an interest in the above suppliers or customers.

ENTRUST DEPOSITS AND ENTRUST LOANS

As at 31 December 2021, the Company has no entrust deposits or entrust loans being placed with commercial banks or non-commercial banks and other finance institutions.

TAXATION POLICY

The details of the Group's applicable income taxation policy and income tax rate are set out in note 13 to the consolidated financial statements.

SUFFICIENCY OF PUBLIC FLOAT

Based on the information that is publicly available to the Company and within the knowledge of the Directors as at the date of this report, the Company has maintained sufficient public float since its Listing Date.

MANAGEMENT CONTRACTS

There was no contract concerning the management or administration of the whole or any substantial part of the business of the Company which was entered into or existed during the Year.

AUDITOR

The financial statements of the Group for the year ended 31 December 2021 have been audited by PricewaterhouseCoopers who will retire at the forthcoming annual general meeting and being eligible, offer themselves for re-appointment.

By the order of the Board
Honghua Group Limited
Chairman
Jin Liliang

PRC, 29 March 2022

羅兵咸永道

To the Shareholders of Honghua Group Limited
(incorporated in the Cayman Islands with limited liability)

Opinion

What we have audited

The consolidated financial statements of Honghua Group Limited (the "Company") and its subsidiaries (the "Group"), which are set out on pages 98 to 229, comprise:

- the consolidated balance sheet as at 31 December 2021;
- the consolidated statement of profit or loss for the year then ended;
- the consolidated statement of comprehensive income for the year then ended;
- the consolidated statement of changes in equity for the year then ended;
- the consolidated statement of cash flows for the year then ended; and
- the notes to the consolidated financial statements, which include significant accounting policies and other explanatory information.

Our opinion

In our opinion, the consolidated financial statements give a true and fair view of the consolidated financial position of the Group as at 31 December 2021, and of its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards ("IFRSs") and have been properly prepared in compliance with the disclosure requirements of the Hong Kong Companies Ordinance.

Basis for Opinion

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

PricewaterhouseCoopers, 22/F Prince's Building, Central, Hong Kong
T: +852 2289 8888, F: +852 2810 9888, www.pwchk.com

Independence

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 the Code.

Material Uncertainty Related to Going Concern

We draw your attention to Note 2.1 to the consolidated financial statements, which states that during the year ended 31 December 2021, the Group reported a net loss of approximately RMB734,001,000 and an operating cash outflow of approximately RMB983,431,000. As at 31 December 2021, the Group's current liabilities (after reclassifying certain bank loans with scheduled repayment dates beyond one year after 31 December 2021 as current liabilities) exceeded its current assets by RMB1,043,816,000. At the same date, the Group's borrowings presented as current liabilities amounted to RMB5,145,838,000, including a senior note of USD200,000,000 due for repayment in August 2022, while its cash and cash equivalents amounted to RMB703,417,000. In addition, a subsidiary within the Group failed to meet the requirements of financial indicators agreed in certain loan contracts, which constituted the subsidiary's failure to comply certain agreed terms of the relevant loan contracts and triggered default and cross-default clauses in several other bank loan contracts within the Group. The above events caused the relevant banks and financial institutions to have rights to request the Group to immediately repay all principals and interests of the relevant borrowings amounting to RMB3,276,592,000. Such conditions, along with other matters as set forth in Note 2.1 to the consolidated financial statements, indicate that a material uncertainty exists that may cast significant doubt on the Group's ability to continue as a going concern. Our opinion is not modified in respect of this matter.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. In addition to the matter described in the Material Uncertainty Related to Going Concern section, we have determined the matters described below to be the key audit matters to be communicated in our report.

Key audit matters identified in our audit are summarised as follows:

- Impairment of property, plant and equipment
- Valuation of inventory
- Valuation of trade and other receivables, loan to an associate and other related party

Key Audit Matter	How our audit addressed the Key Audit Matter
Impairment of property, plant and equipment Refer to note 5 and note 15 to the consolidated financial statements. As at 31 December 2021, the total balance of property, plant and equipment ("PP&E") was RMB2,921,864,000 and the Group reported a net loss of approximately RMB734,001,000 for the year ended 31 December 2021. The recoverable amount of PP&E is determined at the higher of value in use and fair value less costs of disposal of cash generating units ("CGU"). Significant judgements are required for determination of key assumptions, including discount rates, revenue growth rates and gross margins. As a result of management assessment, an additional provision for impairment of RMB14,196,000 was made in relation to the PP&E under the drilling engineering services segment for the year ended 31 December 2021. We focused on this area because of (a) the significance of PP&E balance; and (b) the estimation of discounted future cash flows of CGUs is subject to high degree of estimation uncertainty. The inherent risk in relation to the impairment assessment of property, plant and equipment is considered significant due to the complexity of the models, subjectivity of significant assumptions used, and significant judgements involved in selecting data.	We obtained an understanding of the management's internal control and assessment process of impairment of property, plant and equipment and assessed the inherent risk of material misstatement by considering the degree of estimation uncertainty and level of other inherent risk factors, such as complexity, subjectivity, changes and susceptibility to management bias or fraud. We evaluated the outcome of prior period assessment of the impairment of property, plant and equipment to assess the effectiveness of the management's estimation process. We involved our in-house valuation specialist to assess the appropriateness of the valuation methodology adopted by management and evaluate the appropriateness of the discount rate adopted by management by comparing it with the costs of capital of comparable companies as well as considering territory specific and other factors. We challenged the management's key assumptions by: • comparing the revenue growth rates with historical data, assessing future customer demand with reference to our knowledge of economic and industry trend; • comparing the gross margin with the historical data and considering the future product mix and production volume. We tested the mathematical accuracy of the calculations of the discounted cash flows. We independently performed sensitivity analysis about the key drivers of growth, including revenue growth and expected changes in gross margins.

Key Audit Matter	How our audit addressed the Key Audit Matter
	We assessed the adequacy of the disclosures related to valuation of property, plant and equipment in the context of the applicable financial reporting framework. We also considered whether the judgements made in selecting the methodology and the key assumptions would give rise to indicators of possible management bias. We found that the risk assessment of impairment of property, plant and equipment remained appropriate and management's judgements in determining the recoverable amount of PP&E are supported by the evidence we gathered.
Valuation of inventory Refer to note 20 to the consolidated financial statements. As at 31 December 2021, the Group had gross inventory balance of RMB2,005,606,000, against which a provision balance for inventory write-down of RMB182,946,000 was made. Inventories are carried at the lower of cost and net realisable value ("NRV"). NRV is determined based on the estimated selling price less the estimated costs to completion, if relevant, other costs necessary to make the sale and related taxes. We focused on this area because of (a) the significance of inventory balance and (b) the estimation of NRV is subject to high degree of estimation uncertainty. The inherent risk in relation to the valuation of inventory is considered significant due to significant judgements involved in determining the NRV of the inventories.	We obtained an understanding of the management's internal control and assessment process of valuation of inventory and assessed the inherent risk of material misstatement by considering the degree of estimation uncertainty and level of other inherent risk factors, such as complexity, subjectivity, changes and susceptibility to management bias or fraud. We evaluated the outcome of prior period assessment of the valuation of inventory to assess the effectiveness of the management's estimation process. We evaluated and challenged the methodology adopted by management for identifying inventories subject to write-down based on our independent assessment of write-down indicators. We compared the estimated selling prices with the selling prices of the recent orders from customers. We challenged management's future sales projections for the prices and quantities by checking historical sales information and considering market trend. We assessed the reasonableness of the estimated costs to completion by comparing with the historical costs to completion of the similar inventories.

Key Audit Matter	How our audit addressed the Key Audit Matter
	We assessed the adequacy of the disclosures related to valuation of inventory in the context of the applicable financial reporting framework. We also considered whether the judgements made in selecting the data and the key assumptions would give rise to indicators of possible management bias. We found that the risk assessment of valuation of inventory remained appropriate and management's judgements in determining the NRV of inventory are supported by the evidence we gathered.
Valuation of trade and other receivables, loan to an associate and other related party Refer to note 3.1(b) and note 18 to the consolidated financial statements. The gross balance of trade and other receivables (excluded finance lease receivables, value-added tax recoverable, and prepayments) as at 31 December 2021 was RMB4,441,111,000 against which a provision balance for expected credit losses of RMB620,808,000 was made. The gross balance of loan to an associate and other related party as at 31 December 2021 was RMB102,425,000 against which a provision balance for expected credit losses of RMB89,910,000 was made. For receivable balances with objective evidence of impairment, individual provision was made based on a probability-weighted estimate of the present value of the difference between the contractual cash flows that are due to an entity under the contract and the cash flows that the entity expects to receive. Receivables without objective evidence of impairment are grouped based on shared credit risk characteristics. The collective provision was determined based on the historical credit loss rates to the respective aging category of gross carrying amount of receivables.	We obtained an understanding of the management's internal control and assessment process of valuation of trade and other receivables as well as loan to an associate and other related party and assessed the inherent risk of material misstatement by considering the degree of estimation uncertainty and level of other inherent risk factors, such as complexity, subjectivity, changes and susceptibility to management bias or fraud. We evaluated the outcome of prior period assessment of the valuation of trade and other receivables as well as loan to an associate and other related party to assess the effectiveness of the management's estimation process. We evaluated and tested the controls over the collectability of the trade and other receivables as well as loan to an associate and other related party, including the monthly review of ageing analysis, repayment and impairment assessment of trade and other receivables as well as loan to an associate and other related party performed by management. We sent confirmations to customers on a sample basis, focusing on material balances.

Key Audit Matter	How our audit addressed the Key Audit Matter
The expected credit loss rates are adjusted to reflect current and forward – looking information. We focused on this area because of (a) the significance of trade and other receivables as well as loan to an associate and other related party balance and (b) the estimation of recoverable amount is subject to high degree of estimation uncertainty. The inherent risk in relation to the valuation of trade and other receivables as well as loan to an associate and other related party is considered significant due to the complexity of the models, and significance of management judgements applied.	We obtained management's assessment on the recoverability of the trade and other receivables as well as loan to an associate and other related party and performed our independent evaluation. We corroborated management's assessment by reviewing individual customer's credit profile and payment history on a sample basis. We obtained management's assessment on the expected credit losses of trade and other receivables as well as loan to an associate and other related party, challenged and assessed its reasonableness by considering the historical cash collection performance and ageing profile, evaluated adjustment made to the historical loss rates based on current economic conditions and forward-looking information with reference to our industry knowledge, market information including macroeconomic factors. We involved our in-house valuation specialist to assess the appropriateness of the methodology adopted by management. We assessed the adequacy of the disclosures related to impairment of trade and other receivables as well as loan to an associate and other related party in the context of the applicable financial reporting framework. We found that the risk assessment of valuation of trade and other receivables as well as loan to an associate and other related party remained appropriate and management's judgements relating to the recoverability of trade and other receivable as well as loan to an associate and other related party are supported by the evidence we gathered.

Other Information

The directors of the Company are responsible for the other information set out in the Company's 2021 Annual Report (the "annual report") other than the consolidated financial statements and our auditor's report thereon. We have obtained some of the other information including corporate information, chairman's statement and biographical details of directors and senior management prior to the date of this auditor's report. The remaining other information including financial highlights, management discussion and analysis, corporate governance report, environmental, social and governance report, report of the directors and five-year financial highlights and the other sections to be included in the annual report, is expected to be made available to us after that date.

Our opinion on the consolidated financial statements does not cover the other information and we do not and will 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 identified above 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 on the other information that we obtained prior to the date of this auditor's report, 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.

When we read the remaining other information to be included in the annual report, if we conclude that there is a material misstatement therein, we are required to communicate the matter to Audit Committee and take appropriate action considering our legal rights and obligations.

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

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

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

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

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

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. We report our opinion solely to you, as a body, and for no other purpose. We do not assume responsibility towards or accept liability to any other person for the contents of this report. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with 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 judgment and maintain professional scepticism throughout the audit. We also:

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

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

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

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

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

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

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

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

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

The engagement partner on the audit resulting in this independent auditor's report is Lee Chung Bor.

PricewaterhouseCoopers
Certified Public Accountants

Hong Kong, 29 March 2022

CONSOLIDATED STATEMENT OF PROFIT OR LOSS

FOR THE YEAR ENDED 31 DECEMBER 2021
(All amounts in RMB unless otherwise stated)

		Year ended 31 December	
		2021	2020
	Notes	**RMB'000**	RMB'000
Continuing operations			
Revenue	5	**2,936,604**	3,931,492
Cost of sales	8	**(2,573,600)**	(2,751,127)
Gross profit		**363,004**	1,180,365
Distribution costs	8	**(161,975)**	(177,878)
Administrative expenses	8	**(480,621)**	(547,597)
Net impairment losses on financial assets and contract assets	3.1(b)	**(363,100)**	(267,752)
Other income	6	**89,308**	87,612
Other losses, net	7	**(56,829)**	(47,334)
Operating (loss)/profit		**(610,213)**	227,416
Finance income	10	**95,679**	96,154
Finance expenses	10	**(228,350)**	(222,513)
Finance expenses – net		**(132,671)**	(126,359)
Share of net losses of associates and joint ventures accounted for using the equity method	12	**(2,460)**	(14,967)
(Loss)/profit before income tax		**(745,344)**	86,090
Income tax credit/(expense)	13	**11,343**	(25,950)
(Loss)/profit for the year		**(734,001)**	60,140
(Loss)/profit attributable to:			
– Owners of the Company		**(717,191)**	49,660
– Non-controlling interests		**(16,810)**	10,480
		(734,001)	60,140
(Loss)/profit per share attributable to owners of the Company (expressed in RMB cents per share)			
Basic and diluted	14	**(13.54)**	0.94

The notes on pages 107 to 229 form an integral part of these consolidated financial statements.

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

FOR THE YEAR ENDED 31 DECEMBER 2021
(All amounts in RMB unless otherwise stated)

	Year ended 31 December	
	2021	2020
	RMB'000	RMB'000
(Loss)/profit for the year	**(734,001)**	60,140
Other comprehensive income		
Items that may be reclassified to profit or loss		
Currency translation differences	**(24,314)**	(43,364)
Items that will not be reclassified to profit or loss		
Change in the fair value of equity investments at fair value through other comprehensive income	**11,638**	(1,052)
Income tax relating to these items	**(2,549)**	151
Other comprehensive income for the year, net of tax	**(15,225)**	(44,265)
Total comprehensive income for the year	**(749,226)**	15,875
Total comprehensive income attributable to:		
– Owners of the Company	**(732,725)**	4,170
– Non-controlling interests	**(16,501)**	11,705
	(749,226)	15,875

The notes on pages 107 to 229 form an integral part of these consolidated financial statements.

CONSOLIDATED BALANCE SHEET

AS AT 31 DECEMBER 2021
(All amounts in RMB unless otherwise stated)

		As at 31 December	
	Notes	**2021 RMB'000**	2020 RMB'000
ASSETS			
Non-current assets			
Right of use assets	16	**323,561**	185,008
Property, plant and equipment	15	**2,921,864**	1,736,605
Intangible assets	17	**246,530**	230,823
Debt investments	19	**23,295**	53,950
Investments accounted for using the equity method	12	**34,037**	28,785
Deferred income tax assets	27	**256,730**	287,900
Financial assets at fair value through other comprehensive income	3.3(c)	**92,664**	89,204
Term deposit	21	**90,000**	40,000
Trade and other receivables	18	**909,237**	803,428
Loan to an associate and other related party	3.1(b)	**–**	731,565
Other non-current assets	38	**100,565**	53,707
Total non-current assets		**4,998,483**	4,240,975
Current assets			
Inventories	20	**1,822,660**	1,346,818
Contract assets	5	**448,825**	687,791
Trade and other receivables	18	**3,501,182**	3,699,407
Debt investments	19	**28,799**	43,956
Loan to an associate and other related party	3.1(b)	**12,515**	683,827
Current tax recoverable		**780**	4,985
Financial assets at fair value through other comprehensive income	3.3(c)	**26,609**	72,071
Pledged bank deposits	21	**204,640**	280,163
Cash and cash equivalents	21	**703,417**	952,384
Total current assets		**6,749,427**	7,771,402
Total assets		**11,747,910**	12,012,377

CONSOLIDATED BALANCE SHEET

AS AT 31 DECEMBER 2021
(All amounts in RMB unless otherwise stated)

	Notes	As at 31 December 2021 RMB'000	2020 RMB'000
EQUITY			
Equity attributable to owners of the Company			
Share capital	22	**488,023**	488,023
Other reserves	24	**4,206,583**	4,223,282
Accumulated losses		**(1,156,970)**	(441,939)
		3,537,636	4,269,366
Non-controlling interests		**208,760**	225,261
Total equity		**3,746,396**	4,494,627
LIABILITIES			
Non-current liabilities			
Deferred income	29	**21,779**	47,621
Borrowings	26	**–**	2,229,719
Trade and other payables	25	**136,795**	–
Lease liabilities	16	**49,697**	70,118
Total non-current liabilities		**208,271**	2,347,458

CONSOLIDATED BALANCE SHEET

AS AT 31 DECEMBER 2021
(All amounts in RMB unless otherwise stated)

		As at 31 December	
		2021	2020
	Notes	**RMB'000**	RMB'000
Current liabilities			
Contract liabilities	5	**154,348**	139,608
Deferred income	29	**10,028**	4,492
Trade and other payables	25	**2,394,391**	2,655,744
Current income tax liabilities		**41,877**	63,865
Borrowings	26	**5,145,838**	2,255,142
Lease liabilities	16	**18,783**	18,199
Provisions for other liabilities and charges	28	**27,978**	33,242
Total current liabilities		**7,793,243**	5,170,292
Total liabilities		**8,001,514**	7,517,750
Total equity and liabilities		**11,747,910**	12,012,377

The notes on pages 107 to 229 form an integral part of these consolidated financial statements.

The consolidated financial statements on pages 98 to 229 were approved by the Board of Directors on 29 March 2022 and were signed on its behalf.

Jin Liliang
Director

Ren Jie
Director

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

FOR THE YEAR ENDED 31 DECEMBER 2021
(All amounts in RMB unless otherwise stated)

	Attributable to owners of the Company											
	Share capital RMB'000 (Note 22)	Share premium RMB'000 (Note 24)	Other reserve RMB'000 (Note 24)	Capital reserve RMB'000 (Note 24)	Surplus reserve RMB'000 (Note 24)	Exchange reserve RMB'000 (Note 24)	Fair value reserve RMB'000 (Note 24)	Shares held for share award scheme RMB'000 (Note 23)	Accumulated losses RMB'000	Total RMB'000	Non-controlling interests RMB'000	Total Equity RMB'000
Balance at 1 January 2020	488,023	3,597,179	60,588	520,424	453,413	(263,777)	9,899	(124,618)	(475,551)	4,265,580	214,797	4,480,377
Profit for the year	–	–	–	–	–	–	–	–	49,660	49,660	10,480	60,140
Other comprehensive income	–	–	–	–	–	(44,589)	(901)	–	–	(45,490)	1,225	(44,265)
Total comprehensive income	–	–	–	–	–	(44,589)	(901)	–	49,660	4,170	11,705	15,875
Transactions with owners												
Loss of shareholders' indemnity	–	–	(516)	–	–	–	–	–	–	(516)	–	(516)
Options lapsed under share option schemes	–	–	–	(235)	–	–	–	–	235	–	–	–
Acquisition of non-controlling interests	–	–	132	–	–	–	–	–	–	132	(1,241)	(1,109)
Appropriation to surplus reserve	–	–	–	–	16,283	–	–	–	(16,283)	–	–	–
Total transactions with owners, recognised directly in equity	–	–	(384)	(235)	16,283	–	–	–	(16,048)	(384)	(1,241)	(1,625)
Balance at 31 December 2020	488,023	3,597,179	60,204	520,189	469,696	(308,366)	8,998	(124,618)	(441,939)	4,269,366	225,261	4,494,627

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

FOR THE YEAR ENDED 31 DECEMBER 2021
(All amounts in RMB unless otherwise stated)

	Attributable to owners of the Company											
	Share capital RMB'000 (Note 22)	Share premium RMB'000 (Note 24)	Other reserve RMB'000 (Note 24)	Capital reserve RMB'000 (Note 24)	Surplus reserve RMB'000 (Note 24)	Exchange reserve RMB'000 (Note 24)	Fair value reserve RMB'000 (Note 24)	Shares held for share award scheme RMB'000 (Note 23)	Accumulated losses RMB'000	Total RMB'000	Non-controlling interests RMB'000	Total Equity RMB'000
Balance at 1 January 2021	**488,023**	**3,597,179**	**60,204**	**520,189**	**469,696**	**(308,366)**	**8,998**	**(124,618)**	**(441,939)**	**4,269,366**	**225,261**	**4,494,627**
Loss for the year	-	-	-	-	-	-	-	-	(717,191)	(717,191)	(16,810)	(734,001)
Other comprehensive income	-	-	-	-	-	(24,623)	9,089	-	-	(15,534)	309	(15,225)
Total comprehensive income	-	-	-	-	-	(24,623)	9,089		(717,191)	(732,725)	(16,501)	(749,226)
Transactions with owners												
Donation from shareholders	-	-	995	-	-	-	-	-	-	995	-	995
Options lapsed under share option schemes	-	-	-	(2,976)	-	-	-	-	2,976	-	-	-
Appropriation to surplus reserve	-	-	-	-	816	-	-	-	(816)	-	-	-
Total transactions with owners, recognised directly in equity	-	-	995	(2,976)	816	-	-	-	2,160	995	-	995
Balance at 31 December 2021	**488,023**	**3,597,179**	**61,199**	**517,213**	**470,512**	**(332,989)**	**18,087**	**(124,618)**	**(1,156,970)**	**3,537,636**	**208,760**	**3,746,396**

The notes on pages 107 to 229 form an integral part of these consolidated financial statements.

THE CONSOLIDATED FINANCIAL STATEMENT OF CASH FLOWS

FOR THE YEAR ENDED 31 DECEMBER 2021
(All amounts in RMB unless otherwise stated)

		Year ended 31 December	
		2021	2020
	Note	**RMB'000**	RMB'000
Cash flows used in operating activities			
Cash generated from operations	31	**(950,377)**	(144,148)
Income tax paid		**(33,054)**	(21,542)
Net cash used in operating activities		**(983,431)**	(165,690)
Cash flows generated from/(used in) investing activities			
Payment for additions of property, plant and equipment and construction in progress		**(75,735)**	(200,171)
Proceeds from financing lease as lessor		**64,269**	64,485
Proceeds from disposal of property, plant and equipment	31	**15,074**	35,998
Proceeds from government grants related to assets		**–**	9,197
Receipts of loans to related parties		**–**	99,891
Dividends received		**1,458**	1,541
Receipt of debt investments		**49,135**	24,915
Interest received		**5,179**	5,668
Expenditure on development project and other intangible assets		**(799)**	(69,988)
Acquisition of non-controlling interests		**–**	(1,109)
Proceeds from acquisition of subsidiary, net of cash acquired		**162**	–
Payment for term deposit		**(50,000)**	(40,000)
Payment for capital increasing of a joint venture		**–**	(9,350)
Net cash generated from/(used in) investing activities		**8,743**	(78,923)

THE CONSOLIDATED FINANCIAL STATEMENT OF CASH FLOWS

FOR THE YEAR ENDED 31 DECEMBER 2021
(All amounts in RMB unless otherwise stated)

		Year ended 31 December	
		2021	2020
	Note	**RMB'000**	RMB'000
Cash flows generated from financing activities			
Proceeds from borrowings		**2,952,420**	2,791,490
Repayments of borrowings		**(2,171,190)**	(2,395,813)
Interest and charges paid		**(227,459)**	(226,757)
Loans from related party		**–**	180,037
Receipts of financing guarantee		**200,000**	–
Payments of lease liabilities		**(23,080)**	(22,538)
Net cash generated from generated financing activities		**730,691**	326,419
Net (decrease)/increase in cash and cash equivalents		**(243,997)**	81,806
Cash and cash equivalents at the beginning of year		**952,384**	889,802
Exchange losses on cash and cash equivalents		**(4,970)**	(19,224)
Cash and cash equivalents at end of the year		**703,417**	952,384

The notes on pages 107 to 229 form an integral part of these consolidated financial statements.

1 General information

Honghua Group Limited ("the Company") and its subsidiaries (together "the Group") are principally engaged in manufacturing of drilling rigs, oil and gas exploitation equipment,providing drilling services and fracturing.

The Company was incorporated in the Cayman Islands on 15 June 2007 as an exempted company with limited liability under the Companies Law, Cap 22 (Law 3 of 1961, as consolidated and revised) of the Cayman Islands. The address of its registered office is Clifton House, 75 Fort Street, PO Box 1350, Grand Cayman, KY1-1108, Cayman Islands.

