ANTON 安東

2020 œANNUAL REPORT

Ä0^ «

Anton Oilfield Services Group

(Incorporated in the Cayman Islands with limited liability)

(Stock Code: 3337)

CONTENTS

ABOUT ANTONOIL

Anton Oilfield Services Group (Hong Kong Stock Exchange Stock Code: 3337) ("Antonoil" or the "Company" and, together with its subsidiaries, the "Group") is a leading integrated oilfield engineering and technical services provider. The Group provides clients with a full range of products and services for oil and gas development, with business throughout the world's major oil and gas production areas. The Group is an innovative company combined with the geological engineering and features production increase, cost reduction and integration. The Group is committed to the development of global oil and gas development in emerging markets. Its business covers many countries and regions, including China, the Middle East, Africa, central Asia, southeast Asia and Latin America, forming a rapidly responsive global service support system. The Group provides a full range of products and services in the oil and gas development process to meet the diverse needs of clients and help them maximize the value of oil and gas assets. The Group's comprehensive products and services include: products and services for the whole process of oil and gas development, a full range of professional resource services for oil and gas development, and integrated services in various forms. The Group's corporate culture is rooted in the traditional oriental culture. The Group's core values are Client-driven, Hard-working, Learning and innovation. The Group's mission is to help others succeed, share the fruits of success with employees internally and achieve win-win development with partners externally. The Group's vision is to be a model for the harmony between man and environment and high-efficiency development. In every construction work scene, the Group is committed to achieving the standard of "operation first" and creating value for clients to the maximum extent. In the process of development, the Group is committed to promote social progress and achieve harmonious development with the society.

BUSINESS

The Group provides a full range of services to help customers complete oil and gas field development and enhance production and reduce costs against various technical problems during the drilling, completion and production stages of field development.

The profit centers of the Group are based on the business clusters and the Group reports its results based on three clusters including drilling technology cluster, well completion cluster, and oil production cluster. Each business cluster is detailed as follows:

DRILLING TECHNOLOGY CLUSTER

Drilling technology cluster provides engineering technical services and products from drilling design, project organization and whole processes during the drilling stage to solve problems encountered in directional drilling, drilling assessment, drilling acceleration, enhanced reservoir contact and integrated drilling, the Group is a leading drilling technical service provider in China.

Integrated Drilling Services

The Group integrates new technologies for drilling, well completion and special tools; provides comprehensive technical services from design to matching tools, production technique and related equipment; integrates individual competitive drilling technologies and provides integrated drilling and well completion technical solutions.

Directional Drilling

The Group engineers operate the drilling tool set to drill wellbores along the pre-set path to enhance the oil and gas recovery rate by reaching the best position in the reserves, the Group is a leading directional drilling service provider in China and its services include directional drilling technology, sidetracking drilling technology and steerable drilling technology.

Drilling Tool Rental and Technical Service

The Group provides drilling tool rental, rehabilitation and anti-abrasion service, tubular processing and manufacturing and storage solutions.

Drilling Rig Service

The Group operates rigs to complete drilling jobs, including the delivery of service with self-owned rigs and third party owned rigs under management.

Oilfield Waste Management

The Group applies advanced technology and combines domestic and international resources to offer waste and pollutants management service throughout oil and gas exploration and development such as oil-based drilling fluid and drill cutting treatment and fracture fluid treatment.

The Group also provides drilling fluid system comprising oil-based muds, high-performance water-based muds and biosynthetic-based environmentally friendly drilling fluid system, intended to address down-hole complications, shorten the drilling cycle and increase drilling speed. The Group has a team of senior drilling fluid technical experts, oil-based mud station, R&D center and the mud materials plant with first class equipment, providing customers with integrated services including drilling fluid on-site services, drilling fluid technology R&D, technical research and design, and sales services.

Oil and Gas Production Facilities Inspection and Assessment Technology

The Group enjoys China National Accreditation Service (CNAS) lab status for instruments and Chinese and US Non- destructive Testing (NDT) qualifications; adopts international standards to conduct site testing service for oil production equipment, devices and instruments for customers across petrochemical, pharmaceutical, machinery manufacturing and electronics. It also concludes tubular helium testing services which use the mixed gas of helium and nitrogen to test tubing threaded connector against helium leak in the natural gas wells, thus solving the problem of helium connector leak. It is important to guarantee production safety of high pressure wells, sulfur-rich wells and key natural gas wells.

WELL COMPLETION CLUSTER

The Group provides integrated well completion and stimulation services from integrated solutions for well cementing and completion, production well completion, equipment, tools and materials. The Group is a leading well completion technical service and tool provider in China, which provides technical services and products to solve various technical problems experienced by oil companies during well completion stage. It designs well completion solutions and techniques comprised of various well completion tools for different formations and reservoirs, thus completing the preparation works as necessary for wellbore completion and oil production. Its services include well completion integration, screen well completion, gravel packing completion and oil production tools.

Integrated Completion Services

The Group provides well completion engineering design and implementation service for low-permeability naturally fractured reservoirs and shale gas reservoirs; provides integrated services ranging from reservoir geological analysis consulting to well completion engineering design, well completion tools and liquid material; provides monitoring service for stimulation measures.

Completion Tools

The Group provides a host of well cementing and completion tools and production well completion tool services; addresses various kinds of technical complications in open-hole well completion and casing well completion. It also has capacity of production proprietary tools.