The Company was listed on the Main Board of the Stock Exchange of Hong Kong Limited on 7 March 2008.

These financial statements are presented in Chinese Renminbi ("RMB"), unless otherwise stated, and were approved for issue by the Board of Directors of the Company on 29 March 2022.

2 Summary of significant accounting policies

The principal accounting policies applied in the preparation of these consolidated financial statements are set out below. These policies have been consistently applied to all the years presented, unless otherwise stated.

2.1 Basis of preparation

The consolidated financial statements of the Group have been prepared in accordance with all applicable International Financial Reporting Standards ("IFRS") and requirements of the Hong Kong Companies Ordinance. The consolidated financial statements have been prepared under the historical cost convention, except that financial assets at fair value through other comprehensive income are carried at fair value, and certain financial assets and liabilities are recognized initially at fair value and subsequently measured at amortized cost using the effective interest method.

The preparation of financial statements in conformity with IFRS requires the use of certain critical accounting estimates. It also requires management to exercise its judgement in the process of applying the Group's accounting policies. The areas involving a higher degree of judgement or complexity, or areas where assumptions and estimates are significant to the consolidated financial statements are disclosed in Note 4.

2 Summary of significant accounting policies (Continued)

2.1 Basis of preparation (Continued)

During the year ended 31 December 2021, the Group reported a net loss of approximately RMB734,001,000 and an operating cash outflow of approximately RMB983,431,000. As at 31 December 2021, the Group's current liabilities exceeded its current assets by RMB1,043,816,000. At the same date, the Group's borrowings presented as current liabilities amounted to RMB5,145,838,000, including a senior note of USD200,000,000 due for repayment in August 2022 (the "Senior Notes"), while its cash and cash equivalents amounted to RMB703,417,000.

During the year ended 31 December 2021, a subsidiary within the Group failed to meet the requirements of financial indicators agreed in certain loan contracts, which constituted the subsidiary's failure to comply certain agreed terms of the relevant loan contracts and triggered default and cross-default clauses in several other bank loan contracts within the Group (hereinafter collectively referred to as "the Default Matters").

The Default Matters caused the relevant banks and financial institutions to have rights to request the Group to immediately repay all principals and interests of the relevant borrowings. As at 31 December 2021, the balances of such borrowings under default and cross-default were RMB901,462,000 and RMB2,375,130,000, respectively, totalling RMB3,276,592,000. These balances included principals and interests of short-term borrowings and long-term borrowings due within one year amounting to RMB2,140,274,000, and principals of long-term borrowings due after 31 December 2022 as agreed in original loan contracts amounting to RMB1,136,318,000 (which have been reclassified as borrowings presented as current liabilities).

The conditions and events described in the above paragraphs may cast significant doubt on the Group's ability to continue as a going concern.

2 Summary of significant accounting policies (Continued)

2.1 Basis of preparation (Continued)

In view of such circumstances, the Directors have given careful consideration to the future liquidity and performance of the Group and its available sources of financing in assessing whether the Group will have sufficient financial sources to continue as a going concern for a period of not less than 12 months from 31 December 2021. The following plans and measures are formulated to mitigate the liquidity pressure and to improve the financial position of the Group:

(a) The Group has actively communicated with relevant banks and financial institutions to explain and clarify the causes of the Default Matters. The Directors are confident to convince the relevant banks and financial institutions not to exercise their rights to demand the Group's immediate repayment of the borrowings prior to their scheduled contractual repayment dates. The relevant banks and financial institutions have not required the Group to repay relevant borrowings immediately as of the date of reporting the financial statements.

(b) The Group is also actively negotiating with several existing banks and financial institutions on the renewal of certain borrowings due after 31 December 2021 as agreed in original loan contracts, and on the arrangement of new borrowings. Based on the good long-term business relationship between the Group and its major cooperative banks and financial institutions, the Group is confident that it will continue to obtain necessary credit lines from the banks and financial institutions and renew existing borrowings or obtaining new borrowings as and when necessary. Subsequent to 31 December 2021, the Group has renewed or obtained new borrowings totalling approximately RMB547,650,000, although the loan contracts for these renewed and new borrowings contain terms that cause such borrowings to be subject to immediate repayment if requested by relevant banks as a result of the Default Matters.

(c) On 26 November 2021, the shareholder of the Company, Kehua Technology Co., Limited, a wholly-owned subsidiary of China Aerospace Science and Industry Corporation Limited ("CASIC"), entered into a gratuitous transfer agreement with Dongfang Electric International Investment Co., Ltd. According to the gratuitous transfer agreement, Kehua Technology Co., Limited intends to transfer its 1,606,000,000 shares of the Company (accounting for 29.98% of the total issued shares of the Company) to Dongfang Electric International Investment Co., Ltd. for nil consideration (the "Gratuitous Transfer"). Dongfang Electric International Investment Co., Ltd. has planned to provide financial support to the Group, upon completion of the Gratuitous Transfer, for the repayments of the Senior Notes which will be due in August 2022 and to support the Group's liquidity needs. The Gratuitous Transfer is subject to, and yet to be approved by the State-Owned Assets Supervision and Administration Commission of the State Council ("SASAC") as of the date of reporting the financial statements. In anticipation of the time required for the SASAC approval of the Gratuitous Transfer, the Group has been in communication with CASIC to seek timely financial support if and when the Group needs fund to repay the Senior Notes in the transition period of the Gratuitous Transfer.

(d) The Group will take active measures to continue to promote business growth, speed up the collection of outstanding sales proceeds and other receivables, accelerate inventory turnover and control administrative costs and maintain containment of capital expenditures.

2 Summary of significant accounting policies (Continued)

2.1 Basis of preparation (Continued)

The Board of Directors of the Company have reviewed the Group's cash flow forecast prepared by management covering a period of not less than twelve months from 31 December 2021. They are of the opinion that, taking into account the plans and measures mentioned above, the Group will have sufficient working capital to finance its operations and to meet its financial obligations as and when they fall due within twelve months from 31 December 2021. Accordingly, the Directors are satisfied that it is appropriate to prepare the consolidated financial statements on a going concern basis.

Notwithstanding the above, material uncertainty exists as to whether the Group is able to achieve its plans and measures as described above. Whether the Group will be able to continue as a going concern would depend upon the following:

(a) the successful maintenance of a continuing and normal business relationship with the Group's existing banks and financial institutions such that no action will be taken by the relevant banks and financial institutions to exercise their contractual rights to demand immediate repayment of the relevant borrowings;

(b) the successful negotiations with the banks and financial institutions for renewal of outstanding borrowings when due for repayment or obtaining of new borrowings and facilities as and when needed;

(c) the successful and timely obtaining of adequate financial support from either Dongfang Electric International Investment Co., Ltd. or CASIC for the repayment of the Senior Notes; and

(d) the successful and timely implementation of the plans to promote business growth, speed up the collection of outstanding sales proceeds and other receivables, accelerate inventory turnover and control costs and contain capital expenditure so as to generate adequate net operating cash inflows.

Should the Group be unable to achieve the above-mentioned plans and measures and operate as a going concern, adjustments would have to be made to write down the carrying values of the Group's assets to their recoverable amounts, to provide for any further liabilities which might arise, and to reclassify non-current assets and non-current liabilities as current assets and current liabilities, respectively. The effects of these adjustments have not been reflected in these consolidated financial statements.

2 Summary of significant accounting policies (Continued)

2.1 Basis of preparation (Continued)

2.1.1 New and amended standards adopted by the Group

The Group has applied the following amendments for the first time for their annual reporting period commencing 1 January 2021:

- Amendments to IFRS 9, ISA 39, IFRS 7, IFRS 4 and IFRS 16 – Interest Rate Benchmark Reform Phase 2

The adoption of these new accounting policies disclosed did not have any significant impact on the Group's accounting policies and did not require retrospective adjustments.

2.1.2 New standards and interpretations not yet adopted

Certain new accounting standards and interpretations have been published that are not mandatory for 31 December 2021 reporting periods and have not been early adopted by the Group. These standards are not expected to have a material impact on the entity in the current or future reporting periods and on foreseeable future transactions.

Standards, Amendments or Interpretations	Subject	Effective for annual accounting periods beginning on or after
IFRS 17	Insurance Contracts	1 January 2023
Amendments to IAS 1	Classification of Liabilities as Current or Non-current	1 January 2023
Amendments to IAS 1 and IFRS Practice Statement 2	Disclosure of Accounting Policies	1 January 2023
Amendments to IAS 8	Definition of Accounting Estimates	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 16	Property, Plant and Equipment Proceeds before intended use	1 January 2022
Amendments to IFRS 3	Reference to the Conceptual Framework	1 January 2022
Amendments to IAS 37	Onerous Contracts – Cost of Fulfilling a Contract	1 January 2022
Annual Improvements	Annual Improvements to IFRS Standards 2018 – 2020	1 January 2022

2 Summary of significant accounting policies (Continued)

2.2 Subsidiaries

2.2.1 Consolidation

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

(a) Business combinations

The Group applies the acquisition method to account for business combinations. The consideration transferred for the acquisition of a subsidiary is the fair values of the assets transferred, the liabilities incurred to the former owners of the acquiree and the equity interests issued by the Group. The consideration transferred includes the fair value of any asset or liability resulting from a contingent consideration arrangement. Identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are measured initially at their fair values at the acquisition date.

The Group recognises any non-controlling interest in the acquiree on an acquisition-by-acquisition basis. Non-controlling interests in the acquiree that are present ownership interests and entitle their holders to a proportionate share of the entity's net assets in the event of liquidation are measured at either fair value or the present ownership interests' proportionate share in the recognised amounts of the acquiree's identifiable net assets. All other components of non-controlling interests are measured at their acquisition date fair value, unless another measurement basis is required by IFRS.

Acquisition-related costs are expensed as incurred.

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

Any contingent consideration to be transferred by the Group is recognised at fair value at the acquisition date. Subsequent changes to the fair value of the contingent consideration that is deemed to be an asset or liability is recognised in profit or loss. Contingent consideration that is classified as equity is not remeasured, and its subsequent settlement is accounted for within equity.

2 Summary of significant accounting policies (Continued)

2.2 Subsidiaries (Continued)

2.2.1 Consolidation (Continued)

(a) Business combinations (Continued)

The excess of the consideration transferred, the amount of any non-controlling interest in the acquiree and the acquisition-date fair value of any previous equity interest in the acquiree over the fair value of the identifiable net assets acquired is recorded as goodwill. If the total of consideration transferred, non-controlling interest recognised and previously held interest measured is less than the fair value of the net assets of the subsidiary acquired in the case of a bargain purchase, the difference is recognised directly in profit or loss.

Intra-group transactions, balances and unrealised gains on transactions between group companies are eliminated. Unrealised losses are also eliminated unless the transaction provides evidence of an impairment of the transferred asset. When necessary, amounts reported by subsidiaries have been adjusted to conform with the Group's accounting policies.

(b) Changes in ownership interests in subsidiaries without change of control

Transactions with non-controlling interests that do not result in a loss of control are accounted for as equity transactions – that is, as transactions with the owners of the subsidiary in their capacity as owners. The difference between fair value of any consideration paid and the relevant share acquired of the carrying amount of net assets of the subsidiary is recorded in equity. Gains or losses on disposals to non-controlling interests are also recorded in equity.

(c) Disposal of subsidiaries

When the Group ceases to have control, any retained interest in the entity is re-measured to its fair value at the date when control is lost, with the change in carrying amount recognised in profit or loss. The fair value is the initial carrying amount for the purposes of subsequently accounting for the retained interest as an associate, joint venture or financial asset. In addition, any amounts previously recognised in other comprehensive income in respect of that entity are accounted for as if the Group had directly disposed of the related assets or liabilities. It means the amounts previously recognised in other comprehensive income are reclassified to profit or loss or transferred to another category of equity as specified/permitted by applicable IFRSs.

2 Summary of significant accounting policies (Continued)

2.2 Subsidiaries (Continued)

2.2.2 Separate financial statements

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

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

2.3 Associates

Associates are all entities over which the Group has significant influence but not control, generally accompanying a shareholding of between 20% and 50% of the voting rights. Investments in associates are accounted for using the equity method of accounting. Under the equity method, the investment is initially recognised at cost, and the carrying amount is increased or decreased to recognise the investor's share of the profit or loss of the investee after the date of acquisition. The Group's investments in associates include goodwill identified on acquisition. Upon the acquisition of the ownership interest in an associate, any difference between the cost of the associate and the Group's share of the net fair value of the associate's identifiable assets and liabilities is accounted for as goodwill.

If the ownership interest in an associate is reduced but significant influence is retained, only a proportionate share of the amounts previously recognised in other comprehensive income is reclassified to profit or loss where appropriate.

The Group's share of post-acquisition profit or loss is recognised in profit or loss, and its share of post-acquisition movements in other comprehensive income is recognised in other comprehensive income with a corresponding adjustment to the carrying amount of the investment. When the Group's share of losses in an associate equals or exceeds its interest in the associate, including any other unsecured receivables, the Group does not recognise further losses, unless it has incurred legal or constructive obligations or made payments on behalf of the associate.

The Group determines at each reporting date whether there is any objective evidence that the investment in the associate is impaired. If this is the case, the Group calculates the amount of impairment as the difference between the recoverable amount of the associate and its carrying value and recognises the amount adjacent to 'share of profits of associates' in profit or loss.

2 Summary of significant accounting policies (Continued)

2.3 Associates (Continued)

Profits and losses resulting from upstream and downstream transactions between the Group and its associate are recognised in the Group's financial statements only to the extent of unrelated investor's interests in the associates. Unrealised losses are eliminated unless the transaction provides evidence of an impairment of the asset transferred. Accounting policies of associates have been changed where necessary to ensure consistency with the policies adopted by the Group.

Gains or losses on dilution of equity interest in associates are recognised in profit or loss.

2.4 Joint arrangements

The Group has applied IFRS 11 to all joint arrangements. Under IFRS 11 investments in joint arrangements are classified as either joint operations or joint ventures depending on the contractual rights and obligations of each investor. The Group has assessed the nature of its joint arrangements and determined them to be joint ventures. Joint ventures are accounted for using the equity method.

Under the equity method of accounting, interests in joint ventures are initially recognised at cost and adjusted thereafter to recognise the Group's share of the post-acquisition profits or losses and movements in other comprehensive income. The Group's investments in joint ventures include goodwill identified on acquisition. Upon the acquisition of the ownership interest in a joint venture, any difference between the cost of the joint venture and the Group's share of the net fair value of the joint ventures' identifiable assets and liabilities is accounted for as goodwill. When the Group's share of losses in a joint venture equals or exceeds its interests in the joint ventures, including any other unsecured receivables, the Group does not recognise further losses, unless it has incurred obligations or made payments on behalf of the joint ventures.

Unrealised gains on transactions between the Group and its joint ventures are eliminated to the extent of the Group's interest in the joint ventures. Unrealised losses are also eliminated unless the transaction provides evidence of an impairment of the asset transferred. Accounting policies of the joint ventures have been changed where necessary to ensure consistency with the policies adopted by the Group.

2.5 Segment reporting

Operating segments are reported in a manner consistent with the internal reporting provided to the chief operating decision maker. The chief operating decision-maker, who is responsible for allocating resources and assessing performance of the operating segments, has been identified as the senior executive management that makes strategic decisions.

2 Summary of significant accounting policies (Continued)

2.6 Foreign currency translation

(a) Functional and presentation currency

Items included in the financial statements of each of the Group's entities are measured using the currency of the primary economic environment in which the entity operates ('the functional currency'). The consolidated financial statements are presented in Renminbi ("RMB"), which is the Group's and Company's presentation currency. The Company's functional currency is Hong Kong Dollar ("HKD").

(b) Transactions and balances

Foreign currency transactions are translated into the functional currency using the exchange rates prevailing at the dates of the transactions or valuation where items are re-measured. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at year-end exchange rates of monetary assets and liabilities denominated in foreign currencies are generally recognised in profit or loss, except when deferred in other comprehensive income as qualifying cash flow hedges and qualifying net investment hedges.

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

Changes in the fair value of debt securities denominated in foreign currency classified as available for sale are analysed between translation differences resulting from changes in the amortised cost of the security and other changes in the carrying amount of the security. Translation differences related to changes in amortised cost are recognised in profit or loss, and other changes in carrying amount are recognised in other comprehensive income.

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

2 Summary of significant accounting policies (Continued)

2.6 Foreign currency translation (Continued)

(c) Group companies

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

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

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

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

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

(d) Disposal of foreign operation and partial disposal

On the disposal of a foreign operation (that is, a disposal of the Group's entire interest in a foreign operation, or a disposal involving loss of control over a subsidiary that includes a foreign operation, a disposal involving loss of joint control over a joint venture that includes a foreign operation, or a disposal involving loss of significant influence over an associate that includes a foreign operation), all of the currency translation differences accumulated in equity in respect of that operation attributable to the owners of the company are reclassified to profit or loss.

In the case of a partial disposal that does not result in the Group losing control over a subsidiary that includes a foreign operation, the proportionate share of accumulated currency translation differences are re-attributed to non-controlling interests and are not recognised in profit or loss. For all other partial disposals (that is, reductions in the Group's ownership interest in associates or joint ventures that do not result in the Group losing significant influence or joint control), the proportionate share of the accumulated exchange difference is reclassified to profit or loss.

2 Summary of significant accounting policies (Continued)

2.7 Property, plant and equipment

Property, plant and equipment is stated at historical cost less accumulated depreciation and impairment losses. Historical cost includes expenditure that is directly attributable to the acquisition of the items.

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

For the drilling rigs used for drilling engineering services included in Plant and machinery, the depreciation is calculated using units-of-production method. For each day a rig is operating, it is depreciated over an approximate of 5,000~6,000-day period, after provision for residual values.

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

• Freehold land	No depreciation
• Buildings held for own use	20-35 years
• Plant and machinery	5-10 years
• Fixtures, fittings and equipment	5-10 years
• Motor vehicles	5-6 years

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

An asset's carrying amount is written down immediately to its recoverable amount if the asset's carrying amount is greater than its estimated recoverable amount (Note 2.9).

Gains and losses on disposals are determined by comparing proceeds with carrying amount and are recognised within 'Other (losses)/gains – net' in profit or loss.

Construction-in-progress ("CIP") represents buildings under construction and plant and equipment pending for installation, and are stated at cost. Costs include construction and acquisition costs. No provision for depreciation is made on CIP until such time as the relevant assets are completed and ready for intended use. When the assets concerned are brought into use, the costs are transferred to property, plant and equipment and depreciated in accordance with the policy as stated above.

2 Summary of significant accounting policies (Continued)

2.8 Intangible assets

(a) Goodwill

Goodwill arises on the acquisition of subsidiaries represents the excess of the consideration transferred, the amount of any non-controlling interest in the acquiree and the acquisition-date fair value of any previous equity interest in the acquiree over the fair value of the identified net assets acquired.

For the purpose of impairment testing, goodwill acquired in a business combination is allocated to each of the cash-generating units ("CGUs"), or groups of CGUs, that is expected to benefit from the synergies of the combination. Each unit or group of units to which the goodwill is allocated represents the lowest level within the entity at which the goodwill is monitored for internal management purposes. Goodwill is monitored at the operating segment level.

Goodwill impairment reviews are undertaken annually or more frequently if events or changes in circumstances indicate a potential impairment. The carrying value of the CGU containing the goodwill is compared to the recoverable amount, which is the higher of value in use and the fair value less costs of disposal. Any impairment is recognised immediately as an expense and is not subsequently reversed.

(b) Technical know-how

Separately acquired technical know-how is shown at historical cost. Technical know-how acquired in a business combination is recognised at fair value at the acquisition date. Technical know-how has a finite useful life and is carried at cost less accumulated amortisation. Amortisation is calculated using the straight-line method to allocate the cost of technical know-how over its estimated useful life of 10 years.

(c) Capitalised development costs

Capitalised development costs that are directly attributable to the design and testing of new or improved products when meet relevant criteria. Amortisation is calculated using the straight-line method over its estimated useful life of 10 years (Note 2.32).

2 Summary of significant accounting policies (Continued)

2.9 Impairment of non-financial assets

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

2.10 Non-current assets (or disposal groups) held for sale and discontinued operations

Non-current assets (or disposal groups) are classified as held for sale when their carrying amount will be recovered principally through a sale transaction and a sale is considered highly probable. The non-current assets (except for certain assets as explained below), (or disposal groups), are stated at the lower of carrying amount and fair value less costs to sell. Deferred tax assets, assets arising from employee benefits, financial assets (other than investments in subsidiaries and associates) and investment properties, which are classified as held for sale, would continue to be measured in accordance with the policies set out elsewhere in Note 2.

A discontinued operation is a component of the Group's business, the operations and cash flows of which can be clearly distinguished from the rest of the Group and which represents a separate major line of business or geographic area of operations, or is part of a single co-ordinated plan to dispose of a separate major line of business or geographical area of operations, or is a subsidiary acquired exclusively with a view to resale. The results of discontinued operations are presented separately in the statement of profit or loss.

An impairment loss is recognised for any initial or subsequent write-down of the asset (or disposal group) to fair value less costs to sell. A gain is recognised for any subsequent increases in fair value less costs to sell of an asset (or disposal group), but not in excess of any cumulative impairment loss previously recognised. A gain or loss not previously recognised by the date of the sale of the non-current asset (or disposal group) is recognised at the date of derecognition.

Non-current assets (including those that are part of a disposal group) are not depreciated or amortised while they are classified as held for sale. Interest and other expenses attributable to the liabilities of a disposal group classified as held for sale continue to be recognised.

Non-current assets classified as held for sale and the assets of a disposal group classified as held for sale are presented separately from the other assets in the balance sheet. The liabilities of a disposal group classified as held for sale are presented separately from other liabilities in the balance sheet.

2 Summary of significant accounting policies (Continued)

2.11 Financial assets

2.11.1 Classification

The Group classifies its financial assets in the following measurement categories:

- those to be measured subsequently at fair value (either through OCI or through profit or loss), and
- those to be measured at amortised cost.

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

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

The Group reclassifies debt investments when and only when its business model for managing those assets changes.

2.11.2 Recognition and derecognition

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

2.11.3 Measurement

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

Financial assets with embedded derivatives are considered in their entirety when determining whether their cash flows are solely payment of principal and interest.

2 Summary of significant accounting policies (Continued)

2.11 Financial assets (Continued)

2.11.3 Measurement (Continued)

Debt instruments

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

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

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

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

Equity instruments

The Group subsequently measures all equity investments at fair value. Where the Group's management has elected to present fair value gains and losses on equity investments in OCI, there is no subsequent reclassification of fair value gains and losses to profit or loss following the derecognition of the investment. Dividends from such investments continue to be recognised in profit or loss as other income when the Group's right to receive payments is established.

2 Summary of significant accounting policies (Continued)

2.11 Financial assets (Continued)

2.11.3 Measurement (Continued)

Equity instruments (Continued)

Changes in the fair value of financial assets at FVPL are recognised in other gains/(losses) in the statement of profit or loss as applicable. Impairment losses (and reversal of impairment losses) on equity investments measured at FVOCI are not reported separately from other changes in fair value.

2.11.4 Impairment

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

For trade receivables, the Group applies the simplified approach permitted by IFRS 9, which requires expected lifetime losses to be recognised from initial recognition of the receivables, see Note 3.1(b) for further details.

2.12 Offsetting financial instruments

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

2.13 Derivative financial instruments and hedging activities

Derivatives are initially recognised at fair value on the date a derivative contract is entered into and are subsequently re-measured at their fair value. The method of recognising the resulting gain or loss depends on whether the derivative is designated as a hedging instrument, and if so, the nature of the item being hedged. The Group does not have any derivative instruments that qualifying for hedge accounting. Changes in the fair value of any derivative instruments that do not qualify for hedge accounting are recognised immediately in profit or loss.

2 Summary of significant accounting policies (Continued)

2.14 Inventories

Inventories are stated at the lower of cost and net realisable value. Cost is determined using the weighted average method. The cost of finished goods and work in progress comprises design costs, raw materials, direct labour, other direct costs and related production overheads (based on normal operating capacity). It excludes borrowing costs. Net realisable value is the estimated selling price in the ordinary course of business, less applicable variable selling expenses.

2.15 Trade and other receivables

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

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

2.16 Cash and cash equivalents

In the consolidated statement of cash flows, cash and cash equivalents include cash in hand, deposits held at call with banks, other short-term highly liquid investments with original maturities of three months or less, and bank overdrafts.

2.17 Share capital

Ordinary shares are classified as equity.

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

2.18 Trade and other payables

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

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

2 Summary of significant accounting policies (Continued)

2.19 Borrowings

Borrowings are recognised initially at fair value, net of transaction costs incurred. Borrowings are subsequently carried at amortised cost; any difference between the proceeds (net of transaction costs) and the redemption amount is recognised in profit or loss over the period of the borrowings using the effective interest method.

Fees paid on the establishment of loan facilities are recognised as transaction costs of the loan to the extent that it is probable that some or all of the facility will be drawn down. In this case, the fee is deferred until the draw down occurs. To the extent there is no evidence that it is probable that some or all of the facility will be drawn down, the fee is capitalised as a prepayment for liquidity services and amortised over the period of the facility to which it relates.

Borrowings are classified as current liabilities unless the Group has an unconditional right to defer settlement of the liability for at least 12 months after the end of the reporting period.

An initial recognition the derivative component of senior notes under borrowings is measured at fair value and presented as part of derivative financial instruments. Any excess of proceeds over the amount initially recognised as the derivative component is recognised as the liability component. Transaction costs that relate to issue of the senior note are allocated to the liability and derivative components in proportion to the allocation of proceeds. The portion of the transaction costs relating to the liability component is recognised initially as part of the liability. The portion relating to derivative component is recognised immediately in profit or loss.

The derivative component is subsequently remeasured in accordance with Note 2.13. The liability component is subsequently carried at amortised cost. The interest expense recognised in profit or loss on the liability component is calculated using the effective interest method.

2.20 Borrowing costs

General and specific borrowing costs directly attributable to the acquisition, construction or production of qualifying assets, which are assets that necessarily take a substantial period of time to get ready for their intended use or sale, are added to the cost of those assets, until such time as the assets are substantially ready for their intended use or sale.

Investment income earned on the temporary investment of specific borrowings pending their expenditure on qualifying assets is deducted from the borrowing costs eligible for capitalisation.

All other borrowing costs are recognised in profit or loss in the period in which they are incurred.

2 Summary of significant accounting policies (Continued)

2.20 Borrowing costs (Continued)

Borrowing costs include interest expense, finance charges in respect of finance lease and exchange differences arising from foreign currency borrowings to the extent that they are regarded as an adjustment to interest costs. The exchange gains and losses that are an adjustment to interest costs include the interest rate differential between borrowing costs that would be incurred if the entity had borrowed funds in its functional currency, and the borrowing costs actually incurred on foreign currency borrowings. Such amounts are estimated based on interest rates on similar borrowings in the entity's functional currency.

When the construction of the qualifying assets takes more than one accounting period, the amount of foreign exchange differences eligible for capitalisation is determined for each annual period and are limited to the difference between the hypothetical interest amount for the functional currency borrowings and the actual interest incurred for foreign currency borrowings. Foreign exchange differences that did not meet the criteria for capitalisation in previous years should not be capitalised in subsequent years.

2.21 Current and deferred income tax

The tax expense for the period comprises current and deferred tax. Tax is recognised in profit or loss, except to the extent that it relates to items recognised in other comprehensive income or directly in equity. In this case, the tax is also recognised in other comprehensive income or directly in equity, respectively.

(a) Current income tax

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

2 Summary of significant accounting policies (Continued)

2.21 Current and deferred income tax (Continued)

(b) Deferred income tax

Inside basis differences

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

Deferred tax assets are recognised only to the extent that it is probable that future taxable profit will be available against which the temporary differences can be utilised.

Outside basis differences

Deferred income tax liabilities are provided on taxable temporary differences arising from investments in subsidiaries, associates and joint arrangements, except for deferred income tax liability where the timing of the reversal of the temporary difference is controlled by the Group and it is probable that the temporary difference will not reverse in the foreseeable future. Generally the Group is unable to control the reversal of the temporary difference for associates. Only when there is an agreement in place that gives the Group the ability to control the reversal of the temporary difference in the foreseeable future, deferred tax liability in relation to taxable temporary differences arising from the associate's undistributed profits is not recognised.

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

(c) Offsetting

Deferred income tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets against current tax liabilities and when the deferred income tax assets and liabilities relate to income taxes levied by the same taxation authority on either the taxable entity or different taxable entities where there is an intention to settle the balances on a net basis.

2 Summary of significant accounting policies (Continued)

2.22 Employee benefits

(a) Pension obligations

Pursuant to the relevant labour rules and regulations in the People's Republic of China (the "PRC"), the PRC subsidiaries of the Group participates in defined contribution retirement benefit schemes (the "Schemes") organised by the PRC municipal government authorities whereby the Group is required to make contributions to the Schemes at the rate of 25% to 26% (2020: 20% to 22%) of the standard wages determined by the relevant authorities in the PRC for the year ended 31 December 2021. The local government authority is responsible for the entire pension obligations payable to retired employees. The contributions to the schemes are charged to profit or loss as and when incurred.

(b) Housing fund and other benefits

All full-time employees of the Group's subsidiaries in the PRC are entitled to participate in various government-sponsored housing and other benefits funds. The Group contributes on a monthly basis to these funds based on certain percentages of the salaries of the employees. The Group's liability in respect of these funds is limited to the contributions payable in each period.

2.23 Share-based payments

(a) Equity-settled share-based payment transactions

The Group operates an equity-settled, share-based compensation plan, under which the entity receives services from employees as consideration for equity instruments (options) of the Group. The fair value of the employee services received in exchange for the grant of the options is recognised as an expense. The total amount to be expensed is determined by reference to the fair value of the options granted:

- including any market performance conditions (for example, an entity's share price);
- excluding the impact of any service and non-market performance vesting conditions (for example, profitability, sales growth targets and remaining an employee of the entity over a specified time period); and
- including the impact of any non-vesting conditions (for example, the requirement for employees to save or holding shares for a specified period of time).

At the end of each reporting period, the Group revises its estimates of the number of options that are expected to vest based on the non-marketing performance and service conditions. It recognises the impact of the revision to original estimates, if any, in profit or loss, with a corresponding adjustment to equity.

2 Summary of significant accounting policies (Continued)

2.23 Share-based payments (Continued)

(a) Equity-settled share-based payment transactions (Continued)

In addition, in some circumstances employees may provide services in advance of the grant date and therefore the grant date fair value is estimated for the purposes of recognising the expense during the period between service commencement period and grant date.

When the options are exercised, the Company issues new shares. The proceeds received net of any directly attributable transaction costs are credited to share capital (and share premium).

(b) Share-based payment transactions among group entities

The grant by the Company of options over its equity instruments to the employees of subsidiary undertakings in the Group is treated as a capital contribution. The fair value of employee services received, measured by reference to the grant date fair value, is recognised over the vesting period as an increase to investment in subsidiary undertakings, with a corresponding credit to equity in the parent entity accounts.

2.24 Provisions

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

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

Provisions are measured at the present value of the expenditures expected to be required to settle the obligation using a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the obligation. The increase in the provision due to the passage of time is recognised as interest expense.

2 Summary of significant accounting policies (Continued)

2.25 Revenue recognition

(a) Sale of goods

The Group manufactures and sells land drillings rigs, parts and components to the ultimate customers or dealers. Sales are recognised when control of the products has transferred, being when the customer has the ability to direct the use of and obtain substantially all of the remaining benefits from the products. The control of products is transferred when products have been shipped to the specified location, being when customer has accepted the products and collectability of the related parted receivables is reasonably assured.

The sales commission is the incremental cost of obtaining a contract and the Group expenses these costs as incurred where the expected amortisation period is one year or less.

For contracts that contain more than one performance obligations, typically sales of products, transportation as well as installation services in one contract, the Group allocates the transaction price to each performance obligation on a relative stand-alone selling price basis.

The Group's obligation to repair or replace faulty products under the standard warranty terms is recognised as a provision, see Note 28.

Instalment sales, under which the consideration is receivable in instalments. The certain contracts where the period between the transfer of the promised goods or services to the customer and payment by the customer exceeds one year shall be considered any financing components. As a consequence, the Group adjusts the transaction prices for the time value of money.

As receivable is recognised when the goods are delivered as this is the point in time that the consideration is unconditional because only the passage of time is required before the payment is due.

(b) Sale of services

The Group provides drilling engineering service and fracturing engineering service. Revenue is recognised on the basis of outputs to the satisfaction of the performance obligation relative to the total expected outputs to the satisfaction of that performance obligation.

2 Summary of significant accounting policies (Continued)

2.26 Earnings per share

(a) Basic earnings per share

Basic earnings per share is calculated by dividing:

- the profit attributable to owners of the company, excluding any costs of servicing equity other than ordinary shares

by the weighted average number of ordinary shares outstanding during the financial year, adjusted for bonus elements in ordinary shares issued during the year and excluding treasury shares.

(b) Diluted earnings per share

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

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

2.27 Dividend income

Dividends are received from financial assets measured at fair value through profit or loss (FVPL) and at fair value through other comprehensive income (FVOCI). Dividends are recognised as other income in profit or loss when the right to receive payment is established. This applies even if they are paid out of pre-acquisition profits, unless the dividend clearly represents a recovery of part of the cost of an investment. In this case, the dividend is recognised in OCI if it relates to an investment measured at FVOCI. However, the investment may need to be tested for impairment as a consequence.

2.28 Leases

Leases are recognised as a right-of-use asset and a corresponding liability at the date at which the leased asset is available for use by the Group.

Contracts may contain both lease and non-lease components. The Group allocates the consideration in the contract to the lease and non-lease components based on their relative stand-alone prices. However, for leases of real estate for which the group is a lessee, it has elected not to separate lease and non-lease components and instead accounts for these as a single lease component.

2 Summary of significant accounting policies (Continued)

2.28 Leases (Continued)

Lease terms are negotiated on an individual basis and contain a wide range of different terms and conditions. The lease agreements do not impose any covenants other than the security interests in the leased assets that are held by the lessor. Leased assets may not be used as security for borrowing purposes.

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

- fixed payments (including in-substance fixed payments), less any lease incentives receivable
- variable lease payment that are based on an index or a rate, initially measured using the index or rate as at the commencement date
- amounts expected to be payable by the Group under residual value guarantees
- the exercise price of a purchase option if the Group is reasonably certain to exercise that option, and
- payments of penalties for terminating the lease, if the lease term reflects the Group exercising that option.

The variable lease payments which are not based on an index or a rate are not included in the measurement of the lease liability initially, and are recognised in profit or loss in the period in which the event or condition that triggers those payments occurs.

Lease payments to be made under reasonably certain extension options are also included in the measurement of the liability.

The lease payments are discounted using the interest rate implicit in the lease. If that rate cannot be readily determined, which is generally the case for leases in the Group, the lessee's incremental borrowing rate is used, being the rate that the individual lessee would have to pay to borrow the funds necessary to obtain an asset of similar value to the right-of-use asset in a similar economic environment with similar terms, security and conditions.

2 Summary of significant accounting policies (Continued)

2.28 Leases (Continued)

To determine the incremental borrowing rate, the Group:

- where possible, uses recent third-party financing received by the individual lessee as a starting point, adjusted to reflect changes in financing conditions since third party financing was received
- uses a build-up approach that starts with a risk-free interest rate adjusted for credit risk for leases held by the entities within the Group, which does not have recent third party financing, and
- makes adjustments specific to the lease, e.g. term, country, currency and security.

Lease payments are allocated between principal and finance cost. The finance cost is charged to profit or loss over the lease period so as to produce a constant periodic rate of interest on the remaining balance of the liability for each period.

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

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

Right-of-use assets are generally depreciated over the shorter of the asset's useful life and the lease term on a straight-line basis. If the Group is reasonably certain to exercise a purchase option, the right-of-use asset is depreciated over the underlying asset's useful life.

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

Lease income from operating leases where the Group is a lessor is recognised in income on a straight-line basis over the lease term or on another systematic basis. Initial direct costs incurred in obtaining an operating lease are added to the carrying amount of the underlying asset and recognised as expense over the lease term on the same basis as lease income. The respective leased assets are included in the balance sheet based on their nature.

2 Summary of significant accounting policies (Continued)

2.28 Leases (Continued)

In classifying a sublease, the intermediate lessor shall classify the sublease as a finance lease or an operating lease as follows:

- if the head lease is a short-term lease that the Group, as a lessee, has accounted this lease on a straight-line basis over the lease term as an expense in profit or loss, the sublease shall be classified as an operating lease.
- otherwise, the sublease shall be classified by reference to the right-of-use assets arising from the head lease, rather than by reference to the underlying asset.

2.29 Dividend distribution

Provision is made for the amount of any dividend declared, being appropriately authorised and no longer at the discretion of the entity, on or before the end of the reporting period but not distributed at the end of the reporting period.

2.30 Government grants

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

Government grants relating to costs are deferred and recognised in the profit or loss over the period necessary to match them with the costs that they are intended to compensate.

Government grants relating to the purchase of property, plant and equipment are included in non-current liabilities as deferred income and are credited to profit or loss on a straight-line basis over the expected lives of the related assets.

2.31 Interest income

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

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

Interest income is presented as finance income where it is earned from financial assets that are held for cash management purposes, see Note 10 below. Any other interest income is included in other income.

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

2 Summary of significant accounting policies (Continued)

2.32 Research and development

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

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

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

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

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

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

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

Other development expenditures that do not meet these criteria are recognised as an expense as incurred. Development costs previously recognised as an expense are not recognised as an asset in a subsequent period. Capitalised development costs are recorded as intangible assets and amortised from the point at which the asset is ready for use on a straight-line basis over its useful life.

3 Financial risk management

3.1 Financial risk factors

The Group's activities expose to a variety of financial risks: market risk (including foreign exchange risk, cash flow and fair value interest rate risk), credit risk and liquidity risk. The Group's overall risk management programme focuses on the unpredictability of financial markets and seeks to minimise potential adverse effects on the Group's financial performance.

Risk management is carried out by the senior executive management of the Group. The senior executive management of the Group identifies, evaluates and hedges financial risks in close co-operation with the Group's operating units. The board provides principles for overall risk management, as well as policies covering specific areas, such as foreign exchange risk, interest rate risk, credit risk, use of derivative financial instruments and non-derivative financial instruments, and investment of excess liquidity.

(a) Market risk

(i) Foreign exchange risk

The Group is exposed to foreign exchange risk arising from various currency exposures, primarily with respect to the US dollar ("USD"), Euros ("EUR") and RMB. Foreign exchange risk arises when future commercial transactions or recognised assets or liabilities are denominated in a currency that is not the entity's functional currency. Management has set up a policy to require the Group companies to manage their foreign exchange risk against their functional currency.

RMB is not freely convertible into foreign currencies. All foreign exchange transactions involving RMB must take place through the People's Bank of China or other institutions authorised to buy and sell foreign currencies. The exchange rate adopted for the foreign exchange transactions are the rates of exchange quoted by the commercial banks that are based on the middle price quoted by People's Bank of China and determined largely by supply and demand.

3 Financial risk management (Continued)

3.1 Financial risk factors (Continued)

(a) Market risk (Continued)

(i) Foreign exchange risk (Continued)

The following table details the Group's exposure at 31 December 2021 to currency risk arising from recognised assets or liabilities 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 RMB, translated using the spot rate at 31 December 2021.

	Exposure to foreign currency		
	USD items (RMB'000)	**EUR items (RMB'000)**	**RMB items (RMB'000)**
At 31 December 2021			
Cash and cash equivalents	**153,192**	**758**	**1,851**
Trade and other receivables	**553,456**	**58**	**–**
Borrowings	**(1,028,368)**	**–**	**–**
Trade and other payables	**(79,647)**	**(13)**	**(295)**
Lease liabilities	**(67,400)**	**–**	**–**
Overall net exposure	**(468,767)**	**803**	**1,556**

	Exposure to foreign currency		
	USD items (RMB'000)	EUR items (RMB'000)	RMB items (RMB'000)
At 31 December 2020			
Cash and cash equivalents	158,393	2,186	5,257
Trade and other receivables	770,304	86	54
Borrowings	(637,313)	–	–
Trade and other payables	(249,313)	(44)	(3,421)
Lease liabilities	(85,837)	–	–
Overall net exposure	(43,766)	2,228	1,890

As at 31 December 2021 and 2020, the Group did not have any forward exchange contracts to hedge its exposure to foreign exchange risk.

3 Financial risk management (Continued)

3.1 Financial risk factors (Continued)

(a) Market risk (Continued)

(i) Foreign exchange risk (Continued)

As at 31 December 2021, if RMB had weakened/strengthened by 5% (2020: 5%) against the USD with all other variables held constant, the Group's post-tax loss for the year then ended would have been approximately RMB23,082,000 lower/higher (2020: RMB1,751,000 lower/higher), mainly as a result of foreign exchange gains/(losses) on translation of USD-denominated cash and cash equivalents, trade and other receivables, borrowings, trade and other payables and lease liabilities.

The sensitivity analysis above represents an aggregation of the instantaneous effects on each of the group entities' profit or loss after tax measured in the respective functional currencies, translated into RMB at the exchange rate ruling at the end of the reporting period for presentation purposes.

(ii) Cash flow and fair value interest rate risk

The Group's interest rate risk arises primarily from borrowings. Borrowings obtained at variable rates expose the Group to cash flow interest rate risk which is partially offset by cash held at variable rates. All borrowings including senior notes obtained at fixed rates expose the Group to fair value interest rate risk. The Group's policy is to manage its interest rate risk to ensure there are no undue exposures to significant interest rate movements. The Group does not use derivative financial instruments to hedge its fixed and variable rate debt obligations.

As at 31 December 2021, it is estimated that a general increase/decrease of 50 basis points in interest rates, with all other variables held constant, would have decreased/increased the Group's profit after tax by approximately RMB6,134,000 (2020: RMB5,272,000).

The sensitivity analysis above indicates the instantaneous change in the Group's profit after tax that would arise assuming that the change in interest rates had occurred as at 31 December 2021 and 2020, the impact on the Group's profit after tax is estimated as annualised impact on interest expense of such a change in interest rates.

3 Financial risk management (Continued)

3.1 Financial risk factors (Continued)

(b) Credit risk

Credit risk arises from cash and cash equivalents, contractual cash flows of debt instruments carried at amortised cost and at fair value through comprehensive income and deposits with banks, as well as credit exposures to customers, including outstanding receivables.

(i) Risk management

Credit risk is managed on a group basis. Management has a credit policy in place and the exposures to these credit risks are monitored on an on-going basis.

Risk control assesses the credit quality of the customer, taking into account its financial position, past experience and other factors. Individual risk limits are set based on internal or external ratings in accordance with limits set by the management. The compliance with credit limits by customers is regularly monitored by line management.

The Group's exposure to credit risk is influenced mainly by the individual characteristics of each customer and the industry in which the customers operate. Significant concentration of credit risk primarily arises when the Group has significant exposure to individual customers. As at 31 December 2021, 21% (2020: 23%) and 43% (2020: 42%) of the total trade receivables was due from the Group's largest customer and the five largest customers respectively. The Group also has significant concentration of credit risk on customers in the oil drilling industry and the volatility in global oil prices may affect the financial results and ability of customers to make payments.

The credit risk on cash at bank, pledged bank deposits and term deposit is limited as the counterparties are banks with sound credit standing. Majority of the Group's cash and cash equivalents at bank and pledged bank deposits were deposited at the state-owned commercial banks in the PRC.

3 Financial risk management (Continued)

3.1 Financial risk factors (Continued)

(b) Credit risk (Continued)

(ii) Impairment of financial assets

The Group has the following types of financial assets and contract assets that are subject to the expected credit loss model:

- trade receivables (including bills receivables) for sales of goods and from the provision of services
- contract assets for sales of goods and from the provision of services
- loan to an associate and other related party carried at amortised cost
- debt investments carried at amortised cost
- bank acceptance bill receivables carried at FVOCI
- finance lease receivables
- other financial assets at amortised cost
- pledged bank deposits
- term deposit, and
- cash and cash equivalents

While pledged bank deposits, term deposit and cash and cash equivalents are also subject to the impairment requirements of IFRS 9, the identified impairment loss was immaterial.

Trade receivables and contract assets

The Group applies the IFRS 9 simplified approach to measuring expected credit losses which uses a lifetime expected loss allowance for all trade receivables and contract assets.

3 Financial risk management (Continued)

3.1 Financial risk factors (Continued)

(b) Credit risk (Continued)

(ii) Impairment of financial assets (Continued)

Trade receivables and contract assets (Continued)

If the credit losses of a signal trade receivable can be assessed at a reasonable cost, the credit losses of those trade receivables are assessed separately. If not, to measure the expected credit losses, trade receivables and contract assets have been grouped based on shared credit risk characteristics and the days past due. The contract assets relate to unbilled work in progress and have substantially the same risk characteristics as the trade receivables for the same types of contracts. The Group has therefore concluded that the expected loss rates for trade receivables are a reasonable approximation of the loss rates for the contract assets.

The expected loss rates are based on the payment profiles of sales over a period of 24 months before 31 December 2021 or 1 January 2021 respectively and the corresponding historical credit losses experienced within this period. The historical loss rates are adjusted to reflect current and forward-looking information on macroeconomic factors affecting the ability of the customers to settle the receivables. The Group has identified the GDP of the countries in which it sells its goods and services and the International crude oil price index to be the most relevant factors, and accordingly adjusts the historical loss rates based on expected changes in these factors.

On that basis, the loss allowance as at 31 December 2021 and 31 December 2020 was determined as follows for both trade receivables and contract assets:

i) As at 31 December 2021 and 31 December 2020, receivables with amounts subject to separate assessment for impairment are as below:

31 December 2021	**More than 90 days past due**	**Total**
Expected loss rate	**65.21%**	**–**
Gross carrying amount – trade receivables (RMB'000)	**514,920**	**514,920**
Loss allowance (RMB'000)	**(335,771)**	**(335,771)**

3 Financial risk management (Continued)

3.1 Financial risk factors (Continued)

(b) Credit risk (Continued)

(ii) Impairment of financial assets (Continued)

Trade receivables and contract assets (Continued)

i) As at 31 December 2021 and 31 December 2020, receivables with amounts subject to separate assessment for impairment are as below (continued):

31 December 2020	More than 90 days past due	Total
Expected loss rate	71.08%	–
Gross carrying amount – trade receivables (RMB'000)	520,596	520,596
Loss allowance (RMB'000)	(370,050)	(370,050)

As the above debtors suffered in several lawsuits or operation difficulty, the Group cannot be able to collect the amount under the original terms, provisions for impairment on those receivables were made.

ii) As at 31 December 2021 and 31 December 2020, trade receivables and contract assets have been grouped on the basis of shared credit risk characteristics and the days past due for the measurement of expected credit losses:

- bank acceptance bill receivables group at amortised cost

  As at 31 December 2021, the total amount of bank acceptance bills was RMB104,883,000 (As at 31 December 2020: nil), these bills will be accepted by large state-owned banks or commercial banks. The Group believes that there is no significant credit losses due to the bank default.