Sand Screen and Water Control services

The Group provides the most diverse range of sand control completion tools and integrated design for sand control well completion, sand-screen and water control; provides sand control well completion stimulation service with high-pressure gravel packing as the core offering; provides supporting services for AICD water control. The screen well completion tools of the Group include composite screens, punched slotted screens, sand screens, pack screens, wire wrapped screens, slotted screens and innovative water control screens.

Fracturing/Acidizing Technique and Chemical materials

The Group focus on acidizing and fracturing stimulation technologies development, provides integrated solutions from stimulation technology evaluation, design, down-hole chemicals and equipment engineering to enable integrated stimulation; provides R&D, manufacturing, marketing and technical services for down-hole chemicals for acidizing, fracturing, killing, and oil production (inflow and profile control) operations.

Fracturing and Pumping

The Group harnesses the hydraulic horsepower (HHP) of the pressure pumping equipment and other related operational capabilities to help clients implement pressure pumping design and solutions of varying scales, with the benefit of expanding the permeability of oil and gas reservoirs and improving production capacity. Pressure pumping has become the necessary measure to developing unconventional oil and gas reservoirs.

Coiled Tubing Services

The Group combines equipment and tools to form different processes and technologies with broad applications, including stimulation in low-permeability wells, special operations in ultra-complicated wells and regular operations in conventional wells including horizontal well cable testing and workover services such as sidetrack drilling, milling and fishing services.

OIL PRODUCTION CLUSTER

The Group provides engineering services and products for oil companies during well completion and production; enables economic recovery based on reservoir geological conditions through production operation management and ground process services.

Production Operation Management

The Group provides integrated oilfield management services to customers and also provides production operation management services for oilfield ground stations, including power engineering construction, operation, inspection and maintenance, artificial life technology design, management, optimization operation support, water injection, profile control, ground equipment maintenance and rehabilitation services etc.

Workover Services

The Group provides conventional and major workover for oil and gas wells, sidetrack, fishing, oil testing and well completion integrated operation and routine maintenance operation services.

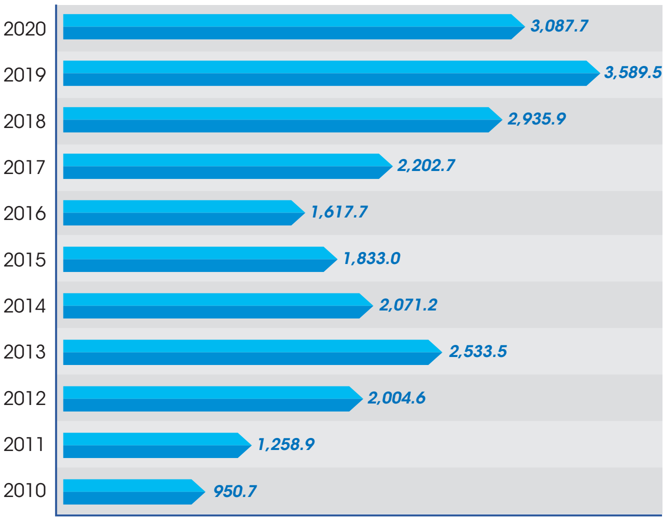
Tubing/Casing Repair and Anti-corrosion Service

The Group provides featured tubing and casing technical services with Premium Thread Design as the core offering; a reputable supplier of specialized tubes and casings for Chinese and overseas customers.

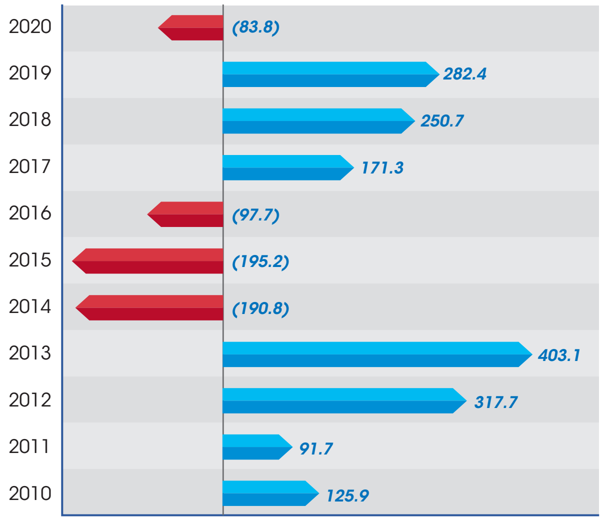
FINANCIAL SUMMARY

CONDENSED CONSOLIDATED INCOME STATEMENTS

	For the year ended 31 December				
RMB ('000)	2016	2017	2018	2019	**2020**
Revenue	1,617,675	2,202,702	2,935,888	3,589,497	**3,087,652**
Other gains, net	68,967	9,674	11,932	176	**40,279**
Operating costs	(1,543,446)	(1,738,682)	(2,303,557)	(2,870,091)	**(2,803,400)**
Operating profits	143,196	473,694	644,263	719,582	**324,531**
Finance costs, net	(173,379)	(267,872)	(297,454)	(295,133)	**(293,933)**
(Loss)/Profit before income tax	(30,591)	204,921	347,164	425,211	**30,739**
(Loss)/Profit for the year	(97,672)	171,274	250,721	282,420	**(83,760)**
Attributable to:					
Equity holders of the Company	(160,450)	54,495	222,423	268,583	**(95,844)**
Non-controlling interests	62,778	116,779	28,298	13,837	**12,084**
Dividends	–	–	30,107	–	**-**
(Loss)/Earnings per share attributable to the equity holders of the Company during the year (expressed in RMB per share)					
Basic	(0.0720)	0.0206	0.0792	0.0894	**(0.0322)**
Diluted	(0.0720)	0.0205	0.0783	0.0889	**(0.0322)**