3 Financial risk management (Continued)

3.1 Financial risk factors (Continued)

(b) Credit risk (Continued)

(ii) Impairment of financial assets (Continued)

Trade receivables and contract assets (Continued)

ii) As at 31 December 2021 and 31 December 2020, trade receivables and contract assets have been grouped on the basis of shared credit risk characteristics and the days past due for the measurement of expected credit losses: (Continued)

- revenue of land drilling rigs group

31 December 2021	Current	1-30 days past due	31-60 days past due	More than 90 days past due	Total
Expected loss rate	1.53%	3.64%	7.58%	8.33%	–
Gross carrying amount – trade receivables (RMB'000)	984,663	14,378	1,095	82,409	1,082,545
Loss allowance (RMB'000)	(15,030)	(523)	(83)	(6,865)	(22,501)

31 December 2020	Current	1-30 days past due	More than 90 days past due	Total
Expected loss rate	1.15%	4.42%	7.85%	–
Gross carrying amount – trade receivables (RMB'000)	1,072,907	40,989	241,278	1,355,174
Loss allowance (RMB'000)	(12,382)	(1,812)	(18,940)	(33,134)

3 Financial risk management (Continued)

3.1 Financial risk factors (Continued)

(b) Credit risk (Continued)

(ii) Impairment of financial assets (Continued)

Trade receivables and contract assets (Continued)

ii) As at 31 December 2021 and 31 December 2020, trade receivables and contract assets have been grouped on the basis of shared credit risk characteristics and the days past due for the measurement of expected credit losses: (Continued)

- revenue of fracturing group

31 December 2021	Current	1-30 days past due	31 – 60 days past due	More than 90 days past due	Total
Expected loss rate	**2.67%**	**4.12%**	**8.56%**	**11.41%**	**–**
Gross carrying amount – trade receivables (RMB'000)	**668,403**	**25,212**	**9,330**	**15,750**	**718,695**
Gross carrying amount – contract assets (RMB'000)	**334,296**	**–**	**–**	**–**	**334,296**
Loss allowance (RMB'000)	**(26,767)**	**(1,038)**	**(799)**	**(1,797)**	**(30,401)**

31 December 2020	Current	1-30 days past due	More than 90 days past due	Total
Expected loss rate	1.39%	1.45%	8.09%	–
Gross carrying amount – trade receivables (RMB'000)	339,379	169,947	94,427	603,753
Gross carrying amount – contract assets (RMB'000)	314,530	–	–	314,530
Loss allowance (RMB'000)	(9,094)	(2,469)	(7,641)	(19,204)

3 Financial risk management (Continued)

3.1 Financial risk factors (Continued)

(b) Credit risk (Continued)

(ii) Impairment of financial assets (Continued)

Trade receivables and contract assets (Continued)

ii) As at 31 December 2021 and 31 December 2020, trade receivables and contract assets have been grouped on the basis of shared credit risk characteristics and the days past due for the measurement of expected credit losses: (Continued)

- revenue of parts and components and others group

31 December 2021	Current	1-30 days past due	31-60 days past due	61-90 days past due	More than 90 days past due	Total
Expected loss rate	**4.47%**	**10.33%**	**10.71%**	**13.56%**	**14.26%**	**–**
Gross carrying amount – trade receivables (RMB'000)	**599,419**	**234,246**	**74,487**	**5,509**	**289,756**	**1,203,417**
Gross carrying amount – contract assets (RMB'000)	**12,634**	**–**	**–**	**–**	**–**	**12,634**
Loss allowance (RMB'000)	**(27,389)**	**(24,193)**	**(7,980)**	**(747)**	**(41,330)**	**(101,639)**

31 December 2020	Current	1-30 days past due	31-60 days past due	61-90 days past due	More than 90 days past due	Total
Expected loss rate	4.15%	9.69%	10.53%	10.82%	11.66%	–
Gross carrying amount – trade receivables (RMB'000)	324,722	221,256	112,516	11,676	253,839	924,009
Gross carrying amount – contract assets (RMB'000)	222,542	–	–	–	–	222,542
Loss allowance (RMB'000)	(22,696)	(21,437)	(11,849)	(1,263)	(29,590)	(86,835)

3 Financial risk management (Continued)

3.1 Financial risk factors (Continued)

(b) Credit risk (Continued)

(ii) Impairment of financial assets (Continued)

Trade receivables and contract assets (Continued)

ii) As at 31 December 2021 and 31 December 2020, trade receivables and contract assets have been grouped on the basis of shared credit risk characteristics and the days past due for the measurement of expected credit losses: (Continued)

- revenue of drilling engineering services group

31 December 2021	Current	1-30 days past due	31–60 days past due	More than 90 days past due	Total
Expected loss rate	**1.72%**	**2.56%**	**4.31%**	**11.46%**	**–**
Gross carrying amount – trade receivables (RMB'000)	**96,384**	**782**	**348**	**12,063**	**109,577**
Gross carrying amount – contract assets (RMB'000)	**113,160**	**–**	**–**	**–**	**113,160**
Loss allowance (RMB'000)	**(3,603)**	**(20)**	**(15)**	**(1,383)**	**(5,021)**

31 December 2020	Current	1-30 days past due	More than 90 days past due	Total
Expected loss rate	1.36%	1.63%	11.06%	–
Gross carrying amount – trade receivables (RMB'000)	231,849	31,522	67,965	331,336
Gross carrying amount – contract assets (RMB'000)	169,230	–	–	169,230
Loss allowance (RMB'000)	(5,453)	(515)	(7,518)	(13,486)

3 Financial risk management (Continued)

3.1 Financial risk factors (Continued)

(b) Credit risk (Continued)

(ii) Impairment of financial assets (Continued)

Trade receivables and contract assets (Continued)

ii) As at 31 December 2021 and 31 December 2020, trade receivables and contract assets have been grouped on the basis of shared credit risk characteristics and the days past due for the measurement of expected credit losses: (Continued)

The closing loss allowances for trade receivables and contract assets as at 31 December 2021 reconcile to the opening loss allowances as follows:

	Contract assets		Trade receivables	
	2021	2020	**2021**	2020
	RMB'000	RMB'000	**RMB'000**	RMB'000
Opening loss allowance as at 1 January 2021	**(18,511)**	(1,022)	**(504,198)**	(294,486)
Decrease/(increase) in loss allowance recognised in profit or loss during the year	**7,246**	(17,489)	**(159,824)**	(215,720)
Decrease in loss allowance during the year due to the acquisition of a subsidiary (Note 34)	**–**	–	**168,242**	–
Receivables written off during the year as uncollectible	**–**	–	**6,941**	803
Exchange rate changes	**–**	–	**4,771**	5,205
Closing loss allowances as at 31 December 2021	**(11,265)**	(18,511)	**(484,068)**	(504,198)

Trade receivables and contract assets are written off where there is no reasonable expectation of recovery. Indicators that there is no reasonable expectation of recovery include, amongst others, the failure of a debtor to engage in a repayment plan with the Group, and a failure to make contractual payments.

Impairment losses on trade receivables and contract assets are presented as net impairment losses within operating profit. Subsequent recoveries of amounts previously written off are credited against the same line item.

3 Financial risk management (Continued)

3.1 Financial risk factors (Continued)

(b) Credit risk (Continued)

(ii) Impairment of financial assets (Continued)

Loan to an associate and other related party and debt investments

Loan to an associate and other related party is considered credit-impairment on origination. For such assets, impairment is determined based on full lifetime expected credit loss on initial recognition. However, lifetime expected credit losses are included in the estimated cash flows when calculating the effective interest rate on initial recognition. The effective interest rate for interest recognition throughout the life of the asset is a credit-adjusted effective interest rate.

For measuring expected credit losses, the estimate of expected cash shortfalls reflects the cash flows expected from collateral and other credit enhancements that are part of the contractual terms and are not recognised separately by the entity.

As at 31 December 2021 and 31 December 2020, loan to an associate and other related party subject to separate assessment for impairment is as below:

31 December 2021	**Current**	**Total**
Expected loss rate	**87.78%**	**–**
Gross carrying amount-Loan to an associate and other related party (RMB'000)	**102,425**	**102,425**
Loss allowance (RMB'000)	**(89,910)**	**(89,910)**

31 December 2020	Current	Total
Expected loss rate	4.88%	–
Gross carrying amount-Loan to an associate and other related party (RMB'000)	1,488,055	1,488,055
Loss allowance (RMB'000)	(72,663)	(72,663)

Debt investments at amortised cost are considered to have low credit risk, and the loss allowance recognised during the period was therefore limited to 12 months' expected losses.

3 Financial risk management (Continued)

3.1 Financial risk factors (Continued)

(b) Credit risk (Continued)

(ii) Impairment of financial assets (Continued)

Financial assets at fair value through other comprehensive income

Bank acceptance bill receivables carried at FVOCI are considered to have low credit risk, and the loss allowance recognised during the period was therefore limited to 12 months expected losses. Management considers 'low credit risk' for the instruments as the issuers have strong capacity to meet its contractual cash flow obligations in the near term.

Finance lease receivables

The Group applies the IFRS 9 simplified approach to measuring expected credit losses which uses a lifetime expected loss allowance for finance lease receivables.

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

The expected loss rates are based on the payment profiles of revenue over a period of 24 months before 31 December 2021 or 1 January 2021 respectively and the corresponding historical credit losses experienced within this period. The historical loss rates are adjusted to reflect current and forward-looking information on macroeconomic factors affecting the ability of the customers to settle the receivables. The Group has identified the GDP of the countries in which it rents its inventory out through financing lease and the International crude oil price index to be the most relevant factors, and accordingly adjusts the historical loss rates based on expected changes in these factors.

3 Financial risk management (Continued)

3.1 Financial risk factors (Continued)

(b) Credit risk (Continued)

(ii) Impairment of financial assets (Continued)

Finance lease receivables (Continued)

On that basis, the loss allowance as at 31 December 2021 and 31 December 2020 was determined as follows for finance lease receivables:

i) As at 31 December 2021 and 31 December 2020, finance lease receivables with amounts subject to separate assessment for impairment are as below:

31 December 2021	**More than 90 days past due**	**Total**
Expected loss rate	**100%**	**–**
Gross carrying amount – finance lease receivables (RMB'000)	**77,047**	**77,047**
Loss allowance (RMB'000)	**(77,047)**	**(77,047)**

31 December 2020	More than 90 days past due	Total
Expected loss rate	57.27%	–
Gross carrying amount – finance lease receivables (RMB'000)	129,257	129,257
Loss allowance (RMB'000)	(74,024)	(74,024)

As the above debtors suffered in several lawsuits or operation difficulty, the Group cannot be able to collect the amount under the original terms, provisions for impairment on those receivables were made.

3 Financial risk management (Continued)

3.1 Financial risk factors (Continued)

(b) Credit risk (Continued)

(ii) Impairment of financial assets (Continued)

Finance lease receivables (Continued)

ii) As at 31 December 2021 and 31 December 2020, finance lease receivables have been grouped on the basis of shared credit risk characteristics and the days past due for the measurement of expected credit losses:

Finance lease receivables within due date group

31 December 2021	**Current**	**Total**
Expected loss rate	**1.29%**	**–**
Gross carrying amount – finance lease receivables (RMB'000)	**83,716**	**83,716**
Loss allowance (RMB'000)	**(1,076)**	**(1,076)**

31 December 2020	Current	Total
Expected loss rate	1.00%	–
Gross carrying amount – finance lease receivables (RMB'000)	125,573	125,573
Loss allowance (RMB'000)	(1,255)	(1,255)

Other financial assets at amortised cost

Other financial assets at amortised cost include other receivables. The closing loss allowances for other financial assets as at 31 December 2021 reconcile to the opening loss allowances as follows:

	Other receivables RMB'000
Opening loss allowance as at 1 January 2021	**(126,101)**
Increase in the allowance recognised in profit or loss during the year	**(12,034)**
Exchange rate changes	**1,395**
Closing loss allowance as at 31 December 2021	**(136,740)**

3 Financial risk management (Continued)

3.1 Financial risk factors (Continued)

(b) Credit risk (Continued)

(ii) Impairment of financial assets (Continued)

Net impairment losses on financial and contract assets recognised in profit or loss

During the year, the following losses were recognised in profit or loss in relation to impaired financial assets and contract assets:

	2021 **RMB'000**	2020 RMB'000
Impairment losses		
Impairment losses on trade receivables and contract assets	**(152,579)**	(233,209)
Impairment losses on finance lease receivables	**(2,841)**	1,913
Impairment losses on other financial assets at amortised cost	**(116,949)**	(7,697)
Impairment losses on loan to an associate and other related party	**(88,874)**	(26,470)
Impairment losses on debt investments	**(1,857)**	–
Impairment losses on cash and cash equivalents	**–**	(2,289)
Net impairment losses on financial assets and contract assets	**(363,100)**	(267,752)

3 Financial risk management (Continued)

3.1 Financial risk factors (Continued)

(c) 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 Company's management when the borrowings exceed certain predetermined levels of authority.

The Group's policy is to regularly monitor its liquidity requirements and its compliance with lending covenants, to ensure that it maintains sufficient reserves of cash and adequate committed lines of funding from major financial institutes to meet its liquidity requirements in the short and long term.

The Group has significant concentration of credit risk on customers in the oil and gas industry. The volatility in global oil prices may affect the ability of customers to make payments and demand of the Group's goods and services and hence may affect the liquidity of the Group.

The table below analyses the Group's non-derivative financial liabilities into relevant maturity groupings based on the remaining period the balance sheet date to the contractual maturity date. The amounts disclosed in the table are the contractual undiscounted cash flows. Balances due within 12 months equal their carrying balances, as the impact of discounting is not significant.

	Less than 1 year RMB'000	Between 1 and 2 years RMB'000	Between 2 and 5 years RMB'000	Over 5 years RMB'000	Total contractual cash flows RMB'000
At 31 December 2021					
Trade and other payables (i)	**2,397,708**	**111,085**	**30,296**	**–**	**2,539,089**
Senior notes	**1,356,430**	**–**	**–**	**–**	**1,356,430**
Borrowings (excluding senior notes)	**3,911,741**	**–**	**–**	**–**	**3,911,741**
Lease liabilities	**22,574**	**21,698**	**31,556**	**–**	**75,828**
Total financial liabilities	**7,688,453**	**132,783**	**61,852**	**–**	**7,883,088**
At 31 December 2020					
Trade and other payables (i)	2,655,243	–	–	–	2,655,243
Senior notes	83,192	1,388,172	–	–	1,471,364
Borrowings (excluding senior notes)	2,317,614	550,806	382,807	–	3,251,227
Lease liabilities	22,304	21,942	53,855	–	98,101
Total financial liabilities	5,078,353	1,960,920	436,662	–	7,475,935

(i) Trade and other payables include trade payables, bills payable, amounts due to related companies and other payables.

3 Financial risk management (Continued)

3.2 Capital management

The Group's primary objectives when managing capital are to safeguard the Group's ability to continue as ageing concern, so that it can continue to provide returns for shareholders and to maintain an optimal capital structure to reduce the cost of capital.

The Group's capital structure is regularly reviewed and managed in accordance with the capital management practices of the Group and in light of changes in economic conditions affecting the Group, to the extent that these do not conflict with the directors' fiduciary duties towards the Group.

Consistent with others in the industry, the Group monitors capital risk on the basis of the gearing ratio. This ratio is calculated as net debt divided by total capital. Net debt is calculated as total borrowings (including "current and non-current borrowings" as shown in the consolidated balance sheet) less cash and cash equivalents. Total capital is calculated as "equity" as shown in the consolidated balance sheet plus net debt. The Group aims to maintain the gearing ratio at a reasonable level.

For the year ended 31 December 2021, the Group's strategy, which was unchanged from 2020, was to maintain sufficient capital to cover any net debt position by adjusting the amount of dividends paid to shareholders or issue new shares. The gearing ratios as at 31 December 2021 and 2020 were as follows:

	As at 31 December	
	2021 **RMB'000**	2020 RMB'000
Total borrowings (Note 26)	**5,145,838**	4,484,861
Less: cash and cash equivalents (Note 21)	**(703,417)**	(952,384)
Net debt	**4,442,421**	3,532,477
Total equity	**3,746,396**	4,494,627
Total capital	**8,188,817**	8,027,104
Gearing ratio	**54%**	44%

3 Financial risk management (Continued)

3.3 Fair value estimation

(a) Fair value hierarchy

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

The Group has an established control framework with respect to the measurement of fair values. Management of the Group has overall responsibility for overseeing all significant fair value measurements, including level 3 fair values and reports directly to the management.

Management of the Group regularly reviews significant unobservable inputs and valuation adjustments. If third-party information is used to measure fair values, then management of the Group assesses the evidence obtained from the third parties to support the conclusion that such valuations meet the requirements of IFRS, including the level in the fair value hierarchy in which such valuations should be classified.

The following table presents the Group's financial assets that are measured at fair value at 31 December 2021.

	Level 1 RMB'000	Level 2 RMB'000	Level 3 RMB'000	Total RMB'000
Assets				
Financial asset at fair value through other comprehensive income				
– Investment in unlisted companies	**–**	**–**	**117,902**	**117,902**
– Bank acceptance bill receivables	**–**	**–**	**1,371**	**1,371**
Total assets	**–**	**–**	**119,273**	**119,273**

3 Financial risk management (Continued)

3.3 Fair value estimation (Continued)

(a) Fair value hierarchy (Continued)

The following table presents the Group's financial assets that are measured at fair value at 31 December 2020.

	Level 1 RMB'000	Level 2 RMB'000	Level 3 RMB'000	Total RMB'000
Assets				
Financial asset at fair value through other comprehensive income				
– Investment in unlisted companies	–	–	106,338	106,338
– Bank acceptance bill receivables	–	–	54,937	54,937
Total assets	–	–	161,275	161,275

There were no transfers among levels 1, 2 and 3 during 2021 and 2020. There were no other changes in valuation techniques during 2021 and 2020.

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

Level 1: The fair value of financial instruments traded in active markets is based on quoted market prices at the balance sheet date. A market is regarded as active if quoted prices are readily and regularly available from an exchange, dealer, broker, industry group, pricing service, or regulatory agency, and those prices represent actual and regularly occurring market transactions on an arm's length basis.

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

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

3 Financial risk management (Continued)

3.3 Fair value estimation (Continued)

(b) Valuation techniques used to determine fair values

Specific valuation techniques used to value financial instruments include:

- Quoted market prices or dealer quotes for similar instruments.
- The fair value of interest rate swaps is calculated as the present value of the estimated future cash flows based on observable yield curves.
- The fair value of forward foreign exchange contracts is determined using forward exchange rates at the balance sheet date, with the resulting value discounted back to present value.
- Other techniques, such as discounted cash flow analysis, are used to determine fair value for the remaining financial instruments.

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

	Investments in unlisted companies RMB'000	Bank acceptance bill receivables RMB'000	Total RMB'000
Opening balance 1 January 2020	104,263	78,273	182,536
Acquisitions	–	282,882	282,882
Disposals	–	(306,218)	(306,218)
Changes in fair value	(1,052)	–	(1,052)
Others	3,127	–	3,127
Closing balance 31 December 2020	**106,338**	**54,937**	**161,275**
Acquisitions	**–**	**100,693**	**100,693**
Disposals	**–**	**(154,259)**	**(154,259)**
Changes in fair value	**11,564**	**–**	**11,564**
Closing balance 31 December 2021	**117,902**	**1,371**	**119,273**

There is no unrealised gains or losses recognised in profit or loss attributable to balances held at the end of the reporting period.

3 Financial risk management (Continued)

3.3 Fair value estimation (Continued)

(c) Fair value measurements using significant unobservable inputs (level 3) (Continued)

The carrying amounts of the Group's financial assets and liabilities including cash and cash equivalents, pledged bank deposits, trade and other receivables, trade and other payables and current borrowings, approximate their fair values due to their short maturities. The face values less any estimated credit adjustments for financial assets and liabilities with a maturity of less than one year are assumed to approximate their fair values. The fair value of term deposit and non-current financial liabilities for disclosure purposes is estimated by discounting the future contractual cash flows at the current market interest rate available to the Group for similar financial instruments. The fair value of term deposit and the non-current borrowings is disclosed in Note 21 and Note 26 respectively.

(d) Valuation inputs and relationships to fair value

The following table summarises the quantitative information about the significant unobservable inputs used in level 3 fair value measurements. See (b) above for the valuation techniques adopted.

Description	Fair value at 31 December 2021 RMB'000	Fair value at 31 December 2020 RMB'000	Unobservable inputs	Range of unobservable inputs 2021	Range of unobservable inputs 2020	Relationship of unobservable inputs to fair value
Unlisted companies-current	**25,238**	17,134	Discount rate	**2.02%**	21%	negative
Unlisted companies -non-current	**92,664**	89,204	Discount rate	**42.06%**	33.18%	negative
Bank acceptance bill receivables	**1,371**	54,937	Discount rate	**1.72%**	2.42%-2.51%	negative

4 Critical accounting estimates and judgements

4.1 Critical accounting estimates and assumptions

Estimates and judgements are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances.

The Group makes estimates and assumptions concerning the future. The resulting accounting estimates will, by definition, seldom equal the related actual results. The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are addressed below.

(a) Measurement of expected credit loss

The Group calculates expected credit losses according to the default risk exposure and expected credit loss rate, and determines the expected credit loss rate based on default probability and default loss rate. In determining the expected credit loss rate, the Group uses data such as internal historical credit loss experience, etc., and adjusts historical data based on current conditions and forward-looking information. When considering forward-looking information, the indicators used by the Group include GDP of the countries in which it sells its goods and services and the International crude oil price index. The Group regularly monitors and reviews assumptions related to the calculation of expected credit losses. In 2021, there was no significant change in the above estimation techniques and key assumptions.

(b) Impairment of non-financial assets

If circumstances indicate that the carrying value of non-financial assets may not be recoverable, these assets may be considered impaired, and an impairment loss may be recognised in accordance with IAS 36, Impairment of assets. These assets are tested for impairment whenever events or changes in circumstances indicate that their recorded carrying amounts may not be recoverable. When such a decline has occurred, the carrying amount is reduced to recoverable amount. The recoverable amount is the greater of the fair value less costs to sell and the value in use. In determining that value in use, expected cash flows generated by the assets are discounted to their present value, which requires significant judgement relating to revenue, gross margin and pre-tax discount rate. The Group uses all readily available information in determining an amount that is a reasonable approximation of recoverable amount, including estimates based on reasonable and supportable assumptions and projections of revenue and amount of operating costs.

4 Critical accounting estimates and judgements (Continued)

(b) Impairment of non-financial assets (Continued)

(c) Write down of inventories

The Group estimates the write down for obsolescence of inventories with reference to aged inventories analyses, projections of expected future saleability of goods and management experience and judgement. Based on this review, write down of inventories will be made when the carrying amounts of inventories decline below their estimated net realisable value. Due to changes in market conditions, actual saleability of goods may be different from estimation and profit or loss could be affected by differences in this estimation.

(d) Income taxes

The Group is subject to various taxes in the places which the Group has operations. Significant judgement is required in determining the provision for income taxes. There are many transactions and calculations for which the ultimate tax determination is uncertain during the ordinary course of business. The Group recognises liabilities for anticipated tax audit issues based on estimates of whether additional taxes will be due. Where the final tax outcome of these matters is different from the amounts that were initially recorded, such differences will impact the income tax and deferred tax provisions in the period in which such determination is made.

Deferred income tax assets relating to certain temporary differences and tax losses are recognised as management considers it is probable that future taxable profit will be available against which the temporary differences or tax losses can be utilised. Where the expectation is different from the original estimate, such differences will impact the recognition of deferred income tax assets and income tax expense in the period in which such estimate is changed.

Deferred tax liabilities are generally recognised for all taxable temporary differences, except that the temporary differences arise from the initial recognition of goodwill, or arise from initial recognition of an asset or liability in a transaction other than a business combination that at the time of the transaction affects neither accounting nor taxable profit or loss.

5 Segment information

The senior executive management is the Group's chief operating decision-maker. Management has determined the operating segments based on the information reviewed by the senior executive management for the purposes of allocating resources and assessing performance.

The Group manages its businesses by divisions, which are organised by business lines (land drilling rigs, parts and components and others, drilling engineering services and fracturing) and geographically. In a manner consistent with the way in which information is reported internally to the Group's chief operating decision maker ("CODM") for the purposes of resource allocation and performance assessment, the Group has identified four reportable segments.

The senior executive management assesses the performance of the operating segments based on a measure of segment profit or loss. This measurement basis excludes the share of loss of joint ventures and associates, other (losses)/gains, net and other income. Finance income and expenses are not allocated to segments, as this type of activity is driven by the central treasury function, which manages the cash position of the Group. Other information provided, except as noted below, to the senior executive management is measured in a manner consistent with that in the consolidated financial statements.

Sales between segments are carried out in the ordinary course of business and in accordance with the terms of the underlying agreements. The revenue from external parties reported to the senior executive management is measured in a manner consistent with that in profit or loss.

5 Segment information (Continued)

The following table presents revenue and profit information regarding the Group's operating segments for the years ended 31 December 2021 and 2020 respectively. The Group derives revenue from the transfer of good and services over time and at a point in the following operating segments.