REVENUE (RMB million)

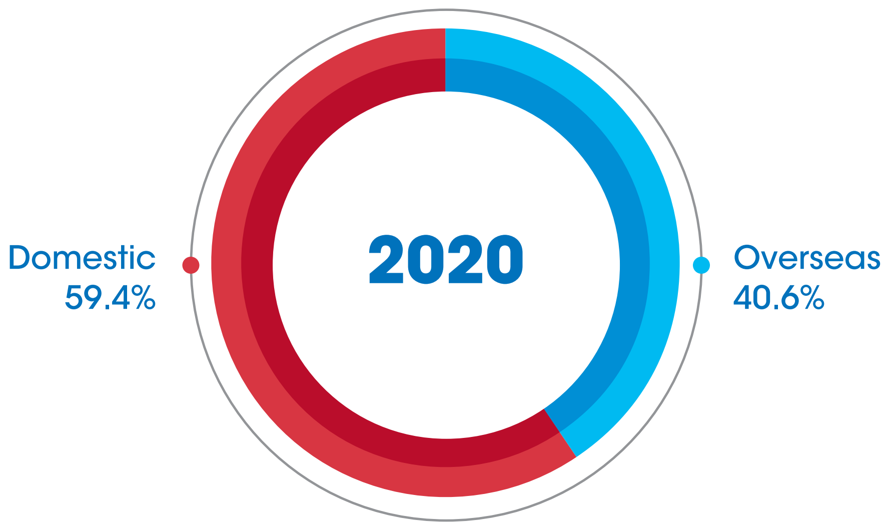


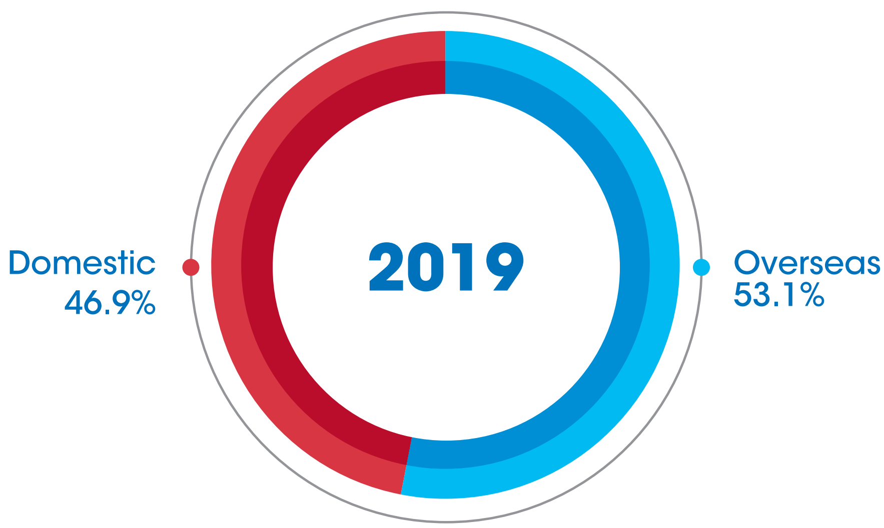
PROFIT/(LOSS) FOR THE YEAR (RMB million)

CONDENSED CONSOLIDATED FINANCIAL POSITION

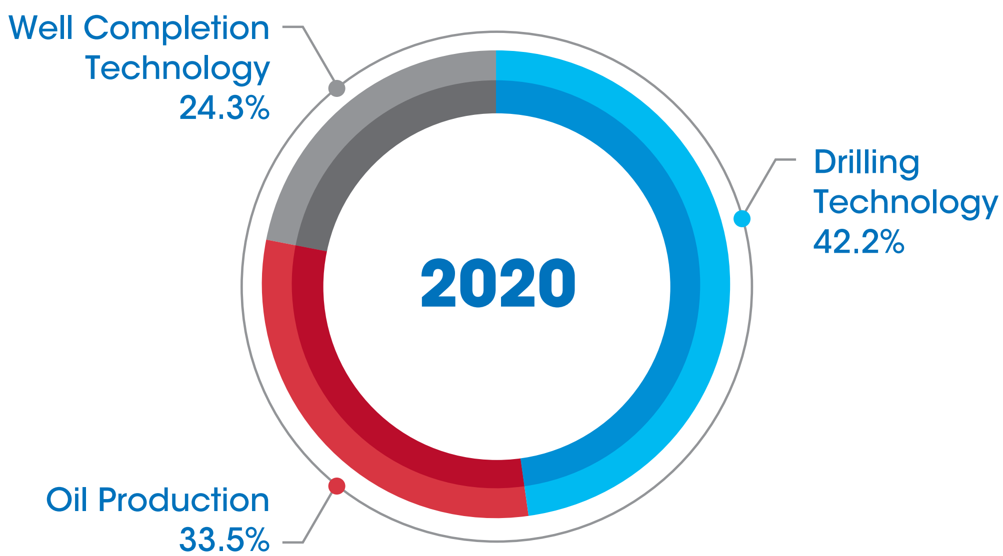
	As at 31 December				
RMB ('000)	2016	2017	2018	2019	**2020**
Assets					
Non-current assets	3,004,012	3,367,768	3,002,465	3,025,898	**2,847,367**
Current assets	3,657,269	4,379,707	4,244,136	6,480,914	**5,033,754**
Total Assets	6,661,281	7,747,475	7,246,601	9,506,812	**7,881,121**
Total Equity	1,976,897	2,946,992	2,694,562	2,957,663	**2,763,721**
Liabilities					
Non-current liabilities	2,504,217	1,932,702	2,305,184	2,310,327	**2,028,782**
Current liabilities	2,180,167	2,867,781	2,246,855	4,238,822	**3,088,618**
Total liabilities	4,684,384	4,800,483	4,552,039	6,549,149	**5,117,400**
Total equity and liabilities	6,661,281	7,747,475	7,246,601	9,506,812	**7,881,121**
Net current assets	1,477,102	1,511,926	1,997,281	2,242,092	**1,945,136**
Total assets less current liabilities	4,481,114	4,879,694	4,999,746	5,267,990	**4,792,503**