	Land drilling rigs Year ended 31 December		Parts and components and others Year ended 31 December		Drilling engineering services Year ended 31 December		Fracturing Year ended 31 December		Total Year ended 31 December	
	2021 RMB'000	2020 RMB'000	**2021 RMB'000**	2020 RMB'000	**2021 RMB'000**	2020 RMB'000	**2021 RMB'000**	2020 RMB'000	**2021 RMB'000**	2020 RMB'000
Segment revenue	**89,127**	621,523	**1,799,416**	1,788,594	**236,940**	247,919	**1,018,677**	1,339,871	**3,144,160**	3,997,907
Inter-segment revenue	**(101,074)**	–	**(106,482)**	(66,415)	**-**	–	**-**	–	**(207,556)**	(66,415)
Revenue from external customers	**(11,947)**	621,523	**1,692,934**	1,722,179	**236,940**	247,919	**1,018,677**	1,339,871	**2,936,604**	3,931,492
Timing of revenue recognition										
At a point in time	**89,127**	621,523	**1,799,416**	1,788,594	**-**	–	**378,118**	610,143	**2,266,661**	3,020,260
Over time	**-**	–	**-**	–	**236,940**	247,919	**640,559**	729,728	**877,499**	977,647
Reportable segment (loss)/profit	**(86,293)**	(42,330)	**(385,730)**	179,801	**(34,253)**	5,969	**(82,529)**	109,233	**(588,805)**	252,673
Depreciation and amortisation for the year (i)	**7,202**	30,805	**105,106**	63,113	**46,112**	38,204	**22,433**	63,890	**180,853**	196,012
Impairment on trade and other receivables and contract assets	**12,621**	104,411	**232,539**	106,955	**2,750**	11,060	**21,618**	18,480	**269,528**	240,906
Write-down of inventories	**5,510**	1,903	**33,137**	49,803	**14,184**	3,988	**-**	–	**52,831**	55,694
Impairment provision of property, plant and equipment	**-**	–	**-**	–	**14,196**	1,035	**-**	–	**14,196**	1,035

(i) The amount includes depreciation and amortisation of property, plant and equipment, intangible assets, right-of-use assets and other non-current assets.

Given the manufacturing processes of the Group's business are in a form of vertical integration, the Group's chief operating decision maker considered segment assets and liabilities information was not relevant in assessing performance of and allocating resources to the operations segments. During the year ended 31 December 2021, such information was not reviewed by the Group's chief operating decision maker. Accordingly, no segment assets and liabilities are presented.

5 Segment information (Continued)

A reconciliation of segment (loss)/profit to (loss)/profit before income tax is provided as follows:

	Year ended 31 December	
	2021	2020
	RMB'000	RMB'000
Segment (loss)/profit		
– for reportable segments	**(588,805)**	252,673
Elimination of inter-segment profit	**(17,409)**	(13,994)
Segment (loss)/profit derived from the Group's external customers	**(606,214)**	238,679
Share of loss of joint ventures	**(2,460)**	(14,967)
Other income and other losses, net	**32,479**	40,278
Finance income	**95,679**	96,154
Finance expenses	**(228,350)**	(222,513)
Unallocated head office and corporate expenses	**(36,478)**	(51,541)
(Loss)/profit before income tax	**(745,344)**	86,090

The following table sets out revenue from external customers by geographical location, based on the destination of the customer:

	Year ended 31 December	
	2021	2020
	RMB'000	RMB'000
PRC (country of domicile)	**2,176,955**	2,905,901
Americas	**43,612**	42,137
Middle East	**422,099**	417,736
Europe and Central Asia	**183,141**	305,887
South Asia and South East	**61,002**	118,790
Africa	**49,795**	141,041
	2,936,604	3,931,492

5 Segment information (Continued)

The following table sets out non-current assets, other than financial instruments and deferred income tax assets, by geographical location:

	As at 31 December	
	2021	2020
	RMB'000	RMB'000
PRC (country of domicile)	**3,117,061**	1,809,820
Americas	**280**	2,037
Middle East	**447,005**	351,146
Europe and Central Asia	**28,174**	43,140
Africa	**34,037**	28,785
	3,626,557	2,234,928

For the year ended 31 December 2021, revenue of approximately RMB326,011,000 was derived from one external customer. The revenue was attributed to the sales of fracturing in the PRC.

For the year ended 31 December 2020, there was no customer contributed over 10% of the total revenue of the Group.

Assets and liabilities related to contracts with customers

(a) The Group has recognised the following assets and liabilities related to contracts with customers:

	Year ended 31 December	
	2021	2020
	RMB'000	RMB'000
Contract assets	**460,090**	706,302
Less: loss allowance	**(11,265)**	(18,511)
Total contract assets	**448,825**	687,791
Current contract liabilities	**154,348**	139,608

(i) Contract assets and contract liabilities are recognised under fracturing, drilling engineering services and sales of parts and components and others segments.

(ii) Contract assets have decreased as the Group has fulfilled the wind power contracts. The Group also recognised a loss allowance for contract assets in accordance with IFRS 9, see Note 3.1(b) for further information.

Contract liabilities for sales of goods have increased by RMB14,740,000, which was due to the signing of new contracts with customers.

5 Segment information (Continued)

Assets and liabilities related to contracts with customers (Continued)

(b) Revenue recognised in relation to contract liabilities

The following table shows how much of the revenue recognised in current reporting period relates to carried-forward contract liabilities:

	Year ended 31 December	
	2021	2020
	RMB'000	RMB'000
Revenue recognised that was included in the contract liabilities balance at the beginning of the year		
Sales of goods	**67,569**	121,406
Services	**–**	1,976

(c) Unsatisfied performance

As at 31 December 2021, the aggregate amount of the transaction price allocated to contracts that are partially or fully unsatisfied is RMB2,931,877,000 (as at 31 December 2020: RMB1,718,720,000).

The management expects that 74% (as at 31 December 2020: 74%) of the transaction price allocated to unsatisfied performance obligations as at 31 December 2021 will be recognised as revenue during the next reporting period RMB2,169,071,000 (as at 31 December 2020: RMB1,268,400,000). The remaining will be recognised in the 2023 financial year and afterwards.

6 Other income

	Year ended 31 December	
	2021	2020
	RMB'000	RMB'000
Government grants	**56,828**	63,687
Sales of scrap materials	**25,391**	12,926
Others	**7,089**	10,999
	89,308	87,612

7 Other losses, net

	Year ended 31 December	
	2021	2020
	RMB'000	RMB'000
Insurance compensation	**2,698**	50,519
Net foreign exchange losses	**(59,545)**	(74,784)
Gains/(losses) on disposals of property, plant and equipment	**3,264**	(1,674)
Other penalty losses	**–**	(33,816)
Legal claims	**(13,256)**	(2,759)
Others	**10,010**	15,180
	(56,829)	(47,334)

8 Expenses by nature

	Year ended 31 December	
	2021	2020
	RMB'000	RMB'000
Raw materials and consumables used	**1,462,495**	1,508,618
Employee benefit expenses	**490,001**	530,591
Service fee	**320,760**	323,444
Amortisation and depreciation		
– Property, plant and equipment	**149,022**	171,274
– Intangible assets	**22,252**	15,908
– Right-of-use-assets	**9,579**	8,830
Transportation	**66,877**	43,124
Changes in inventories of finished goods and work in progress	**(266,196)**	(81,464)
Provision for inventory write-down	**52,831**	55,694
Research and development costs (i)	**57,527**	177,329
Less: amount capitalised into intangible assets	**(20,438)**	(56,007)
Utilities	**82,656**	25,999
Operating lease charges	**568,791**	522,764
Travelling expenses	**59,498**	39,155
Provision of prepayments	**88**	(796)
Repairs and maintenance expenditure on property, plant and equipment	**14,505**	16,985
Other taxes	**20,502**	24,362
Provision for warranty	**3,074**	4,302
Commission	**11,385**	42,990
Auditors' remuneration		
– Audit services	**4,979**	4,707
– Other services	**–**	150
Impairment provision of property, plant and equipment	**14,196**	1,035
Other expenses	**91,812**	97,608
Total cost of sales, distribution costs and administrative expenses	**3,216,196**	3,476,602

(i) The amount does not include staff costs of the research and development department of approximately RMB93,377,000 (2020: RMB84,292,000) and relevant amortisation and depreciation of approximately RMB28,837,000 (2020: RMB22,689,000), which are included in the total staff costs as disclosed in Note 9 and total amortisation and depreciation in Note 15 and Note 17 respectively.

9 Employee benefit expenses

	Year ended 31 December	
	2021	2020
	RMB'000	RMB'000
Contributions to defined contribution retirement schemes	**36,491**	37,284
Equity-settled share-based payment expenses (Note 23)	**–**	–
Salaries, wages and other benefits	**453,510**	493,307
	490,001	530,591

(a) Five highest paid individuals

The five individuals whose emoluments were highest in the Group for the year ended 31 December 2021 did not include any director (2020: nil). The emoluments of the directors are reflected in the analysis disclosed as Note 36. The emoluments payable to the five (2020: five) individuals for the years ended 31 December 2021 and 2020 are as follows:

	Year ended 31 December	
	2021	2020
	RMB'000	RMB'000
Basic salaries, allowances and other benefits in kind	**4,144**	3,273
Discretionary bonuses	**4,899**	5,162
Contributions to defined contribution retirement schemes	**356**	237
	9,399	8,672

The emoluments of the above individual fell within the following bands:

	Number of individuals Year ended 31 December	
	2021	2020
HKD1,000,001 to HKD2,000,000	**5**	4
HKD2,000,001 to HKD3,000,000	**–**	1
HKD3,000,001 to HKD4,000,000	**–**	–
HKD4,000,001 to HKD5,000,000	**–**	–
	5	5

10 Finance expenses – net

	Year ended 31 December	
	2021	2020
	RMB'000	RMB'000
Finance expenses		
Interest on borrowings wholly repayable within five years	**224,038**	217,019
Interest expense from lease liabilities	**4,715**	6,100
Other	**3**	–
Less: interest expense capitalised into assets under construction (Note 15)	**(406)**	(606)
	228,350	222,513
Finance income		
Interest income on bank deposits	**(27,208)**	(13,767)
Interest income from non-current receivables	**(14,723)**	(21,692)
Net foreign exchange gains	**(53,748)**	(60,695)
	(95,679)	(96,154)
	132,671	126,359

11 Subsidiaries

The following is a list of the principal subsidiaries as at 31 December 2021:

Name of company	Place of incorporation	Place of operation	Particulars of issued and paid-up capital	Attributable equity interest Direct	Indirect	Principal activities
Honghua Holdings Limited ("Honghua Holdings")	Hong Kong	Hong Kong	1 ordinary share	100%	–	Investment holding
Sichuan Honghua Petroleum Equipment Co., Ltd. ("Honghua Company") ((a) and (c))	The PRC	The PRC	Registered capital RMB2,200,000,000	–	100%	Manufacturing of petroleum equipment
Sichuan Honghua Electric Co., Ltd. ("Honghua Electric") ((a) and (c))	The PRC	The PRC	Registered capital RMB100,000,000	–	84%	Manufacturing of panel of drilling rigs
Honghua International Co., Ltd. ("Honghua International") ((a) and (c))	The PRC	The PRC	Registered capital RMB51,200,000	–	91%	Trading of drilling rigs and related parts
Honghua (China) Investment Co., Ltd. ("Honghua China") ((a), (b) and (c))	The PRC	The PRC	Registered capital USD320,000,000	–	100%	Investment holding
Honghua Oil & Gas Engineering Technology Services Limited ("Sichuan Oil & Gas Services") ((a) and (c))	The PRC	The PRC	Registered capital RMB732,600,000	–	100%	Drilling engineering service and fracturing engineering service
Gansu Hongteng Oil & Gas Equipment Co., Ltd. ("Gansu ongteng") ((a) and (c))	The PRC	The PRC	Registered capital RMB120,000,000	–	70%	Manufacturing of related parts of drilling rigs
Honghua Oil & Gas Engineering Services Limited ("Hongkong Oil & Gas Services")	Hong Kong	Iraq	Registered capital USD41,080,000	–	100%	Drilling engineering service and fracturing engineering service

11 Subsidiaries (Continued)

Name of company	Place of incorporation	Place of operation	Particulars of issued and paid-up capital	Attributable equity interest Direct	Attributable equity interest Indirect	Principal activities
Newco (H.K.) Limited	Hong Kong	Hong Kong	1,000 ordinary shares	–	100%	Trading of drilling rigs and related parts
Honghua America, LLC	United States of America	United States of America	Registered capital USD3,414,000	–	100%	Trading of drilling rigs and related parts
Russia Touhey Motor Drilling Service Limited ("TNG")	Russia Federation	Russia Federation	Registered capital RUB489,297,000	–	51%	Drilling engineering service
Han Zheng Testing Technology Co., Ltd. ("Han Zheng Testing")	The PRC	The PRC	Registered capital RMB11,103,000		100%	Testing service
Honghua Energy Equipment Limited	Russia Federation	Russia Federation	Registered capital RUB13,340,000	–	100%	Trading of drilling rigs and related parts
Honghua Offshore Oil and Gas Equipment (Jiangsu) Co., Ltd. ("Honghua (Jiangsu)")	The PRC	The PRC	Registered capital RMB874,993,000	–	100% (Note 34)	Manufacturing of wind power equipment

(a) These entities are domestic limited liability companies established in the PRC.

(b) The entity is a wholly-owned foreign invested enterprise established in the PRC.

(c) The official names of these companies are in Chinese. The English translation of the company name is for reference only.

11 Subsidiaries (Continued)

Material non-controlling interests

The total non-controlling interests as at 31 December 2021 was approximately RMB208,760,000 (2020: RMB225,261,000), of which approximately RMB198,731,000 (2020: RMB197,293,000) is attributed to Honghua Electric, approximately RMB16,887,000 (2020: RMB24,071,000) is attributed to Honghua International, approximately RMB5,276,000 (2020: RMB10,620,000) is attributed to Gansu Hongteng, and approximately RMB(12,134,000) (2020: RMB(6,723,000)) is attributed to TNG. The amounts disclosed for each subsidiary are before inter-company eliminations.

Summarised financial information on subsidiaries with material non-controlling interests

Set out below are the summarised financial information for each subsidiary that has non-controlling interests that are material to the Group. The amounts disclosed for each subsidiary are before inter-company eliminations.

Summarised balance sheet

	Honghua Electric As at 31 December		Honghua International As at 31 December		Gansu Hongteng As at 31 December		TNG As at 31 December	
	2021 RMB'000	2020 RMB'000	**2021 RMB'000**	2020 RMB'000	**2021 RMB'000**	2020 RMB'000	**2021 RMB'000**	2020 RMB'000
Current								
Assets	**2,508,182**	2,661,176	**913,189**	839,889	**58,543**	56,774	**56,139**	57,648
Liabilities	**(1,563,972)**	(1,581,336)	**(821,337)**	(671,329)	**(90,707)**	(77,656)	**(108,236)**	(113,230)
Total current net assets/ (liabilities)	**944,210**	1,079,840	**91,852**	168,560	**(32,164)**	(20,882)	**(52,097)**	(55,582)
Non-current								
Assets	**343,930**	301,279	**80,411**	84,893	**57,487**	58,766	**27,536**	42,067
Liabilities	**(11,049)**	(112,732)	**–**	–	**(6,146)**	–	**(201)**	(206)
Total non-current net assets	**332,881**	188,547	**80,411**	84,893	**51,341**	58,766	**27,335**	41,861
Net assets/(liabilities)	**1,277,091**	1,268,387	**172,263**	253,453	**19,177**	37,884	**(24,762)**	(13,721)

11 Subsidiaries (Continued)

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

Summarised statement of profit or loss and other comprehensive income

	Honghua Electric Year ended 31 December		Honghua International Year ended 31 December		Gansu Hongteng Year ended 31 December		TNG Year ended 31 December	
	2021 RMB'000	2020 RMB'000	**2021 RMB'000**	2020 RMB'000	**2021 RMB'000**	2020 RMB'000	**2021 RMB'000**	2020 RMB'000
Revenue	**1,204,755**	1,407,388	**504,477**	432,163	**41,465**	56,870	**–**	–
Profit/(loss) before income tax	**4,681**	165,301	**(78,097)**	(155,505)	**(8,961)**	159	**(14,154)**	(7,970)
Income tax credit/(expense)	**4,023**	(18,199)	**(3,093)**	38,806	**(9,746)**	(42)	**2,481**	–
Profit/(loss) for the year	**8,704**	147,102	**(81,190)**	(116,699)	**(18,707)**	117	**(11,673)**	(7,970)
Other comprehensive income for the year	**–**	–	**–**	–	**–**	–	**632**	2,501
Total comprehensive income	**8,704**	147,102	**(81,190)**	(116,699)	**(18,707)**	117	**(11,041)**	(5,469)
Total comprehensive income allocated to non-controlling interests	**1,415**	23,919	**(7,453)**	(10,713)	**(5,612)**	35	**(5,410)**	(2,680)

11 Subsidiaries (Continued)

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

Summarised cash flows

	Honghua Electric Year ended 31 December		Honghua International Year ended 31 December		Gansu Hongteng Year ended 31 December		TNG Year ended 31 December	
	2021 RMB'000	2020 RMB'000	**2021 RMB'000**	2020 RMB'000	**2021 RMB'000**	2020 RMB'000	**2021 RMB'000**	2020 RMB'000
Cash flows from operating activities								
Cash (used in)/generated from operations	**(124,630)**	(533,514)	**43,036**	(236,844)	**(3,161)**	12	**(329)**	(2,187)
Income tax paid	**(20,483)**	(17,009)	**–**	(2,303)	**(9)**	–	**(1)**	(178)
Net cash (used in)/generated from operating activities	**(145,113)**	(550,523)	**43,036**	(239,147)	**(3,170)**	12	**(330)**	(2,365)
Net cash (used in)/generated from investing activities	**(3,266)**	181,290	**(56,760)**	197,015	**1,685**	(134)	**306**	128
Net cash generated from/(used in) financing activities	**261,173**	414,373	**(78,111)**	98,051	**1,110**	–	**16**	–
Net increase/(decrease) in cash and cash equivalents	**112,794**	45,140	**(91,835)**	55,919	**(375)**	(122)	**(8)**	(2,237)
Cash and cash equivalents at beginning of year	**128,141**	83,001	**127,823**	71,904	**897**	1,019	**15**	2,252
Exchange losses on cash and cash equivalents	**(32)**	–	**(2,015)**	–	**–**	–	**–**	–
Cash and cash equivalents at end of year	**240,903**	128,141	**33,973**	127,823	**522**	897	**7**	15

12 Investments accounted for using the equity method

The amounts recognised in the consolidated balance sheet are as follows:

	As at 31 December	
	2021	2020
	RMB'000	RMB'000
Investment in associates and joint ventures	**34,037**	28,785

The amounts recognised in profit or loss are as follows:

	Year ended 31 December	
	2021	2020
	RMB'000	RMB'000
Investment in associates and joint ventures	**(2,460)**	(14,967)

	Year ended 31 December	
	2021	2020
	RMB'000	RMB'000
At 1 January	**28,785**	31,259
Share of loss	**(2,460)**	(14,967)
Increase in ownership interest	**–**	9,350
Currency translation differences	**7,712**	3,143
At 31 December	**34,037**	28,785

Investment in associates

Set out below are the associates of the Group as at 31 December 2021, which are held directly by the Group.

Nature of investment in associates as at 31 December 2021 and 2020

Name of company	**Place of establishment**	**% of ownership interest**	**Nature of the relationship**	**Measurement method**
Shanghai Honghua Offshore Oil & Gas Equipment Co., Ltd. ("Honghua (Shanghai)")	The PRC	49%	(i)	Equity

12 Investments accounted for using the equity method (Continued)

Investment in associates (Continued)

The associate is unlisted company and there is no quoted market price available for its equity. There are no contingent liabilities relating to the Group's interest in the associate. Honghua (Shanghai) is associate of the Group as at 31 December 2021 and 2020, which, in the opinion of the directors, are material to the Group.

Set out below are the summarised financial information for Honghua (Shanghai) Company which are accounted for using the equity method. The information disclosed reflects the amounts presented in the financial statements of the associate and not the Group's share of those amounts. They have been amended to reflect adjustments made by the Group when using the equity method, including fair value adjustments and modifications for differences in accounting policy.

Honghua (Shanghai)

Summarised balance sheet

	As at 31 December	
	2021	2020
	RMB'000	RMB'000
Current assets		
Cash and cash equivalents	**14,093**	6,520
Other current assets	**2,922**	17,621
Total current assets	**17,015**	24,141
Non-current assets	**333**	41,040
Current liabilities		
Other current liabilities	**(160,008)**	(214,587)
Total current liabilities	**(160,008)**	(214,587)
Net liabilities	**(142,660)**	(149,406)

12 Investments accounted for using the equity method (Continued)

Investment in associates (Continued)

Honghua (Shanghai) (Continued)

Summarised statement of comprehensive income

	Year ended 31 December	
	2021	2020
	RMB'000	RMB'000
Revenue	**249**	6,591
Interest income	**30**	13
Depreciation and amortisation	**(129)**	(88)
Interest expense	**(3,977)**	(5,035)
Income tax expense	**–**	–
Loss from continuing operations	**(63,254)**	(12,114)
Loss for the period	**(63,254)**	(12,114)
Other comprehensive income	**–**	–
Total comprehensive loss	**(63,254)**	(12,114)

Reconciliation of summarised financial information

Reconciliation of the summarised financial information presented to the carrying amount of its interest in the associate.

	Year ended 31 December	
	2021	2020
	RMB'000	RMB'000
Opening net liabilities 1 January	**(149,406)**	(137,292)
Debt exemption from shareholder (ii)	**70,000**	–
Loss for the year	**(63,254)**	(12,114)
Closing net liabilities	**(142,660)**	(149,406)
Interest in joint associate	**(69,903)**	(73,209)
Adjustment	**69,903**	73,209
Carrying value (i)	**–**	–

(i) For the year ended 31 December 2021, Honghua (Shanghai) was still suffered from losses and the net assets as at 31 December 2021 were negative, thus the carrying amount of investments in Honghua (Shanghai) was zero as at 31 December 2021.

(ii) As at 31 December 2021, Jiangsu Hongjieding Energy Technology Co., Ltd. ("Jiangsu Hongjieding"), another shareholder of Honghua (Shanghai) exempted the shareholder loan to Honghua (Shanghai) of RMB70,000,000.

12 Investments accounted for using the equity method (Continued)

Investment in joint ventures

Set out below are the joint ventures of the Group as at 31 December 2021, which are held directly by the Group.

Nature of investment in joint ventures as at 31 December 2021 and 2020

Name of company	Place of establishment	% of ownership interest	Nature of the relationship	Measurement method
Egyptian Petroleum HH Rigs Manufacturing Co. S.A.E. ("HH Egyptian Company")	Egypt	50%	(i)	Equity
Honghua Financial Leasing (Shenzhen) Co., Ltd. ("Honghua (Shenzhen)")	The PRC	41%	(ii)	Equity

(i) HH Egyptian Company mainly engages in the manufacturing and sale of drilling rigs, parts and components.

(ii) Honghua (Shenzhen) was incorporated in 2014 and mainly engages in providing leasing services. On 29 June 2020, the Group increased the investment in Honghua (Shenzhen) by RMB9,350,000. As a result, the equity interests in Honghua (Shenzhen) increased to 41%. The Group's voting rights in the board of directors of Honghua (Shenzhen) is 50%, and Honghua (Shenzhen) is accounted as a joint venture.

The joint ventures are unlisted companies and there is no quoted market price available for its equity.

There are no contingent liabilities relating to the Group's interest in the joint ventures.

Honghua (Shenzhen) and HH Egyptian Company are joint ventures of the Group as at 31 December 2021, which, in the opinion of the directors, is material to the Group.

Set out below are the summarised financial information for Honghua (Shenzhen) and HH Egyptian Company which are accounted for using the equity method. The information disclosed reflects the amounts presented in the financial statements of the joint ventures and not the Group's share of those amounts. They have been amended to reflect adjustments made by the Group when using the equity method, including fair value adjustments and modifications for differences in accounting policy.

12 Investments accounted for using the equity method (Continued)

Investment in joint ventures (Continued)

Honghua (Shenzhen)

Summarised balance sheet

	As at 31 December	
	2021	2020
	RMB'000	RMB'000
Current assets		
Cash and cash equivalents	**136,402**	23,163
Other current assets	**131,021**	129,810
Total current assets	**267,423**	152,973
Non-current assets	**753,230**	1,375,958
Current liabilities		
Other current liabilities	**(531,593)**	(486,164)
Total current liabilities	**(531,593)**	(486,164)
Non-current liabilities		
Other non-current liabilities	**(590,716)**	(1,021,503)
Total non-current liabilities	**(590,716)**	(1,021,503)
Net assets	**(101,656)**	21,264

12 Investments accounted for using the equity method (Continued)

Investment in joint ventures (Continued)

Honghua (Shenzhen) (Continued)

Summarised statement of comprehensive income

	Year ended 31 December	
	2021	2020
	RMB'000	RMB'000
Revenue	**970,787**	491,949
Interest income	**823**	804
Depreciation and amortisation	**(454,341)**	(371,163)
Interest expense	**(5,457)**	(6,788)
Income tax expense	**(841)**	10,542
Loss from continuing operations	**(122,920)**	(31,678)
Loss for the period	**(122,920)**	(31,678)
Other comprehensive income	**–**	–
Total comprehensive loss	**(122,920)**	(31,678)

12 Investments accounted for using the equity method (Continued)

Investment in joint ventures (Continued)

Honghua (Shenzhen) (Continued)

Reconciliation of summarised financial information

Reconciliation of the summarised financial information presented to the carrying amount of its interest in the joint venture.

	Year ended 31 December	
	2021	2020
	RMB'000	RMB'000
Opening net assets 1 January	**21,264**	44,599
Loss for the year	**(122,920)**	(31,678)
Increase of capital	**–**	16,840
Dividend distribution	**–**	(8,547)
Others	**–**	50
Closing net assets	**(101,656)**	21,264
Interest in joint venture	**(41,740)**	8,731
Adjustment (i)	**41,740**	(8,731)
Carrying value	**–**	–

(i) Due to the accumulated unrealised gains between the Group and Honghua (Shenzhen) exceeded the carring amount of investment in Honghua (Shenzhen), thus the carrying value of the investment is zero as at 31 December 2021 and 2020.

12 Investments accounted for using the equity method (Continued)

Investment in joint ventures (Continued)

HH Egyptian Company

Summarised balance sheet

	As at 31 December	
	2021	2020
	RMB'000	RMB'000
Current assets		
Cash and cash equivalent	**106**	1,233
Other current assets	**14,986**	12,797
Total current assets	**15,092**	14,030
Non-current assets	**102,610**	91,056
Current liabilities		
Other current liabilities	**(49,628)**	(47,516)
Total current liabilities	**(49,628)**	(47,516)
Net assets	**68,074**	57,570

12 Investments accounted for using the equity method (Continued)

Investment in joint ventures (Continued)

HH Egyptian Company (Continued)

Summarised statement of comprehensive income

	Year ended 31 December	
	2021	2020
	RMB'000	RMB'000
Revenue	**15,037**	14,747
Interest income	**–**	–
Depreciation and amortisation	**–**	–
Interest expense	**(2)**	(86)
Income tax expense	**–**	–
Loss from continuing operations	**(4,921)**	(11,234)
Loss for the period	**(4,921)**	(11,234)
Other comprehensive income	**15,425**	6,286
Total comprehensive loss	**10,504**	(4,948)

Reconciliation of summarised financial information

Reconciliation of the summarised financial information presented to the carrying amount of its interest in the joint venture.

	Year ended 31 December	
	2021	2020
	RMB'000	RMB'000
Opening net assets 1 January	**57,570**	62,518
Post-tax loss for the year	**(4,921)**	(11,234)
Currency translation differences	**15,425**	6,286
Closing net assets	**68,074**	57,570
Interest in joint venture	**34,037**	28,785
Carrying value	**34,037**	28,785

13 Income tax (credit)/expense

Taxation in the consolidated statement of profit or loss represents:

	Year ended 31 December	
	2021	2020
	RMB'000	RMB'000
Current income tax – Hong Kong Profits Tax *(a)*		
Provision for the year	**2,736**	495
Over provision in respect of prior years	**(895)**	(241)
	1,841	254
Current income tax – PRC *(b)*		
Provision for the year	**6,808**	23,931
Over/under provision in respect of prior years	**(2,962)**	6,086
	3,846	30,017
Current income tax – Other jurisdictions *(c)*		
Provision for the year	**12,528**	10,161
Over provision in respect of prior years	**–**	–
	12,528	10,161
Total current income tax	**18,215**	40,432
Deferred income tax (Note 27)	**(29,558)**	(14,482)
Income tax (credit)/expense	**(11,343)**	25,950

13 Income tax (credit)/expense (Continued)

(a) Hong Kong

The provision for Hong Kong Profits Tax is calculated at 16.5% of the estimated assessable profits of the subsidiaries of the Group incorporated in Hong Kong for the years ended 31 December 2021 and 2020.

(b) PRC

Pursuant to the income tax rules and regulations of the PRC, the subsidiaries of the Group in the PRC are subject to PRC enterprise income tax at a rate of 25% for the years ended 31 December 2021 and 2020, except for the following companies:

(i) Honghua Company, Han Zheng Testing, Gansu Hongteng, Honghua (Jiangsu) and Sichuan Oil & Gas Services

Corporate income tax ("CIT") of Honghua Company, Han Zheng Testing, Honghua (Jiangsu)and Sichuan Oil & Gas Services is accrued at a tax rate of 15% applicable for Hi-tech enterprises pursuant to the relevant PRC tax rules and regulations for the years ended 31 December 2021 and 2020. Gansu Hongteng is accrued at a tax rate of 15% applicable for Hi-tech enterprises pursuant to the relevant PRC tax rules and regulations for the years ended 31 December 2021.

(ii) Honghua Electric

On 23 April 2020, State Taxation Administration issued Notice 23(2020) ("the Notice") in respect of favourable CIT policy applicable to qualified enterprises located in western China.Honghua Electric applied and obtained an approval from in-charge tax authority under the policy for the 15% preferential CIT rate and is qualified for the 15% preferential CIT rate from 2021 to 2030.

(c) Others

Taxation for other entities is charged at their respective applicable tax rates ruling in the relevant jurisdictions.

(d) Withholding tax

Under the PRC tax law and its implementation rules, dividends receivable by non-PRC resident enterprises from PRC enterprises are subject to withholding tax at a rate of 10%, unless reduced by tax treaties or arrangements, for profits earned since 1 January 2008. Pursuant to a tax arrangement between the PRC and Hong Kong, a qualified Hong Kong tax resident will be liable for withholding tax at a reduced rate of 5% for dividend income derived from the PRC.

The Company's directors revisited the dividend policy of the Group in 2021 and 2020. In order to retain the fundings for operations and future development, it was resolved that the Group's PRC subsidiaries will not distribute dividend to the offshore holding companies in the foreseeable future. Any dividends to be declared by the Company will be distributed from the share premium account.

13 Income tax (credit)/expense (Continued)

(e) The tax on the Group's (loss)/profit before tax differs from the theoretical amount that would arise using the tax rate applicable to the group entities as follows:

	Year ended 31 December	
	2021	2020
	RMB'000	RMB'000
(Loss)/profit before income tax	**(745,344)**	86,090
Tax calculated at statutory tax rates applicable to each group entities	**(104,393)**	39,304
Tax effect of non-deductible expenses	**1,268**	379
Tax effect of non-taxable income	**–**	(230)
Tax effect of changing tax rate	**532**	–
Tax losses for which no deferred income tax asset was recognised	**4,326**	10,179
Deductible temporary differences for which no deferred income tax asset was recognised	**46,120**	2,890
Additional deduction of research and development expense	**(4,599)**	(11,757)
Recognise tax losses for which no deferred income tax asset was recognised in prior years	**(6,880)**	–
Reversal of previously recognised deferred income tax assets of deductible temporary differences	**45,214**	6,702
Write off of previously recognised deferred income tax assets of tax losses	**10,926**	1,548
(Over)/under provision in respect of prior years	**(3,857)**	5,845
Use of tax losses which unrecognised in prior years	**–**	(28,910)
Income tax (credit)/expense	**(11,343)**	25,950

(f) Amounts recognised directly in other comprehensive income

Aggregate deferred tax arising in the reporting period and not recognised in net profit or loss but charged to other comprehensive income:

	Year ended 31 December	
	2021	2020
	RMB'000	RMB'000
Deferred tax: Changes in the fair value of equity investments at fair value other comprehensive income	**(2,549)**	(151)

14 (Loss)/earnings per share

(a) Basic (loss)/earnings per share

The calculation of basic (loss)/earnings per share is based on the (loss)/profit attributable to owners of the Company by the weighted average number of ordinary shares in issue during the year.

	Year ended 31 December	
	2021	2020
(Loss)/profit attributable to owners of the Company (RMB'000)	**(717,191)**	49,660
Weighted average number of ordinary shares in issue (thousands)	**5,355,995**	5,355,995
Effect of the share award scheme (thousands)	**(61,089)**	(61,089)
Adjusted weighted average number of ordinary shares in issue (thousands)	**5,294,906**	5,294,906
Basic (loss)/earnings per share (RMB cents per share)	**(13.54)**	0.94

(b) Diluted (loss)/earnings per share

The calculation of diluted (loss)/earnings per share is based on adjusting the weighted average number of ordinary shares outstanding to assume conversion of all dilutive potential ordinary shares. The Company has one category of dilutive potential ordinary shares: share options. For the share options, a calculation is done to determine the number of shares that could have been acquired at fair value (determined as the average annual market share price of the Company's shares) based on the monetary value of the subscription rights attached to outstanding share options. The number of shares calculated as above is compared with the number of shares that would have been issued assuming the exercise of the share options.

	Year ended 31 December	
	2021	2020
(Loss)/profit attributable to owners of the Company (RMB'000)	**(717,191)**	49,660
Weighted average number of ordinary shares in issue (thousands)	**5,294,906**	5,294,906
Effect of deemed issue of shares under the share option scheme (thousands)	**–**	–
Adjusted weighted average number of ordinary shares (diluted) in issue (thousands)	**5,294,906**	5,294,906
Diluted (loss)/earnings per share (RMB cents per share)	**(13.54)**	0.94

15 Property, plant and equipment

	Freehold land RMB'000	Buildings held for own use RMB'000	Plant and machinery RMB'000	Furniture, fittings and equipment RMB'000	Motor vehicles RMB'000	Construction in progress RMB'000	Total RMB'000
At 1 January 2020							
Cost	512	689,954	1,598,197	490,708	113,077	147,935	3,040,383
Accumulated depreciation and impairment	–	(235,458)	(759,190)	(341,135)	(62,031)	(891)	(1,398,705)
Net book amount	512	454,496	839,007	149,573	51,046	147,044	1,641,678
Year ended 31 December 2020							
Opening net book amount	512	454,496	839,007	149,573	51,046	147,044	1,641,678
Additions	–	822	43,892	114,951	1,041	196,601	357,307
Transfer from construction in progress	–	13,658	224,364	5,896	–	(243,918)	–
Disposals	–	(9,323)	(28,126)	(52)	(8,062)	–	(45,563)
Transfer to inventories	–	–	(25,876)	–	(151)	–	(26,027)
Transfer from investment properties	–	5,476	–	–	–	–	5,476
Depreciation charge	–	(32,897)	(76,180)	(59,466)	(4,898)	–	(173,441)
Currency translation difference	(33)	(817)	(15,375)	–	(407)	(5,158)	(21,790)
Impairment provision	–	–	(1,035)	–	–	–	(1,035)
Closing net amount	479	431,415	960,671	210,902	38,569	94,569	1,736,605
At 31 December 2020							
Cost	479	703,616	1,478,349	611,319	94,072	95,460	2,983,295
Accumulated depreciation and impairment	–	(272,201)	(517,678)	(400,417)	(55,503)	(891)	(1,246,690)
Net book amount	479	431,415	960,671	210,902	38,569	94,569	1,736,605
Year ended 31 December 2021							
Opening net book amount	**479**	**431,415**	**960,671**	**210,902**	**38,569**	**94,569**	**1,736,605**
Additions	**–**	**3,310**	**50,474**	**17,082**	**481**	**12,700**	**84,047**
Transfer from construction in progress	**–**	**2,060**	**71,656**	**8,951**	**–**	**(82,667)**	**–**
Transfer from inventories	**–**	**–**	**191,488**	**27,530**	**–**	**–**	**219,018**
Acquisition of a subsidiary (Note 34)	**–**	**1,029,376**	**384**	**2,598**	**1,583**	**103,062**	**1,137,003**
Disposals	**(471)**	**(962)**	**(10,100)**	**(723)**	**(446)**	**–**	**(12,702)**
Transfer to inventories	**–**	**–**	**(9,850)**	**–**	**–**	**–**	**(9,850)**
Transfer to investment properties	**–**	**(59,092)**	**–**	**–**	**–**	**–**	**(59,092)**
Depreciation charge	**–**	**(32,702)**	**(55,502)**	**(60,743)**	**(1,837)**	**–**	**(150,784)**
Currency translation difference	**(8)**	**(312)**	**(5,025)**	**(2,156)**	**(27)**	**(657)**	**(8,185)**
Impairment provision	**–**	**–**	**(14,196)**	**–**	**–**	**–**	**(14,196)**
Closing net amount	**–**	**1,373,093**	**1,180,000**	**203,441**	**38,323**	**127,007**	**2,921,864**
At 31 December 2021							
Cost	**–**	**1,667,865**	**1,750,982**	**659,191**	**93,956**	**127,898**	**4,299,892**
Accumulated depreciation and impairment	**–**	**(294,772)**	**(570,982)**	**(455,750)**	**(55,633)**	**(891)**	**(1,378,028)**
Net book amount	**–**	**1,373,093**	**1,180,000**	**203,441**	**38,323**	**127,007**	**2,921,864**

15 Property, plant and equipment (Continued)

(a) Depreciation expense of approximately RMB108,995,000 (2020: RMB132,719,000) has been charged in cost of sales, RMB7,573,000 (2020: RMB5,575,000) in distribution expenses, RMB32,454,000 (2020:RMB32,980,000) in administrative expenses and RMB1,762,000 (2020: RMB2,167,000) in development cost.

(b) As at 31 December 2021, the Group was in the process of obtaining the legal title of buildings with carrying amount of approximately RMB157,316,000 (2020: RMB142,795,000).

(c) The Group has capitalised borrowing costs amounting to approximately RMB406,000 (2020: RMB606,000) on qualifying assets. Borrowing costs were capitalised at the weighted average rate of its general borrowings at 2.76% (2020: 3.95%).

(d) For the years ended 31 December 2021 and 2020, inventories were transferred to property, plant and equipment for researching of new products, and property, plant and equipment was transferred out to inventories for rebuild and future sale.

(e) Net rental income amounting to approximately RMB31,140,000 (2020:RMB20,793,000)relating to the lease of plant and machinery is included in profit or loss.

The category of plant and machinery leased by the Group to third parties under operating leases with the following carrying amount:

	Year ended 31 December	
	2021	2020
	RMB'000	RMB'000
Cost	**468,023**	360,816
Accumulated depreciation at 1 January	**(103,674)**	(83,192)
Additions	**144,862**	149,209
Deduction	**(18,731)**	(42,002)
Depreciation charge for the year	**(21,574)**	(20,482)
Net book amount	**468,906**	364,349

16 Leases

This note provides information for leases where the Group is a lessee.

(a) Amounts recognised in the balance sheet

The balance sheet shows the following amounts relating to leases:

	31 December 2021 RMB'000	31 December 2020 RMB'000
Right-of-use assets		
Lease prepayments for land use rights	**321,775**	181,447
Buildings and equipment	**1,786**	3,561
	323,561	185,008
Lease liabilities		
Current	**18,783**	18,199
Non-current	**49,697**	70,118
	68,480	88,317

Additions to the right-of-use assets during the 2021 financial year were RMB150,889,000 (2020: RMB3,335,000) and the additions to the lease prepayments for land use rights of RMB150,235,000 was due to the acquisition of a subsidiary (Note 34).

(b) Amounts recognised in the statement of profit or loss

The statement of profit or loss shows the following amounts relating to leases:

	Note	**2021 RMB'000**	2020 RMB'000
Depreciation charge of right-of-use assets			
Lease prepayments for land use rights		**7,502**	6,158
Buildings and equipment		**2,077**	2,672
Interest expense (included in finance cost)	10	**4,715**	6,100
Expense relating to short-term and low-value assets leases (included in cost of goods sold and distribution expenses)		**227,758**	42,157

The total cash outflow for leases in 2021 was RMB250,838,000 (2020: RMB51,236,000) and it excluded the payments for variable leasing expenses to Honghua (Shenzhen) (Note 33).

(c) The Group's leasing activities and how these are accounted for

The Group leases various offices, warehouses and equipment. Rental contracts are typically made for fixed periods fixed period without extension or termination options. Lease terms are negotiated on an individual basis. The lease agreements do not impose any covenants in relation to security interests in the leased assets that are held by the lessor. Leased assets are not used as security for borrowing purposes.

17 Intangible assets

	Technical know-how RMB'000	Development Cost and others RMB'000	Total RMB'000
At 1 January 2020			
Cost	348,839	228,654	577,493
Accumulated amortisation and impairment	(348,839)	(48,312)	(397,151)
Net book amount	–	180,342	180,342
Year ended 31 December 2020			
Opening net book amount	–	180,342	180,342
Additions	–	69,988	69,988
Amortisation charge	–	(16,019)	(16,019)
Disposals	–	(3,604)	(3,604)
Others	–	116	116
Closing net amount	–	230,823	230,823
At 31 December 2020			
Cost	348,839	295,154	643,993
Accumulated amortisation and impairment	(348,839)	(64,331)	(413,170)
Net book amount	–	230,823	230,823
Year ended 31 December 2021			
Opening net book amount	**–**	**230,823**	**230,823**
Additions	**–**	**40,136**	**40,136**
Amortisation charge	**–**	**(22,475)**	**(22,475)**
Disposals	**–**	**(1,954)**	**(1,954)**
Closing net amount	**–**	**246,530**	**246,530**
At 31 December 2021			
Cost	**348,839**	**333,336**	**682,175**
Accumulated amortisation and impairment	**(348,839)**	**(86,806)**	**(435,645)**
Net book amount	**–**	**246,530**	**246,530**

Most of the amortisation of the Group's intangible assets was charged to administrative expenses.

18 Trade and other receivables

	As at 31 December	
	2021	2020
	RMB'000	RMB'000
Trade receivables *(a)*	**3,008,452**	2,981,797
Bills receivables	**574,413**	549,190
Less: provision for impairment of trade receivables and bills receivables	**(466,121)**	(435,724)
	3,116,744	3,095,263
Amount due from related parties (Note 33(b))		
– Trade	**319,116**	400,473
– Non-trade	**222,457**	359,785
– Less: provision for impairment of trade receivables for amount due from related parties	**(17,947)**	(68,474)
	523,626	691,784
Finance lease receivables	**160,763**	254,830
Less: provision for impairment of finance lease receivable	**(78,123)**	(75,279)
Value-added tax recoverable	**140,689**	64,517
Prepayments	**399,466**	311,285
Less: provision for prepayments	**(32,679)**	(32,662)
Other receivables	**316,673**	319,198
Less: provision for impairment of other receivables	**(136,740)**	(126,101)
	4,410,419	4,502,835
Representing:		
Current portion *(b)*	**3,501,182**	3,699,407
Non-current portion *(c)*	**909,237**	803,428
Total	**4,410,419**	4,502,835

18 Trade and other receivables (Continued)

(a) As at 31 December 2021 and 31 December 2020, the ageing analysis of the net amount of trade receivables and bills receivables (including amounts due from related parties of trading in nature), based on the invoice date is as follows:

	As at 31 December	
	2021	2020
	RMB'000	RMB'000
Within 3 months	**2,325,772**	2,283,515
3 to 12 months	**782,534**	584,314
Over 1 year	**309,607**	559,433
	3,417,913	3,427,262

The Group maintains different billing policies for different customers based on the negotiated terms with each of the customers. The Group issues progress billing at different stages such as upon the signing of contracts and upon the delivery of products. The exact percentage of each part of payment varies from contract to contract. Trade receivables are generally due for payment within 90 days from the date of billing.

(b) Except for the non-current trade and other receivables, all of the other trade and other receivables are expected to be recovered within one year.

(c) Non-current trade and other receivables as at 31 December 2021 included (1) finance lease receivables of approximately RMB48,917,000 (2020: RMB76,283,000); (2) receivables of approximately RMB737,587,000 (2020: RMB727,145,000) arising from instalment sales which are due for receipt over one year after the end of the reporting period and are discounted at the rate which discounts the nominal amount of the promised consideration to the price that customer would pay in cash for the goods or services when or as the Group transfers to the customer; (3) deposit receivable of approximately RMB17,785,000 which is due for receipt over one year after the end of reporting period and is discounted at the loan interest rate stipulated by the People's Bank of China for the corresponding period; (4)prepayments for land use rights of approximately RMB104,948,000.

(d) As at 31 December 2021 and 2020, the Group's maximum exposure to credit risk was the carrying value of each class of receivables mentioned above.

(e) The carrying amounts of the current portion of trade and other receivables approximate their fair value.

18 Trade and other receivables (Continued)

(f) The creation and release of provision for prepayments has been included in "Administrative expenses" and provision for impaired receivables has been included in "Net impairment losses on financial assets and contract assets" in profit or loss respectively.

(g) As at 31 December 2021, bills receivables of approximately RMB152,856,000 (2020: RMB222,658,000), trade receivables of RMB463,651,000 (2020: RMB71,702,000) were secured for borrowings (Note 26).

(h) As at 31 December 2021, lease liabilities of RMB67,400,000 (as at 31 December 2020: RMB85,837,000) were secured by finance lease receivables of RMB65,025,000 (as at 31 December 2020: RMB81,899,000).

(i) As at 31 December 2021 and 2020, the Group had receivables under finance lease as follows:

	As at 31 December	
	2021	2020
	RMB'000	RMB'000
Non-current receivables		
Finance leases – gross receivables	**53,808**	84,830
Unearned finance income	**(3,815)**	(8,547)
	49,993	76,283
Current receivables		
Finance leases – gross receivables	**118,378**	187,288
Unearned finance income	**(7,608)**	(8,741)
	110,770	178,547
Gross receivables from finance leases:		
— No later than 1 year	**118,378**	187,288
— Later than 1 year and no later than 5 years	**53,808**	84,830
	172,186	272,118
Unearned future finance income on finance leases	**(11,423)**	(17,288)
Net investment in finance leases	**160,763**	254,830

18 Trade and other receivables (Continued)

(i) (Continued)

The net investment in finance leases is analysed as follows:

	As at 31 December	
	2021	2020
	RMB'000	RMB'000
No later than 1 year	**110,770**	178,547
Later than 1 year and no later than 5 years	**49,993**	76,283
Total	**160,763**	254,830

(j) Impairment and risk exposure

The Group applies the IFRS 9 simplified approach to measuring expected credit losses which uses a lifetime expected loss allowance for all trade receivables and contract assets. Note 3.1(b) provides for details about the calculation of the allowance.

19 Debt investments at amortised cost

	As at 31 December	
	2021	2020
	RMB'000	RMB'000
Loan to a joint venture	**52,094**	80,736
Loan to a third party	**–**	17,170
	52,094	97,906
Current portion	**28,799**	43,956
Non-current portion	**23,295**	53,950
Total	**52,094**	97,906

The loan to a joint venture, Honghua (Shenzhen), is for a period of 4 years, repayable in quarterly instalments at effective annual interest rate of 7.51% per annum. The loan will be repayable in full on 19 July 2023.

20 Inventories

	As at 31 December	
	2021	2020
	RMB'000	RMB'000
Raw materials	**460,396**	409,733
Work in progress	**840,086**	470,638
Finished goods	**372,127**	349,162
Costs to fulfil contracts	**128,600**	83,891
Revolving materials and others	**21,451**	33,394
	1,822,660	1,346,818

For the year ended 31 December 2021, the cost of inventories recognised as the Group's expense and included in 'cost of sales' amounted to approximately RMB1,196,299,000 (2020: RMB1,427,154,000).

(a) Movement on the provision for inventory is as follows:

	Years ended 31 December	
	2021	2020
	RMB'000	RMB'000
At 1 January	**148,343**	167,595
Addition	**52,831**	55,694
Write off	**(17,824)**	(72,152)
Currency translation difference	**(404)**	(2,794)
At 31 December	**182,946**	148,343

21 Cash and cash equivalents

(a) Cash and cash equivalents

	As at 31 December	
	2021	2020
	RMB'000	RMB'000
Cash on hand	**1,453**	2,500
Cash at bank	**701,964**	949,884
Cash and cash equivalents	**703,417**	952,384

(b) Pledged bank deposits

As at 31 December 2021 and 2020, the deposits are pledged to banks as security against letters of guarantee (Note 26), for bills payable (Note 25) and for borrowings (Note 26).

(c) Term deposit

As at 31 December 2021, the Group had a term deposit with amount of RMB90,000,000 (2020: RMB40,000,000). The interest rate of this term deposit is 2.85%-3.6% (2020: 3.6%) per annum and will be due in 2023 (2020: 2023).

The fair value of the term deposit is RMB89,667,000 (2020: RMB38,664,000) as at 31 December 2021.

22 Share capital

Ordinary shares, issued and fully paid:

	Number of shares (thousands)	**Amount RMB'000**
At 1 January 2020	5,355,995	488,023
Shares issued under share option scheme (Note 23)	–	–
At 31 December 2020	5,355,995	488,023
At 1 January 2021	**5,355,995**	**488,023**
Shares issued under share option scheme (Note 23)	**–**	**–**
At 31 December 2021	**5,355,995**	**488,023**

(a) The total authorised number of ordinary shares is 10,000,000,000 shares (2020: 10,000,000,000 shares) with a par value of HKD0.1 per share (2020: HKD0.1 per share).