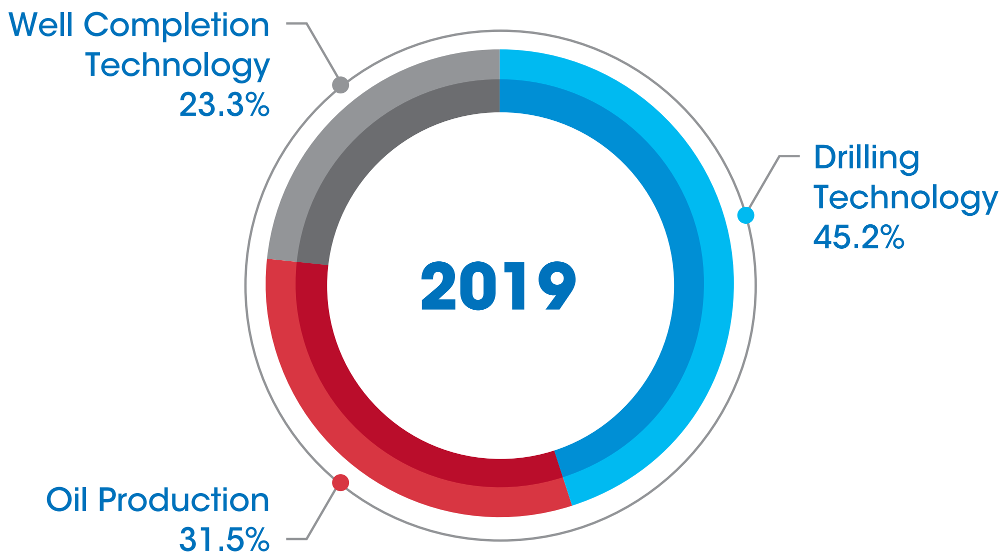
REVENUE BREAKDOWN BY REGION





REVENUE BREAKDOWN BY BUSINESS CLUSTERS





CHAIRMAN'S STATEMENT

LUO Lin
Chairman

Dear Shareholders

Under the dual influence from COVID-19 and plunge in global oil price, the oil industry faced unprecedented challenges in 2020, while thanks to our continuous construction of "Brand-new Anton" and our effective operating management with "cash flow" as the core, the Company withstood the severest challenges and maintained a relative stable operation in 2020.

In summary, there are several highlights in our business performance in 2020:

1. **Our risk resistance was reinforced by our globalized market structure.**
   In 2020, the global market was crippled by the widely spreading pandemic, our projects execution and staff mobilization in overseas markets were severely delayed as a result of quarantines and lockdown measures taken by local government where our business located. Thanks to the effective control over the pandemic in the Chinese market, our business in China fully resumed by the end of the first quarter, and maintained stable operation throughout 2020, we have achieved robust growth in natural gas markets as well as unconventional markets such as shale gas area and coal-bed methane area, revenue in the domestic market increased 8.9% year on year. The Group has also been seeking for new market opportunities actively, deployed in the West Africa markets, which may come to be a new growth engine for the Group under a recovering market environment.

2. **Our business maintained relatively stable, supported by our all-round services especially services from oilfield operating expenses.**
Capital expenditure projects in the whole industry have shrunk under the pandemic, while projects from the operating expenditure of customers stayed constant even in the downturn, the resilience of our oilfield management services was further proved. Our two oilfield management services projects in Iraq and Chad maintained smooth operation throughout 2020. As a result, revenue from oilfield operation service increased 4.4% year on year, which mitigated the overall impact of the pandemic on our overseas business.

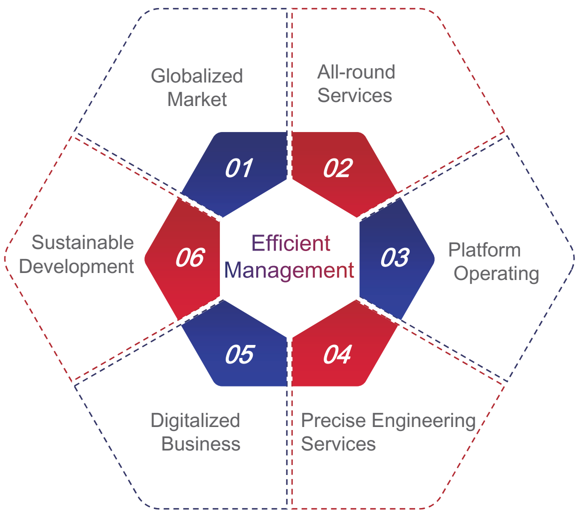
3. **Our competitiveness got further strengthened by our precise engineering services which enable us to precisely locate our target customer and project.**
We continue to implement precise engineering technical services that combine geology and engineering to help customers evaluate high-quality reservoirs, optimize development plans, and carry out precise development.