23 Share-based payments

(a) Share Option Scheme

(i) The Company also adopted a share option scheme ("the Share Option Scheme") on 21 January 2008 for any eligible employees of the entities within the Group. The terms and conditions of the grants that existed during the year are as follows, whereby all options are settled by physical delivery of shares:

	Number of share options (thousands)		Vesting conditions	Contractual life of options
Options granted:				
– on 15 April 2009	60,000	(i)	30% on 1 December 2009	10 years
		(ii)	30% on 14 April 2010	
		(iii)	40% on 15 April 2011	
– on 11 October 2010	2,200	(i)	40% on 25 October 2010	10 years
		(ii)	30% on 11 October 2011	
		(iii)	30% on 11 October 2012	
– on 20 June 2011	7,600 (a)	(i)	30% on 19 July 2011	10 years
		(ii)	30% on 19 June 2012	
		(iii)	40% on 20 June 2013	
– on 5 April 2012	15,400	(i)	30% on 5 April 2013	10 years
		(ii)	30% on 5 April 2014	
		(iii)	40% on 5 April 2015	
– on 24 March 2014	3,200 (b)	(i)	30% on 24 April 2014	10 years
		(ii)	30% on 24 April 2015	
		(iii)	40% on 24 April 2016	
– on 2 July 2014	40,575 (c)		Vesting of the share options is conditional upon the achievement of corporate goals of the company and the individual performance of the respective grantees. The share options of any portion thereof shall lapse if the relevant corporate goals cannot be achieved. Up to 30% of the share options granted to each grantee after April 2015; up to 60% of the share options granted to each grantee after April 2016; all the remaining share options granted to each grantee after April 2017	10 years
– on 21 September 2016	41,350 (d)	(i)	30% on 21 September 2017	10 years
		(ii)	30% on 21 September 2018	
		(iii)	40% on 21 September 2019	
Total share options	170,325			

23 Share-based payments (Continued)

(a) Share Option Scheme (Continued)

(i) (Continued)

(a) 5,200,000 shares are granted to the directors of the Group.

(b) 3,200,000 shares are granted to the directors of the Group.

(c) 4,577,000 shares are granted to the directors of the Group.

(d) 8,450,000 shares are granted to the directors of the Group.

(ii) The number and weighted average exercise prices of share options are as follows:

	Year ended 31 December			
	2021		2020	
	Weighted average exercise price	**Number of share options (thousands)**	Weighted average exercise price	Number of share options (thousands)
At 1 January	**HKD1.18**	**92,336**	HKD1.12	93,707
Lapsed	**HKD0.88**	**(10,276)**	HKD0.96	(1,371)
At 31 December	**HKD1.22**	**82,060**	HKD1.18	92,336

The options outstanding at 31 December 2021 had an exercise price in the range of HKD0.44 to HKD2.02 (2020: HKD0.44 to HKD2.02) and a weighted average remaining contractual life of 5.14 years (2020: 5.81 years).

For the year ended 31 December 2021, there was no share options exercised (2020: no share options exercised).

For the year ended 31 December 2021, 2,983,000 share options granted in year 2012, 2014 and 2016 which were not exercised in prior years were lapsed due to the resignation of employees. And 7,293,000 share options granted in year 2011 which were not exercised in prior years were lapsed due to expiration date.

23 Share-based payments (Continued)

(a) Share Option Scheme (Continued)

(ii) (Continued)

The fair value of options granted to the directors and selected employees is determined by using the binomial valuation model. The fair value of options granted on 21 September 2016 was HKD0.22 and HKD0.18 per option for the directors and selected employees respectively. The significant inputs into the model were spot share price of HKD0.44 at the grant date, exercise price shown above, volatilities of 55.65%, dividend yield of 1.75%, exercise multiples of 2.47 and 1.6 for directors and selected employees respectively, forfeiture rate of 0.00% for directors and selected employees, and an annual risk-free interest rates of 1.06%. The volatilities were based on the daily historical volatility of the Company. See Note 9 for the total expense recognised in profit or loss for share options granted to directors and employees.

(b) Share Award Scheme

On 30 December 2011, the board of directors approved to adopt a Restricted Share Award Scheme (the“Scheme”). Under the Scheme, the Company may grant shares of the Company to certain selected participants at specified consideration.

Pursuant to the Scheme rules, existing issued shares will be purchased by the trustee of the Scheme (the“Trustee”) from the market out of funds provided by the Company in accordance with the Scheme rules.

During the year ended 31 December 2012, 47,817,000 shares were acquired by the Trustee through purchases from the open market, at a total cost of approximately RMB49,973,000 (equivalent to HKD61,518,000).

During the year ended 31 December 2013, the Trustee acquired 50,000,000 shares of the Company through purchase from the open market according to the instructions of the board of directors, at a total cost of approximately RMB146,233,000.

23 Share-based payments (Continued)

(b) Share Award Scheme (Continued)

During the year ended 31 December 2013, the Company granted restricted shares in respect of a total of 35,917,700 ordinary shares of the Company to selected participants at a price of HKD1.27 each, of which 190,000 restricted shares granted were subsequently cancelled. 17,428,850 of the restricted shares were vested on 20 May 2013 and 18,298,850 of the restricted shares were vested on 20 December 2013.

During the year ended 31 December 2014, the Company granted restricted shares in respect of a total of 1,000,000 ordinary shares of the Company to a selected participant at a price of HKD0.99 each and the selected participant exercised all the granted shares on 19 December 2017.

No shares were acquired by the Trustee under the Scheme for the years ended 31 December 2021 and 2020. As at 31 December 2021, 61,089,300 shares were held by the Trustee under the Scheme (2020: 61,089,300 shares).

The fair value of restricted shares granted to employees is measured with reference to the closing price of the ordinary share of the Company at the grant date and recognised as staff costs with a corresponding increase in the capital reserve within equity.

24 Other reserves

(a) Share premium

The application of the share premium account is governed by the Companies Law (Revised) of the Cayman Islands. The balance in the share premium account of the Company is distributable to the shareholders of the Company provided that immediately following the date on which the dividend is proposed to be distributed, the Company will be in a position to pay off its debts as they fall due in the ordinary course of business.

(b) Other reserve

The other reserve represents the difference between the nominal value of share of the subsidiaries acquired over the nominal value of the shares issued by the Company in exchange; the difference between acquisitions of non-controlling interests and entities under common control over the consideration given; and the contribution of technology licenses by a shareholder.

24 Other reserves (Continued)

(c) Capital reserve

Capital reserve represents the value of employee services in respect of the equity-settled share-based payment as set out in Note 23, waiver of debts by the immediate holding company and capital contribution arising on shareholders' indemnity.

(d) Surplus reserve

Pursuant to the applicable PRC regulations, PRC entity is required to appropriate 10% of its profit-after-tax (after offsetting prior year losses) to the reserve until such reserve reaches 50% of the registered capital. The transfer to the reserve must be made before distribution of dividends to shareholders. The surplus reserve can be utilised, upon approval by the relevant authorities, to offset accumulated losses or to increase registered capital of the PRC subsidiaries, provided that the balance after such issue is not less than 50% of its registered capital.

(e) Exchange reserve

The exchange reserve comprises all foreign exchange differences arising from the translation of the financial statements of operations outside the PRC which are dealt with in accordance with the accounting policies as set out in Note 2.6.

(f) Fair value reserve

The fair value reserve comprises the cumulative net change in the fair value of equity investments at fair value through other comprehensive income held at the end of the reporting period and is dealt with in accordance with the accounting policies in Note 2.11.

25 Trade and other payables

	As at 31 December	
	2021	2020
	RMB'000	RMB'000
Trade payables	**1,354,667**	1,421,207
Amounts due to related companies (Note 33(c))		
– Trade	**57,929**	19,423
– Non-trade	**3,610**	44,376
Bills payable	**590,496**	755,316
Receipts in advance	**633**	501
Other payables	**523,851**	414,921
	2,531,186	2,655,744

At 31 December 2021 and 2020, the ageing analysis of the trade payables and bills payable (including amounts due to related parties of trading in nature) based on invoice date is as follows:

	As at 31 December	
	2021	2020
	RMB'000	RMB'000
Within 3 months	**746,413**	567,463
3 to 6 months	**353,430**	532,146
6 to 12 months	**344,259**	766,736
Over 1 year	**558,990**	329,601
	2,003,092	2,195,946

As at 31 December 2021 and 2020, all the trade payables, bills payable and other payables of the Group were non-interest bearing and their fair value approximated their carrying amounts due to their short maturities.

As at 31 December 2021 and 2020, all the current trade and other payables are expected to be settled within one year or are repayable on demand.

26 Borrowings

		As at 31 December	
		2021	2020
		RMB'000	RMB'000
(a)	Bank loans		
	Secured (i)		
	– Current portion	**1,359,083**	611,732
	– Non-current portion	**–**	173,000
		1,359,083	784,732
	Unsecured		
	– Current portion	**2,480,264**	1,533,373
	– Non-current portion	**–**	723,862
		2,480,264	2,257,235
(b)	Unsecured loan from related party (Note 33)		
	– Current portion	**–**	110,037
(c)	Other loans		
	Senior notes (ii)		
	– Current portion	**1,306,491**	–
	– Non-current portion	**–**	1,332,857
Current borrowings (iii)		**5,145,838**	2,255,142
Non-current borrowings		**–**	2,229,719
Total borrowings		**5,145,838**	4,484,861

26 Borrowings (Continued)

(i) As at 31 December 2021, the bank loans were secured by pledged bank deposits as collateral of RMB83,592,000, letters of guarantee as collateral of RMB90,000,000, bills receivables as collateral of RMB152,856,000, trade receivables as collateral of RMB463,651,000 and 20% equity interest of Honghua Company, a subsidiary of the Group.

As at 31 December 2020, the bank loans were secured by letters of guarantee as collateral of RMB200,000,000, bills receivables of RMB222,658,000, trade receivables of RMB71,702,000 and 20% equity interest of Honghua Company, a subsidiary of the Group.

(ii) On 1 August 2019, the Company issued listed senior notes in the aggregate principal amount of USD200,000,000 ("Senior Notes"). The Senior Notes bear interest at 6.375% per annum, payable semi-annually in arrears and will be due in 2022.

The Senior Notes are guaranteed by the Group's existing subsidiaries, Honghua Holdings, Newco (H.K.) Limited, Hongkong Oil & Gas Services, Honghua Golden Coast Equipment FZE as stated in the Company's offering memorandum on 25 July 2019.

(iii) The current borrowings included borrowings with principal amounts of RMB1,136,318,000 due after 31 December 2022 as agreed in original loan contracts which have been reclassified as current liabilities as at 31 December 2021 as a result of the matters described in Note 2.1.

The borrowings at 31 December 2021 bore annual interest ranging from 1.00%-5.70% annually (2020: 1.00%-5.70% annually).

The maturities of the Group's borrowings at respective end of the year are set out as follows:

	As at 31 December	
	2021	2020
	RMB'000	RMB'000
Within 1 year	**5,145,838**	2,255,142
Between 1 and 2 years	**–**	1,855,705
Between 2 and 5 years	**–**	374,014
	5,145,838	4,484,861

26 Borrowings (Continued)

The carrying amount and fair value of the borrowings are as follows:

	As at 31 December	
	2021	2020
	RMB'000	RMB'000
Carrying amount		
Bank borrowings	**3,839,347**	3,041,967
Unsecured loan from related party	**–**	110,037
Senior notes	**1,306,491**	1,332,857
Fair value		
Bank borrowings	**3,808,831**	3,011,531
Unsecured loan from related party	**–**	110,059
Senior notes	**1,152,523**	1,278,880

Except the Senior Notes, the fair values of non-current borrowings are estimated based on discounted cash flow approach using the prevailing market rates of interest available to the Group for financial instruments with substantially the same terms and characteristics, which were 4.35%-4.90% as at 31 December 2021 (2020: 4.35%-4.90%). The fair value of Senior Notes is estimated based on the market price of Senior Notes traded at over-the-counter as at 31 December 2021. All the fair values of the non-current borrowings are classified as level 2 of the fair value hierarchy.

The carrying amount of current borrowings approximated their fair value, as the impact of discounting was not significant.

The carrying amounts of the Group's borrowings are denominated in the following currencies:

	As at 31 December	
	2021	2020
	RMB'000	RMB'000
RMB	**2,799,305**	2,486,268
USD	**2,346,533**	1,998,593
	5,145,838	4,484,861

26 Borrowings (Continued)

At each balance sheet date, the Group had the following undrawn borrowing facilities:

	As at 31 December	
	2021	2020
	RMB'000	RMB'000
Fixed rate		
Expiring within 1 year	**3,381,860**	2,693,866

These facilities have been arranged for financing daily operations.

27 Deferred income tax

(a) The analysis of deferred tax assets/(liabilities) is as follows:

	As at 31 December	
	2021	2020
	RMB'000	RMB'000
Deferred tax assets		
Deferred tax assets to be recovered within 12 months	**115,758**	153,585
Deferred tax assets to be recovered more than 12 months	**225,364**	160,344
	341,122	313,929
Deferred tax liabilities		
Deferred tax liabilities to be settled within 12 months	**(11,157)**	(11,583)
Deferred tax liabilities to be settled more than 12 months	**(73,235)**	(14,446)
	(84,392)	(26,029)
Deferred tax assets, net	**256,730**	287,900

27 Deferred income tax (Continued)

(b) The movement in deferred tax assets and liabilities during the year, without taking into consideration the offsetting of balances within the same tax jurisdiction, is as follows:

Deferred tax assets	Write down of inventories RMB'000	Provision for product warranties RMB'000	Unrealised profit on inventories RMB'000	Impairment losses on financial assets, contract assets and prepayments RMB'000	Accruals RMB'000	Government grants RMB'000	Tax losses RMB'000	Depreciation difference RMB'000	Impairment provision of property, plant and equipment RMB'000	Provision for investment in associates RMB'000	Total RMB'000
At 1 January 2020	24,572	7,796	4,023	94,355	15,329	9,690	93,311	1,605	6,938	54,754	312,373
Recognised in profit or loss	(62)	(5,589)	(1,577)	20,026	(3,472)	(1,915)	(5,775)	–	–	–	1,636
Currency translation differences	–	–	–	(80)	–	–	–	–	–	–	(80)
At 31 December 2020	**24,510**	**2,207**	**2,446**	**114,301**	**11,857**	**7,775**	**87,536**	**1,605**	**6,938**	**54,754**	**313,929**
Recognised in profit or loss	**(7,551)**	**(1,289)**	**(1,574)**	**(4,683)**	**955**	**(3,034)**	**46,151**	**(1,605)**	**(6,938)**	**6,880**	**27,312**
Currency translation differences	**-**	**-**	**-**	**(119)**	**-**	**-**	**-**	**-**	**-**	**-**	**(119)**
At 31 December 2021	**16,959**	**918**	**872**	**109,499**	**12,812**	**4,741**	**133,687**	**-**	**-**	**61,634**	**341,122**

27 Deferred income tax (Continued)

(b) (Continued)

Deferred tax liabilities	Changes in fair value of property, plant and equipment RMB'000	Installment sales RMB'000	Changes in fair value of FVOCI RMB'000	Total RMB'000
At 1 January 2020	–	(36,939)	(2,087)	(39,026)
Credited to profit or loss	–	12,846	–	12,846
Recognised in other comprehensive income	–	–	151	151
At 31 December 2020	**–**	**(24,093)**	**(1,936)**	**(26,029)**
Credited to profit or loss	**(57,765)**	**1,949**	**–**	**(55,816)**
Recognised in other comprehensive income	**–**	**–**	**(2,547)**	**(2,547)**
At 31 December 2021	**(57,765)**	**(22,144)**	**(4,483)**	**(84,392)**

The Group has not recognised deferred income tax assets in respect of tax losses of approximately RMB268,503,000 as at 31 December 2021 (2020: RMB189,695,000) as it is not probable that future taxable profits against which the losses can be utilised in the relevant tax jurisdictions of those entities. These tax losses will be expired in 5 to 10 years.

As at 31 December 2021, deferred income tax liabilities of approximately RMB68,910,000 (2020: RMB87,844,000) had not been recognised for the withholding tax that would be payable on the unremitted earnings of certain subsidiaries. Unremitted earnings totalled approximately RMB1,378,199,000 as at 31 December 2021 (2020: RMB1,756,874,000). The Group does not intend to remit these unremitted earnings from the relevant subsidiaries in the foreseeable future.

28 Provisions for other liabilities and charges

	Compensation to shareholder (i) RMB'000	Legal claims RMB'000	Product warranties RMB'000	Others RMB'000	Total RMB'000
At 1 January 2020	–	–	45,465	6,570	52,035
Provisions during the year	15,919	2,610	4,302	–	22,831
Utilised during the year	–	–	(35,054)	(6,570)	(41,624)
At 31 December 2020	15,919	2,610	14,713	–	33,242
At 1 January 2021	**15,919**	**2,610**	**14,713**	**–**	**33,242**
Provisions during the year	**–**	**2,550**	**3,074**	**3,386**	**9,010**
Utilised during the year	**–**	**(2,610)**	**(11,664)**	**–**	**(14,274)**
At 31 December 2021	**15,919**	**2,550**	**6,123**	**3,386**	**27,978**

(i) Pursuant to the agreement signed in 2020 between the Company and Kehua Technology Co., Limited("Kehua Technology"), the subsidiary of China Aerospace Science and Industry Corporation (中國航天科工集團有限公司) ("CASIC"), the Company will compensate CASIC for certain litigations and issues which cause losses. As 31 December 2021, as some issues haven't been settled, the Group estimated that about RMB15,919,000 may need to be compensated to CASIC upon those issues are finalised. The Group recorded such estimated compensation amount as "Provision for other liabilities and charges" and recognised in profit or loss as other losses.

29 Deferred income

Movement on the deferred income is as follows:

	As at 31 December	
	2021 RMB'000	2020 RMB'000
At 1 January	**52,113**	64,961
Government grants related to assets received during the year	**–**	9,197
Government grants related to costs received during the year	**6,263**	64,359
Credited to profit or loss	**(26,569)**	(86,404)
At 31 December	**31,807**	52,113
Less: non-current portion	**(21,779)**	(47,621)
Current portion	**10,028**	4,492

30 Dividends

No dividend was approved or paid in respect of the previous financial years for the years ended 31 December 2021 and 2020.

No dividend was proposed for the year ended 31 December 2021.

31 Cash generated from operations

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

	Year ended 31 December	
	2021	2020
	RMB '000	RMB'000
(Loss)/profit before income tax	**(745,344)**	86,090
Adjustments for:		
– Depreciation of property, plant and equipment	**149,022**	171,274
– Depreciation of right use of assets	**9,579**	8,830
– Amortisation of intangible assets	**22,252**	15,908
– Interest income	**(5,179)**	(5,668)
– Interest expense	**228,753**	223,119
– Share of loss from joint ventures and associates	**2,460**	14,967
– (Gain)/loss on disposal of property, plant and equipment	**(3,264)**	1,674
– Foreign exchange gain	**(77,970)**	(60,695)
– Provision for impairment of property, plant and equipment	**14,196**	1,035
	(405,495)	456,534
Changes in working capital:		
– Increase in inventories	**(560,337)**	(181,650)
– Decrease in trade and other receivables	**152,843**	274,070
– Increase in pledged bank deposits	**(124,477)**	(11,490)
– Decrease in trade and other payables	**(261,353)**	(170,774)
– Decrease/(increase) in contract assets	**238,966**	(467,854)
– Increase/(decrease) in contract liabilities	**14,740**	(24,191)
– Decrease in provisions for other liabilities and charges	**(5,264)**	(18,793)
Cash generated from operations	**(950,377)**	(144,148)

31 Cash generated from operations (Continued)

(b) Proceeds from disposal of property, plant and equipment

In the consolidated statements of cash flows, proceeds from disposal of property, plant and equipment comprise:

	Year ended 31 December	
	2021	2020
	RMB'000	RMB'000
Net book amount (Note 15)	**12,702**	45,563
Gain/(loss) on disposal of property, plant and equipment	**3,264**	(1,674)
Non-cash investing activities	**(892)**	(7,891)
Proceeds from disposal of property, plant and equipment	**15,074**	35,998

(c) Net debt reconciliation

This section sets out an analysis of net debt and the movements in net debt for each of the periods presented.

	2021	2020
Net debt	**RMB'000**	RMB'000
Cash and cash equivalents (Note 21)	**703,417**	952,384
Borrowings – repayable within one year (Note 26)	**(5,145,838)**	(2,255,142)
Borrowings – repayable after one year (Note 26)	**–**	(2,229,719)
Net debt	**(4,442,421)**	(3,532,477)
Cash and cash equivalents (Note 21)	**703,417**	952,384
Gross debt – fixed interest rates	**(3,699,812)**	(3,240,791)
Gross debt – variable interest rates	**(1,446,026)**	(1,244,070)
Net debt	**(4,442,421)**	(3,532,477)

31 Cash generated from operations (Continued)

(c) Net debt reconciliation (Continued)

	Assets	Liabilities from financing activities		
	Cash and cash equivalents RMB'000	Borrowings due within 1 year RMB'000	Borrowings due after 1 year RMB'000	Total RMB'000
Net debt as at 1 January 2020	889,802	(1,917,590)	(2,091,779)	(3,119,567)
Cashflows	81,806	(379,940)	(195,774)	(493,908)
Foreign exchange adjustments	(19,224)	42,388	98,023	121,187
Other non-cash movements	–	–	(40,189)	(40,189)
Net debt as at 31 December 2020	**952,384**	**(2,255,142)**	**(2,229,719)**	**(3,532,477)**
Cashflows	**(243,997)**	**(13,316)**	**(767,914)**	**(1,025,227)**
Foreign exchange adjustments	**(4,970)**	**19,016**	**33,838**	**47,884**
Other non-cash movements	**–**	**(2,896,396)**	**2,963,795**	**67,399**
Net debt as at 31 December 2021	**703,417**	**(5,145,838)**	**–**	**(4,442,421)**

32 Commitments

(a) Capital commitments

Capital expenditure contracted for or authorised but not contracted for at the balance sheet date but not yet incurred is as follows:

	As at 31 December	
	2021 RMB'000	2020 RMB'000
Contracted for	**21,198**	3,479

(b) Operating lease commitments

The future aggregate minimum lease payments under non-cancellable operating leases are as follows:

	As at 31 December	
	2021 RMB'000	2020 RMB'000
Within 1 year	**83,648**	5,897

The Group was the lessee in respect of a number of buildings held under operating leases. None of the leases include contingent rentals.

33 Related-party transactions

Related parties are those parties that have the ability to control the other party or exercise significant influence in making financial and operating decisions. Parties are also considered to be related if they are subject to common control.

The following is a summary of the significant transactions carried out between the Group and its related parties in the ordinary course of business during the years ended 31 December 2021 and 2020, and balances arising from related party transactions as at 31 December 2021 and 2020.

Name of party	Relationship
Guanghan Hongtai Business Trading Co., Ltd. (廣漢市宏泰商貿有限公司) ("Hongtai")	Hongtai is a party of which spouses of certain directors and management have equity interests
Sichuan Deep & Fast Oil Drilling Tools Co., Ltd. (四川深遠石油鑽井工具有限公司) ("Sichuan Shenyuan")	Sichuan Shenyuan is a party of which the spouse of a director has equity interests
Guanghan Huite Hydraulic Accessories Co., Ltd. (廣漢市惠特液壓附件有限公司) ("Huite")	Huite is a party of which the brother of a director of a group's subsidiary has equity interests
Aerospace Science & Industry Financial Leasing Co,. Ltd. (航天科工金融租賃有限公司) ("ASIFL")	ASIFL is a joint venture of CASIC
Aerospace Science & Industry Finance CORP (航天科工財務有限責任公司) ("ASIFC")	ASIFC is a subsidiary of CASIC
HH Egyptian Company	Joint venture
Honghua (Shenzhen)	Joint venture
Honghua (Jiangsu)	Associate (Note 34)
Honghua (Shanghai)	Associate
Jiangsu Hongjieding Energy Technology Co., Ltd. ("Jiangsu Hongjieding")	Controlled by a director of the Group
Hong Kong Tank Tek Limited ("HK Tank")	HK Tank is a subsidiary of Jiangsu Hongjieding
Aerospace Information System Engineering (Beijing) Co., Ltd. (航天信息系統工程(北京)有限公司) ("AISE")	AISE is a subsidiary of CASIC
Aerospace Jiangnan Group Co., Ltd. (航天江南集團有限公司) ("AJG")	AJG is a subsidiary of CASIC

33 Related-party transactions (Continued)

Name of party	Relationship
Aerospace Sanjiang Group Co., Ltd. (中國航天三江集團有限公司) ("ASG")	ASG is a subsidiary of CASIC
Aerospace Cloud Technology Development Co., Ltd. (航天雲網科技發展有限責任公司) ("ACTD")	ACTD is a subsidiary of CASIC
Aerospace Construction Group Co., Ltd. (中國航天建設集團有限公司) ("ACG")	ACG is a subsidiary of CASIC

(a) Significant related party transactions

	Year ended 31 December	
	2021	2020
	RMB'000	RMB'000
Purchases of parts and components and others		
– Honghua (Jiangsu)	**290,406**	188,231
– Honghua (Shenzhen)	**42,009**	–
– Other related companies	**2,612**	4,628
	335,027	192,859
Sales of drilling rigs, parts and components and others		
– Honghua (Shenzhen)	**326,011**	4,250
– HH Egyptian Company	**6,586**	10,438
– Honghua (Jiangsu)	**5,413**	13,044
– Other related companies	**1,130**	18,394
	339,140	46,126
Consulting service provided		
– Honghua (Shenzhen)	**24,196**	10,186
– Other related companies	**74**	–
	24,270	10,186
Operating lease expenses		
– Honghua (Shenzhen)	**341,033**	480,607

33 Related-party transactions (Continued)

(a) Significant related party transactions (Continued)

According to the tripartite agreements signed by the Group, Honghua (Shenzhen) and third party leasing companies, for the year ended 31 December 2019, the Group sold products amounted to approximately RMB960,177,000 to those third party leasing companies, meanwhile, those third party leasing companies have provided finance lease to Honghua (Shenzhen), and the risk and rewards of those products have been transferred to Honghua (Shenzhen).

After the completion of the above transactions, Honghua (Shenzhen) and the subsidiaries of the Group have entered into operating lease agreements which leased the above mentioned products to the subsidiaries of the Group, and then the subsidiaries of the Group have leased those products to third party companies.

For the year ended 31 December 2021, the total operating lease expense incurred charged to the profit or loss from the lease agreements above by the Group was approximately RMB341,033,000 (2020：RMB480,607,000).

	Year ended 31 December	
	2021	2020
	RMB'000	RMB'000
Receipts of loan to		
– Honghua (Jiangsu)	**40,000**	93,040
– Honghua (Shenzhen) (Note 19)	**26,786**	24,915
– HK Tank	**–**	6,851
	66,786	124,806

33 Related-party transactions (Continued)

(a) Significant related party transactions (Continued)

For year ended 31 December 2021, the loan to an associate and other related parties from Honghua (Jiangsu) was settled by the deposit of RMB40,000,000 which was paid by Jiangsu Hongjieding pursuant to debt repayment agreements entered in 2018 (Note 34).

For year ended 31 December 2020, the Group received repayments of loan to an associate and other related parties from HK Tank and Honghua (Jiangsu) based on debt payment arrangements described in Note 33(b).

	Year ended 31 December	
	2021	2020
	RMB'000	RMB'000
Investments to		
– Honghua (Shenzhen) (Note 12)	**–**	9,350
Receipts of loans from		
– ASIFC	**–**	180,037
Repayments of loans from		
– ASIFC	**110,037**	1,022,673
Financial income		
– Honghua (Shenzhen)	**4,619**	6,403
Financial expenses		
– ASIFC	**1,110**	36,673

Compensation to shareholder

Pursuant to the agreement signed in 2020 between the Company and Kehua Technology, the Company paid compensation of RMB16,112,000 to shareholder for certain litigations and issues which cause losses and recognised the amount in profit or loss as other losses.

33 Related-party transactions (Continued)

(b) Amounts due from related companies

	As at 31 December	
	2021	2020
	RMB'000	RMB'000
Trade (Note 18)		
– Joint ventures	**299,670**	222,405
– Associates	**–**	104,483
– Other related companies	**1,499**	5,111
	301,169	331,999
Non-trade (i)		
– Joint ventures	**274,192**	392,157
– Associates	**60**	1,359,941
– Other related companies	**12,814**	103,815
	287,066	1,855,913

(i) As at 31 December 2021, the debt from HK Tank is RMB102,425,000 (as at 31 December 2020: 104,823,000) and the Group recorded this debt as "loan to an associate and other related party" and the Group made a provision for the credit risk of RMB87,781,000 (2020: RMB nil) (Note 3.1(b)) for the year ended 31 December 2021, and the balance of the provision for the loan to an associate and other related party was RMB89,910,000 as at 31 December 2021 (as at 31 December 2020: RMB2,129,000) (Note 34).

As at 31 December 2021, the current portion and non-current portion of debt investments to joint venture is RMB28,799,000(2020:RMB26,786,000) and RMB23,295,000(2020:RMB53,950,000) respectively (Note 19).

The other amounts due from other related companies are unsecured, interest-free and repayable on demand (Note 18). The Group made provisions against the other amount due from related companies for the credit risk of RMB13,608,000 (31 December 2020: RMB3,345,000).

33 Related-party transactions (Continued)

(c) Amounts due to related companies

	As at 31 December	
	2021	2020
	RMB'000	RMB'000
Trade (Note 25)		
– Joint ventures	**7,707**	6,531
– Associates	**44,964**	7,177
– Other related companies	**5,258**	5,715
	57,929	19,423
Non-trade (Note 25)		
– Joint ventures	**3,182**	4,239
– Associates	**123**	123
– Other related companies	**305**	40,014
	3,610	44,376

The amounts due to related companies are unsecured, interest-free and have no fixed repayment terms.

33 Related-party transactions (Continued)

(d) Cash and cash equivalents

	As at 31 December	
	2021	2020
	RMB'000	RMB'000
– ASIFC	**11,962**	9,868

(e) Borrowings (Note 26)

	As at 31 December	
	2021	2020
	RMB'000	RMB'000
– ASIFC (i)	**–**	110,037

(i) As at 31 December 2020, the loans from ASIFC bear fixed interest rate of 4.35%-4.45%, and had been repaid in 2021.

(f) Key management compensation

	Year ended 31 December	
	2021	2020
	RMB'000	RMB'000
Basic salaries, allowances and other benefits in kind	**6,533**	7,205
Contributions to defined contribution retirement schemes	**709**	436
Discretionary bonus	**2,165**	6,836
	9,407	14,477

34 Business Combination

In 2018, the Group signed agreements with Jiangsu Hongjieding an Honghua (Shanghai) with the following key transaction terms and disposed offshore drilling rigs segment accordingly:

i) The Group agreed to sell its 51% equity interests in both Honghua (Jiangsu) and Honghua (Shanghai) for a cash consideration of RMB1 respectively;

ii) The Group agreed to sell its 25% equity interests in FSP LNG B.V. and 70% equity interests in HK Tank for a cash consideration of USD1 respectively;

iii) The Group agreed to sell its 30% equity interests in Prime FSP, LLC for a cash consideration of USD1.

The Group also entered debt repayment agreements with Honghua (Jiangsu) and HK Tank respectively, pursuant to which Honghua (Jiangsu) and HK Tank shall repay the existing debt, together with relevant interest to the Group after the completion of the above equities transfer. These debts were secured by the interests of above entities held by Jiangsu Hongjieding, as well as the total assets of Honghua (Jiangsu) and Honghua (Shanghai). The interest of the loans to Honghua (Jiangsu) and HK Tank are 4.75% and 6% respectively.

According to the announcement dated 21 November 2021, Honghua (Jiangsu) and HK Tank informed the Group that they would be unable to repay the debts amounts due on 31 December 2021 (the "Expected Debt Default"). As the Expected Debt Default occurred, the Group decided to exercise its security rights to acquire the 51% equity interests in Honghua (Jiangsu) held by Jiangsu Hongjieding pursuant to the debt repayment agreements mentioned above.

On 16 December 2021, the acquisition was completed at a cash consideration of RMB1 and Honghua (Jiangsu) became a wholly subsidiary of the Group. On the same date, the Group had amounts due from Honghua (Jiangsu) amounted to RMB1,555,368,000 with provisions for the credit risk, including the debts amounted to RMB1,272,699,000 which were secured by 51% equity interests in Honghua (Jiangsu) held by Jiangsu Hongjieding. Up to 16 December 2021, Honghua (Jiangsu) had accumulated losses and the book value of net assets was negative, thus the carrying amount of investment in Honghua (Jiangsu) was zero. The pre-existing debtor/creditor relationship between the Group and Honghua (Jiangsu) was effectively settled and the Group increased the consideration transferred for the acquisition by RMB1,555,368,000, to account for the effective settlement of amounts due from Honghua (Jiangsu).

34 Business Combination (Continued)

Details of the purchase consideration and the net assets acquired of Honghua (Jiangsu), excluding the amounts due to the Group as at 16 December 2021 are as follow:

	RMB'000
Purchase consideration	
Cash paid	–
Amounts due from Honghua (Jiangsu)	1,555,368
Investment in Honghua (Jiangsu) as an associate before 16 December 2021	–
Total purchase consideration	1,555,368

	Fair value RMB'000
Cash	162
Trade and other receivables	290,497
Inventory	169,125
Property, plant and equipment	1,137,003
Right of use assets	150,235
Trade and other payables	(65,539)
contract liabilities	(68,053)
Deferred income tax liabilities	(58,062)
Net identifiable assets acquired	1,555,368

35 Balance sheet and reserve movement of the Company

Balance sheet of the Company

	Note	As at 31 December 2021 RMB'000	2020 RMB'000
ASSETS			
Non-current assets			
Investments in subsidiaries		**3,938,691**	4,032,590
Total non-current assets		**3,938,691**	4,032,590
Current assets			
Other receivables		**206**	71
Amounts due from subsidiaries		**898,043**	1,014,328
Cash and cash equivalents		**580**	353
Total current assets		**898,829**	1,014,752
Total assets		**4,837,520**	5,047,342
EQUITY			
Equity attributable to owners of the Company			
Share capital		**488,023**	488,023
Other reserves	(a)	**3,523,516**	3,620,101
Accumulated losses	(a)	**(840,781)**	(773,679)
Total equity		**3,170,758**	3,334,445
LIABILITIES			
Non-current liabilities			
Borrowings		**–**	1,332,857
Current liabilities			
Borrowings		**1,306,491**	–
Other payables		**360,271**	380,040
Total liabilities		**1,666,762**	1,712,897
Total equity and liabilities		**4,837,520**	5,047,342

The balance sheet of the Company was approved by the Board of Directors on 29 March 2022 and was signed on its behalf:

Jin Liliang
Director

Ren Jie
Director

35 Balance sheet and reserve movement of the Company (Continued)

Balance sheet of the Company (Continued)

(a) Reserve movement of the Company

	Share capital RMB'000	Share premium RMB'000	Other reserve RMB'000	Capital reserve RMB'000	Exchange reserve RMB'000	Shares held for share award scheme RMB'000	Accumulated losses RMB'000	Total RMB'000
Balance at 1 January 2020	488,023	3,597,179	389,691	99,993	(126,852)	(124,618)	(674,725)	3,648,691
Loss for the year	–	–	–	–	–	–	(98,954)	(98,954)
Other comprehensive income	–	–	–	–	(215,294)	–	–	(215,294)
Total comprehensive income	–	–	–	–	(215,294)	–	(98,954)	(314,248)
Equity-settled share-based transactions	–	–	–	2	–	–	–	2
Total transactions with owners, Recognised directly in equity	–	–	–	2	–	–	–	2
Balance at 31 December 2020	488,023	3,597,179	389,691	99,995	(342,146)	(124,618)	(773,679)	3,334,445
Balance at 1 January 2021	**488,023**	**3,597,179**	**389,691**	**99,995**	**(342,146)**	**(124,618)**	**(773,679)**	**3,334,445**
Loss for the year	**-**	**-**	**-**	**-**	**-**	**-**	**(69,482)**	**(69,482)**
Other comprehensive income	**-**	**-**	**-**	**-**	**(94,205)**	**-**	**-**	**(94,205)**
Total comprehensive income	**-**	**-**	**-**	**-**	**(94,205)**	**-**	**(69,482)**	**(163,687)**
Shares issued under share option scheme	**-**	**-**	**(2,380)**	**-**	**-**	**-**	**2,380**	**-**
Total transactions with owners, Recognised directly in equity	**-**	**-**	**(2,380)**	**-**	**-**	**-**	**2,380**	**-**
Balance at 31 December 2021	**488,023**	**3,597,179**	**387,311**	**99,995**	**(436,351)**	**(124,618)**	**(840,781)**	**3,170,758**

36 Benefits and interests of directors

(a) Directors', supervisors' and senior management's emoluments

The remuneration of every director and the chief executive is set out below:

For the year ended 31 December 2021:

Emoluments paid or receivable in respect of a person's services as a director, whether of the Company or its subsidiaries undertakings.

Name	Fees RMB'000	Basic salaries, allowances and other benefits in kind RMB'000	Contributions to defined contribution retirement scheme RMB'000	Discretionary bonuses RMB'000	Equity-settled share-based payment expenses RMB'000	Total RMB'000
Chairman and Executive Director						
Jin Liliang	–	711	73	–	–	784
Executive Directors	–	–	–	–	–	
Zhang Mi	–	641	–	–	–	641
Ren Jie	–	532	73	363	–	968
Non-executive Directors						
Chen Wenle	–	–	–	–	–	–
Han Guangrong (i)	–	–	–	–	–	–
Wang Xiuchang (ii)	–	–	–	–	–	–
Independent Non-executive Directors						
Chen Guoming	100	–	–	–	–	100
Su Mei	100	–	–	–	–	100
Liu Xiaofeng (iii)	176	–	–	–	–	176
Poon Chiu Kwok (iv)	137	–	–	–	–	137
Chang Qing	100	–	–	–	–	100
Wei Bin	199	–	–	–	–	199
Total	812	1,884	146	363	–	3,205

(i) Mr. Han Guangrong tendered his resignation as a Non-Executive Director of the Company with effect from 28 October 2021.

(ii) Mr. Wang Xiuchang was appointed as a Non-Executive Director with effect from 28 October 2021.

(iii) Mr. Liu Xiaofeng tendered his resignation as an Independent Non-Executive Director, Chairman of
Remuneration Committee, a member of the Remuneration Committee, Audit Committee and Strategic
Investment and Risk Control Committee of the Company with effect from 19 November 2021.

(iv) Mr. Poon Chiu Kwok tendered his resignation as an Independent Non-Executive Director, and a member of Remuneration Committee, Audit Committee and Strategic Investment and Risk Control Committee of the Company with effect from 1 December 2021.

36 Benefits and interests of directors (Continued)

(a) Directors', supervisors' and senior management's emoluments (Continued)

The remuneration of every director and the chief executive is set out below:

For the year ended 31 December 2020:

Emoluments paid or receivable in respect of a person's services as a director, whether of the Company or its subsidiaries undertakings.

Name	Fees	Basic salaries, allowances and other benefits in kind	Contributions to defined contribution retirement scheme	Discretionary bonuses	Equity-settled share-based payment expenses	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
Chairman and Executive Director						
Jin Liliang	–	698	521	41	–	1,260
Executive Directors						
Zhang Mi	–	690	770	–	–	1,460
Ren Jie	–	617	643	41	–	1,301
Non-executive Directors						
Chen Wenle	–	–	–	–	–	–
Han Guangrong	–	–	–	–	–	–
Independent Non executive Directors						
Chen Guoming	107	–	–	–	–	107
Su Mei	107	–	–	–	–	107
Liu Xiaofeng	213	–	–	–	–	213
Poon Chiu Kwok	160	–	–	–	–	160
Chang Qing	107	–	–	–	–	107
Wei Bin	213	–	–	–	–	213
Total	907	2,005	1,934	82	–	4,928

36 Benefits and interests of directors (Continued)

(b) Directors' retirement benefits and termination benefits

For the years ended 31 December 2021 and 2020, no special retirement and termination benefits plans to the directors for the year except for the plans to all the Group's employees mentioned in Note 9. No other retirement and termination benefits were paid to or receivable by those directors in respect of their other services in connection with the management of the affairs of the Company or its subsidiary undertaking.

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

During the year ended 31 December 2021, the Company did not provide any consideration to any third party for making available director's services (2020: nil).

(d) Information about loans, quasi-loans and other dealings in favour of directors, controlled bodies corporate by and connected entities with such directors

During the year ended 31 December 2021, no loans, quasi-loans or other dealings in favour of directors of the Company, controlled bodies corporate by and connected entities with such directors (2020: nil).

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

Save for contracts amongst group companies and the interests in transactions, arrangements or contracts mentioned in Note 33, no other significant transactions, arrangements and contracts in relation to the Group's business to which the Company was a party and in which a director of the Company had a material interest, whether directly or indirectly, subsisted at the end of the year or at any time during the year.

37 Financial instruments by category

The Group holds the following financial instruments:

Financial Assets	Notes	**As at 31 December** **2021** **RMB'000**	2020 RMB'000
Financial assets at amortized cost			
– Trade and bills receivables	18	**3,145,086**	3,230,670
– Finance lease receivables	18	**82,640**	179,551
– Other receivables (include non-trade amounts due from related parties)	18	**400,972**	540,743
– Debt investment	19	**52,094**	97,906
– Loan to an associate and other related party	3.1(b)	**12,515**	1,415,392
– Pledged bank deposits	21	**204,640**	280,163
– Term Deposit	21	**90,000**	40,000
– Cash and cash equivalents	21	**703,417**	952,384
Financial assets at fair value through other comprehensive income			
– Bank acceptance bill receivables	3.3(c)	**1,371**	54,937
– Investment in unlisted companies at FVOCI	3.3(c)	**117,902**	106,338
		4,810,637	6,898,084

Financial liabilities	Notes	**As at 31 December** **2021** **RMB'000**	2020 RMB'000
Liabilities at amortized cost			
Trade and other payables (exclude payroll and welfare payables, other tax payables and receipts in advance)	25	**2,469,989**	2,572,704
Borrowings	26	**5,145,838**	4,484,861
Lease liabilities	16	**68,480**	88,317
		7,684,307	7,145,882

The Group's exposure to various risks associated with the financial instruments is discussed in Note 3. The maximum exposure to credit risk at the end of the reporting period is the carrying amount of each class of financial assets mentioned above.

38 Other Non-current assets

	As at 31 December	
	2021	2020
	RMB'000	RMB'000
Investment properties	**66,340**	6,986
unexpired insurance prepayments	**23,371**	31,264
Right of use assets improvements	**5,623**	4,872
Others	**5,231**	10,585
	100,565	53,707

FIVE-YEAR FINANCIAL HIGHLIGHTS

	2021 RMB'000	2020 RMB'000	2019 RMB'000	2018 RMB'000	2017 RMB'000
Consolidated Statement of profit or loss					
Revenue	**2,936,604**	3,931,492	4,425,686	4,205,162	2,175,856
Cost of sales	**(2,573,600)**	(2,751,127)	(3,109,852)	(3,122,890)	(1,540,763)
Gross profit	**363,004**	1,180,365	1,315,834	1,082,272	635,093
Distribution costs	**(161,975)**	(177,878)	(357,273)	(313,211)	(232,616)
Administrative expenses	**(480,621)**	(547,597)	(503,486)	(469,484)	(422,090)
Impairment losses on financial and contract assets	**(363,100)**	(267,752)	(190,989)	(93,829)	(133,094)
Other income	**89,308**	87,612	(11,954)	90,678	92,652
Other (losses)/gains,net	**(56,829)**	(47,334)	126,259	43,005	(43,319)
Operating (loss)/profit	**(610,213)**	227,416	378,391	339,431	(103,374)
Finance expenses – net	**(132,671)**	(126,359)	(208,903)	(163,405)	(214,203)
Share of net losses of associates and joint ventures accounted for using the equity method	**(2,460)**	(14,967)	(3,223)	(32,444)	(28,968)
(Loss)/profit before income tax	**(745,344)**	86,090	166,265	143,582	(346,545)
Income tax credit/(expense)	**11,343**	(25,950)	(33,776)	(33,897)	(48,651)
(loss)/Profit from continuing operations	**(734,001)**	60,140	132,489	109,685	(395,196)
Discontinued operations					
Loss from discontinued operations	**–**	–	–	(13,063)	(834,386)
(Loss)/profit for the year	**(734,001)**	60,140	132,489	96,622	(1,229,582)
(loss)/Profit attributable to:					
Owners of the company	**(717,191)**	49,660	107,472	82,287	(1,239,368)
Non-controlling interests	**(16,810)**	10,480	25,017	14,335	9,786
Basic (loss)/profit per share	**(13.54)**	0.94	2.03	1.55	(26.50)
Diluted (loss)/profit per share	**(13.54)**	0.94	2.03	1.55	(26.50)
Dividend					
Dividends declared and paid	**–**	–	–	–	–
Dividends declared and paid per share	**–**	–	–	–	–
Dividend proposed after balance sheet date	**–**	–	–	–	–
Dividend proposed after balance sheet date per share	**–**	–	–	–	–

FIVE-YEAR FINANCIAL HIGHLIGHTS

	2021 RMB'000	2020 RMB'000	2019 RMB'000	2018 RMB'000	2017 RMB'000
Consolidated Balance Sheet					
Total non-current assets	**4,998,483**	4,240,975	5,298,467	4,772,175	2,334,095
Total current assets	**6,749,427**	7,771,402	6,455,861	5,544,922	7,732,449
Total assets	**11,747,910**	12,012,377	11,754,328	10,317,097	10,066,544
Total current liabilities	**7,793,243**	5,170,292	5,033,409	5,374,100	3,938,579
Total non-current liabilities	**208,271**	2,347,458	2,240,542	624,086	1,950,315
Total liabilities	**8,001,514**	7,517,750	7,273,951	5,998,186	5,888,894
Total equity	**3,746,396**	4,494,627	4,480,377	4,318,911	4,177,650
Key financial ratios					
Profitability					
Gross margin from continuing operations	**12.4%**	30.0%	29.7%	25.7%	29.2%
EBITDA (loss margin)/margin	**(14.7%)**	10.4%	12.6%	11.7%	(24.0%)
Net (loss margin)/margin	**(24.4%)**	1.3%	2.4%	2.0%	(57.0%)
Return					
Return on average equity	**(18.4%)**	1.2%	2.6%	2.0%	(31.3%)
Return on average assets	**(6.0%)**	0.4%	1.0%	0.8%	(11.6%)
Liquidity					
Current ratio	**0.87**	1.50	1.28	1.03	1.96
Quick ratio	**0.63**	1.24	1.03	0.74	1.50
Turnover					
Turnover of average trade and bills receivable	**386**	297	247	191	172
Turnover of average trade and bills payable	**292**	292	239	174	128
Turnover of average inventory	**225**	174	166	198	160
Gearing					
Total debts/Total assets	**43.8%**	37.3%	34.1%	30.2%	32.9%
Gearing ratio	**68.1%**	62.6%	61.9%	58.1%	58.5%
EBIT/Interest expenses	**(2.73)**	0.98	1.66	2.07	(3.56)

FIVE-YEAR FINANCIAL HIGHLIGHTS

Note:

Profitability		
Gross margin	=	Gross profit/Revenue
EBITDA	=	(Loss)/profit from operations + Share of net losses of associates and joint ventures accounted for using the equity method + Depreciation + Amortisation
EBITDA (loss margin)/margin	=	EBITDA/Revenue
Net (loss margin)/margin	=	(Loss)/profit attributable to equity shareholders of the Company/Revenue
Return		
Return on average assets	=	(Loss)/profit attributable to equity shareholders of the Company/Average assets
Return on average equity	=	(Loss)/profit attributable to equity shareholders of the Company/Average equity attributable to equity shareholders of the Company
Liquidity		
Current ratio	=	Current assets/Current liabilities
Quick ratio	=	(Current assets – Inventory)/Current liabilities
Turnover		
Turnover of average trade and bills receivable	=	365.25*Average trade and bills receivable/Revenue
Turnover of average trade and bills payable	=	365.25*Average trade and bills payable/Cost of sales
Turnover of average inventory	=	365.25*Average inventory/Cost of sales
Gearing		
Total debts/Total assets	=	(Long term interest-bearing borrowings + Short term interest-bearing borrowings)/Total assets
Gearing ratio	=	Total liabilities/Total assets
EBIT/Interest expenses	=	(Loss)/profit from operations + Share of net losses of associates and joint ventures accounted for using the equity method)/Interest expenses (including capitalised interest)

宏华集团有限公司

HONGHUA GROUP LIMITED