   During the year, the Group's precise engineering technology was fully promoted in the domestic unconventional shale gas regions, and comprehensive geological research was carried out in southern Chad oilfield in Africa, we provide precise modeling, and guidance of production operations to help customers achieve cost reduction and increase efficiency. In the long run, precision engineering technology will further help us accurately locate target customers and target projects, and enhance our market competitiveness.

4. **Persist in cash flow operations, maintained sufficient liquidity, and ensured financial security.**
During the year, the Group continued to adhere to cash flow management, implemented strict management and control of liquidity throughout the full project cycle, while seizing market opportunities, made proactive debt management to reduce financial expenses. In addition, the Group's leasing business introduced a strategic investor with a state-owned enterprise background and obtained 70.0 million yuan in cash investment to further ensure financial security. During the year, the Group not only successfully repaid the USD bonds due in December 2020, but also achieved continuous growth in free cash flow for three consecutive years.

5. **Promote management reform with the help of information technology to achieve long-term cost reduction and lift of efficiency.**
In terms of management, the Group makes full use of information technology to implement management reforms, promotes flat management, strengthens the power of the middle office management to comprehensively enlarge the support for the front desk of the business, and reduces the need for personnel on the front line. By these ways it will further optimizes the personnel Streamline and achieve long-term cost reduction and efficiency enhancement.

6. **Improve ESG governance, fully implement sustainable development, and release our first sustainability report.**
The Group attaches great importance to sustainable development. During the year, the ESG committee was established under the board of directors to lead and manage the group's ESG development from top to bottom. We continued to strengthen personnel training, promote technological innovation, and actively practice corporate social responsibility. During the pandemic, we made full use of the Group's global supply chain system and logistics transportation network to actively provide epidemic prevention supports to employees and their families, communities, and partners in domestic and overseas business locations. At the same time, we actively communicated with local governments and communities where we have business operations and provided supports for poverty alleviation. During the year, the Group was selected as one of ten "Beijing Precision and Advanced Industrial Design Centers", and was awarded the "Beijing Top 100 Private Technology", and was awarded the honorary title of "Advanced Poverty Alleviation Assistance Enterprise" in Aksalai Township, Luntai County. As an outstanding and recognized representative, a grassroots employee of the tubing and casing branch of the Group's inspection business was awarded the title of "National Model Worker." We published the Group's first sustainability report during the year.



OUTLOOK

Entering 2021, with the launch of international vaccines in many countries and the continuous advancement of vaccination, the pandemic is expected to gradually come under control, and global oil prices have also shown a significant rise. However, the impact of the pandemic on the execution efficiency of overseas projects has not been fully eliminated, and the market is still facing large uncertainty. The Group will continue to reform with a positive attitude and continue to implement the upgrade strategy to create a brand-new Anton. At the same time, under the new situation, we will actively seek development opportunities, to seize market, and strive for new development.

In terms of market, the Group will continue to adhere to the development of "**globalization**". In 2021, in the Chinese market, we will continue to focus on the development of natural gas and unconventional energy. We will collaborate with our customer and help them to create value on leveraging our cost-saving and efficiency-lifting precise engineering services. We will further improve our technical competitiveness, and further strive for more market. Overseas, with the recovery of oil prices, in some countries such as Chad and Niger where oil exports account for a considerable proportion of national fiscal revenues but are not subject to OPEC production cuts, we will make all-out efforts to seize market opportunities and achieve rapid development and stable growth. The Group's oilfield management business has maintained steady growth in the low oil price environment in 2020. We have full confidence in the rapid development of this business and will actively promote the oilfield management model globally to strive for more projects from the oil company's operating and maintenance expenses.

In terms of business, we will continue to optimize the "**all-round**" services. Based on our previous businesses, we have started to enter the low-carbon business and new energy business, using our market-oriented platform to help our customers conserve energy and reduce emissions, and at the same time, use our existing service capabilities to help customers to build underground carbon storage, gas storage, and help customers develop geothermal resources etc. In addition, we are also vigorously promoting the intelligent oilfield business to help oilfields achieve digital transformation. For these two businesses, we have established special companies to promote them with brand-new thinking and specialization.

We will continue to implement "**platform-based**" operations. We will build an ecological development platform and use Anton's platform-based advantages to fully introduce partners, including cross-industry partners, to better serve our oilfield customers in a full range. Combining Anton's global market network, business system, information system and QHSE management system to fully meet customer needs and promote the ecological development of China's oilfield service industry.

In terms of management, we will continue to improve information management through informatization empowerment, continue to promote empowerment collaboration, and to improve management efficiency through a decentralized flat management. On this basis, we will further implement precise incentives, fully activate talents through diversified incentive methods, maximize the effectiveness of talents to improve operating efficiency.

In terms of ESG (Environmental, Social and Governance), we will continue to uphold the corporate vision of "becoming a model of efficient and harmonious development of people and the environment", continue to build an advanced governance structure, create an environmentally friendly business model, help talents grow, and promote stakeholders' development, promote community progress, and achieve long-term harmonious development.

ACKNOWLEDGEMENT

On behalf of the board of directors, I would like to extend my sincere thanks to all employees, customers, partners and shareholders! Thanks to your long-term trust and support, we can tide over the difficulties time and time again and achieve new results. In 2021, the dawn of the industry's recovery is already in sight, and the Group has made all preparations to quickly recover in various markets. We believe that, with our good business model, continuous reforms, increasingly streamlined and efficient management, we will achieve continuous upgrades and achieve long-term high-quality and healthy growth!

Luo Lin
Chairman

28 March 2021

CORPORATE INFORMATION

BOARD OF DIRECTORS

Executive Directors

Mr. LUO Lin
Mr. PI Zhifeng
Mr. FAN Yonghong

Non-executive Director

Mr. HUANG Song

Independent Non-executive Directors

Mr. ZHANG Yongyi
Mr. ZHU Xiaoping
Mr. WEE Yiaw Hin

AUDIT COMMITTEE

Mr. ZHU Xiaoping (Chairman)
Mr. ZHANG Yongyi
Mr. WEE Yiaw Hin

REMUNERATION COMMITTEE

Mr. WEE Yiaw Hin (Chairman)
Mr. ZHU Xiaoping
Mr. LUO Lin

NOMINATION COMMITTEE

Mr. ZHANG Yongyi (Chairman)
Mr. WEE Yiaw Hin
Mr. LUO Lin

ESG ("ENVIRONMENT, SOCIETY AND GOVERNANCE") COMMITTEE

Mr. PI Zhifeng (Chairman)
Mr. LUO Lin
Mr. FAN Yonghong

AUTHORIZED REPRESENTATIVES

Mr. LUO Lin
Ms. Nelly AU-YEUNG

COMPANY SECRETARY

Ms. Nelly AU-YEUNG

COMPANY'S WEBSITE

www.antonoil.com

INVESTOR RELATIONS HOTLINE

+86 10 57397584
Email: ir@antonoil.com

PRINCIPAL PLACE OF BUSINESS IN HONG KONG

Level 54
Hopewell Centre
No. 183 Queen's Road East
Wanchai
Hong Kong

PRINCIPAL PLACE OF BUSINESS IN PRC

No. 8, Pingcui West Road, Donghuqu
Chaoyang District
Beijing, China 100102

REGISTERED OFFICE

PO Box 309, Ugland House
Grand Cayman KY1-1104
Cayman Islands

PRINCIPAL SHARE REGISTRAR AND TRANSFER OFFICE

Suntera (Cayman) Limited
Suite 3204, Unit 2A
Block 3. Building D
P.O. Box 1586
Gardenia Court
Camana Bay
Grand Cayman KY1-1110
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
Wanchai
Hong Kong

AUDITORS

Deloitte Touche Tohmatsu

LEGAL ADVISERS

as to Hong Kong and U.S. law:

Sidley Austin

as to PRC law:

Tiger Partners

as to Cayman Islands law:

Maples and Calder

PRINCIPAL BANKS

Citi Bank
Shanghai Pudong Development Bank
China Merchants Bank
Industrial Bank Co,. Ltd

STOCK CODE ON MAIN BOARD OF THE STOCK EXCHANGE OF HONG KONG LIMITED

3337

DATE OF LISTING

14 December 2007

MANAGEMENT DISCUSSION AND ANALYSIS

BUSINESS REVIEW

In 2020, the onslaught of the COVID-19 pandemic plunged the world economy into a downturn. Oil prices fell precipitously and the oil and gas industry faced huge challenges.

In the Chinese market, benefiting from the government's swift response to the epidemic and outstanding control measures, the Chinese economy reopened and recovered after the first quarter. Meanwhile, China remained anchored in its strategy to improve oil and gas self-sufficiency and ensure national energy security. As a result, oil company clients in the domestic market accelerated the development of oil and gas resources while strictly complying with COVID-19 control policies. The demand for oilfield services in the domestic market remained buoyant, but due to the significant dips in oil prices, clients reduced significantly the rates of service fulfillment. In the overseas markets, in order to contain the spread of the virus, countries around the world introduced travel restrictions and quarantine procedures, which prevented oil companies and service providers from deploying personnel to the field or moving equipment as freely as they did in normal times, and forced the suspension of many large-scale, asset-heavy projects. This had significant impact on the Group's business in Iraq and other Belt and Road countries.

In the face of this challenging industry climate, the Group seized the opportunities in natural gas and unconventional resources development in the domestic market, and leveraged its technological strengths to actively secure service orders. In the overseas markets, the Group prioritized the uncompromised high-quality execution of asset-light oilfield management projects and the further rollout this business model. During 2020, the Group's integrated oilfield management contract at the Majnoon oilfield in Iraq was renewed by the client for service excellence; the oilfield management project in Chad in West Africa was successfully commissioned. Despite the tough market conditions, the Group's oilfield management business model demonstrated resilience and delivered growth during the reporting period, which provided welcome cushion against the full-blown impact of the pandemic on the Group's overseas business.

The Group firmly implemented a management approach with cash flow management at the core and tight control throughout the lifecycle of projects and with accelerated turnover in working capital. At the same time, the Group strengthened its partnership with Chinese banks and increased its available credit lines to ensure ample liquidity on the book. In addition, the Group carried out proactive debt management, repurchased USD300 million 9.75% senior notes (the "2020 Notes") due December 2020 by tender offer at accommodating capital market conditions to alleviate the financial stress of a concentrated repayment-at-maturity. The Group also made multiple repurchases of the 2020 Notes and USD300 million 7.5% senior notes due 2022 (the "2022 Notes") in the secondary market to reduce financing costs. During the year, the Group had successfully completed the repayment of the 2020 Notes in full.

The Group actively promoted "digitalization" construction, made full use of information platforms to optimize its management models, streamline its management structures, improve management efficiency, and reduce labor costs.

The Group also made active progress in developing synergies between industry and finance and adopted a platform and ecosystem-based strategy. On 21 December 2020, the Group signed an investment agreement with Chengdu Xiangtou Group, the largest state-owned investment group in Xindu District, Chengdu, and introducing Xiangtou as the Group's strategic partner. Xiangtou will invest RMB70.0 million to establish a joint venture with the Group where both parties can combine their comparative advantages to grow the Group's financial leasing business.

Thanks to strong efforts throughout the year, the Group withstood the heavy blow of the pandemic to its business and mitigated the impact to a manageable level. Moreover, despite the difficult market environment, the Group achieved a net operating cash inflow of RMB805.4 million, an increase of RMB195.1 million compared to 2019.

BUSINESS ANALYSIS

Geographical Market Analysis

In 2020, the Group's total revenue amounted to RMB3,087.7 million, representing a decrease of 14.0% compared to the full year of 2019. In breakdown, revenue from the domestic market amounted to RMB1,832.9 million, representing an increase of 8.9% compared to 2019 and accounting for 59.4% of the Group's total revenue; revenue from the overseas markets amounted to RMB1,254.8 million, representing a decrease of 34.2% compared to 2019 and accounting for 40.6% of the Group's total revenue. In particular, revenue from the Iraqi market amounted to RMB961.1 million, representing a decrease of 32.3% compared to 2019 and accounting for 31.1% of the Group's total revenue; revenues from other overseas markets amounted RMB293.7 million, representing a decrease of 39.6% compared to 2019 and accounting for 9.5% of the Group's total revenue.

Breakdown of Revenue by Market

	Twelve months ended 31 December			**% of total revenue of the Group Twelve months ended 31 December**	
	2020 (RMB'mn)	2019 (RMB'mn)	Change (%)	**2020**	2019
Overseas	**1,254.8**	1,906.2	-34.2%	**40.6%**	53.1%
Domestic	**1,832.9**	1,683.3	8.9%	**59.4%**	46.9%
Total	**3,087.7**	3,589.5	-14.0%	**100.0%**	100.0%

Overseas Market

	Twelve months ended 31 December			% of total revenue of the Group Twelve months ended 31 December	
	2020 (RMB'mn)	2019 (RMB'mn)	Change (%)	**2020**	2019
Iraq	**961.1**	1,419.8	-32.3%	**31.1%**	39.6%
Other overseas markets	**293.7**	486.4	-39.6%	**9.5%**	13.5%
Total	**1,254.8**	1,906.2	-34.2%	**40.6%**	53.1%

Domestic Market

In 2020, China was first hit by COVID-19 epidemic, but thanks to the Chinese government's effective epidemic prevention and control, the situation came under control quickly and production activities resumed across the country in the second quarter. The Group's project execution across regions also resumed in the second quarter. Throughout the year, the Group fully complied with the COVID-19 prevention and control policies of the local governments and ensured work safety, and on the other hand, maintained a relatively full execution of projects.

In addition, the Chinese government further intensified the development of oil and gas resources, staying the course of maintaining energy security. Oil companies responded to the government's call to continue scaling up reserves and production. The domestic market saw such strong momentum throughout the year, and demand for oilfield services remained strong. However, the plunge in oil prices led to a large drop in service price.

The Group seized market opportunities and focused on natural gas and unconventional oil and gas segments, focusing on high-quality orders that could meet the Group's cash flow policy. During the year, the Group won multiple large orders for asset-light leasing contracts in the Xinjiang market by virtue of its technical and resource advantages; in the shale gas market in Southwest China, the Group continued to maintain its leading market position as an independent provider and helped clients enhance production and reduce costs through precise engineering services that combine geological and engineering expertise. Its value proposition was highly recognized by the clients and recorded revenue growth in the year; in Shanxi and Erdos Basin, the Group was awarded multiple coal-bed methane and tight gas-related orders.

For the full year of 2020, the Company received new orders of approximately RMB2,494.1 million in the domestic market, representing a decrease of approximately 9.7% from RMB2,763.0 million recorded in 2019. The domestic market posted revenue of approximately RMB1,832.9 million for the year, up approximately 8.9% from RMB1,683.3 million in 2019.

Overseas Market

In 2020, the Group was hit by the confluence of COVID-19 and low international oil prices. As COVID-19 spread further and affected more countries for an extended period last year, many countries imposed quarantine requirements and traffic restrictions, which prevented the normal movement of people, transfer of equipment and shipment of materials, and forced many asset-heavy projects to a halt in the overseas markets. Therefore, the Group's overseas business was hit hard.

In response to COVID-19, the Group complied with the strict local epidemic prevention policies where it had activities to ensure the health and safety of its overseas employees. At the same time, it actively performed corporate social responsibility by preparing PPE and other essential goods and delivering them through its global supply chain to reach the local governments, communities, and partners in need of COVID control and livelihood protection. On the other hand, the Group focused on the continuity of its oilfield management service, while maintaining close communication with oilfield clients to prepare for the resumption of all suspended projects.

Iraqi Market

During the year, after a surge of COVID-19 cases, the Iraqi government enforced strict control measures by closing borders, cutting off international flights and imposing strict travel restrictions between provinces within Iraq to minimize the movement of people. In light of these developments, the management of the Group consciously and prudently reduced the order backlog in Iraq by RMB1,201.9 million in the first quarter of 2020 to cope with such changes and their likely impact on the Group's business in the country.

Multiple asset-heavy projects in Iraq, such as drilling, were suspended one after another as the pandemic unfolded, but the Majnoon oilfield, an important source of fiscal revenue for Iraq, kept producing steadily and continuously and the Group's revenue and cash flow from oilfield management service onsite remained stable. Thanks to the Group's excellent services, the client extended the service contract in the first quarter of 2020, allowing automatic extension of the existing two-year contract for another twelve months till 1 July 2021 upon expiration. The Group is also in the process of negotiating with the client for a new contract cycle and is confident that its excellent services in managing the project will continue to create value for the client in the long run, helping the client achieve efficient and top-quality development of resources.

In 2020, the Company received new orders of approximately RMB1,190.0 million in Iraq, a decrease of approximately 44.3% from RMB2,137.2 million in 2019, and recorded revenue of approximately RMB961.1 million, a decrease of approximately 32.3% from RMB1,419.8 million in 2019.

Other Overseas Markets – Emerging Markets

During the year, the execution of the Group's business activities in other overseas markets was similarly affected by the spread of COVID-19, and the construction of drilling and completion projects across multiple markets, including Kazakhstan and Pakistan, was postponed. However, the Group's oilfield management project in Chad in West Africa started producing smoothly during the year and operated stably during the year.

In 2020, the Group's other overseas markets together received new orders of approximately RMB623.7 million, representing a decrease of approximately 34.7% from RMB955.2 million in 2019; the combined revenue reached approximately RMB293.7 million, representing a decrease of approximately 39.6% from RMB486.4 million in 2019.

Business Cluster Analysis

Due to COVID-19, the Group's business clusters experienced varying degrees of decline during the year. During the reporting period, the Group's revenue from the drilling technology services cluster amounted to RMB1,303.9 million, representing a decrease of approximately 19.7% compared to 2019 and accounting for 42.2% of the Group's revenue for 2020; revenue from the well completion cluster amounted to RMB750.0 million, representing a decrease of approximately 10.3% compared to 2019 and accounting for 24.3% of the Group's total revenue for 2020. The oil production service cluster reported revenue of RMB1,033.8 million for the year, representing a decrease of approximately 8.5% from RMB1,129.3 million in 2019 and accounting for 33.5% of the Group's total revenue.

Revenue Breakdown by Cluster

	Twelve months ended 31 December			% of total revenue Twelve months ended 31 December	
	2020 (RMB'mn)	2019 (RMB'mn)	Change (%)	**2020**	2019
Drilling technology cluster	**1,303.9**	1,624.2	-19.7%	**42.2%**	45.2%
Well completion cluster	**750.0**	836.0	-10.3%	**24.3%**	23.3%
Oil production service cluster	**1,033.8**	1,129.3	-8.5%	**33.5%**	31.5%
Total	**3,087.7**	3,589.5	-14.0%	**100.0%**	100.0%

Drilling Technology Cluster

In 2020, the Group's revenue from the drilling technology cluster was registered at RMB1,303.9 million, representing a decrease of 19.7% from the revenue of RMB1,624.2 million in 2019.

Analysis of major product lines in this cluster:

1) Integrated drilling service: During the reporting period, revenue from the integrated drilling service amounted to RMB124.2 million, representing a decrease of approximately 66.2% from revenue of RMB367.7 million in 2019. The decline was mainly due to the suspension of large integrated drilling projects in the overseas markets such as Iraq due to the pandemic.

2) Directional drilling services: During the reporting period, directional drilling services recorded revenue of RMB84.9 million, representing a decrease of approximately 54.4% from RMB186.3 million in 2019. The decline was mainly due to the suspension of directional drilling projects in the overseas markets such as Iraq and Chad.

3) Drilling rig services: During the reporting period, drilling rig services recorded revenue of RMB601.4 million, representing an increase of approximately 64.0% from RMB366.6 million in 2019. The growth was mainly attributable to the Group's initiative to seek breakthroughs in a difficult climate. The Group designed financing solutions and secured access to financing for clients and won a large drilling rig services contract in Pakistan.

4) Oilfield waste management services: In 2020, oilfield waste management services recorded revenue of RMB118.0 million, representing a decrease of approximately 45.6% from RMB216.9 million in 2019, mainly due to reduced overseas demand for drilling fluid and completion fluid services and the reduced service price from domestic clients.

   Note: As a result of the restructuring of the Group's product lines, the "drilling and completion fluid services" product line was merged into the "oilfield waste management services" product line in 2020. The revenue from the "drilling and completion fluid services" product line was incorporated into the "oilfield waste management services" product line for 2019 to allow like-for-like comparison.

5) Drilling tool rental and services: During the reporting period, this product line recorded revenue of RMB251.9 million, representing a decrease of approximately 17.6% from RMB305.6 million in 2019, mainly due to the reduction in service price by clients.

6) Oil production facilities inspection and evaluation services: In 2020, this product line recorded revenue of RMB123.5 million, a decrease of 27.3% from RMB169.9 million in 2019. The decrease was mainly due to the reduction in service price by clients.

The EBITDA of the drilling technology cluster decreased by 39.7% to RMB412.5 million in 2020 from RMB684.5 million in 2019, with an EBITDA margin of 31.6%, a decrease of 10.5 percentage points from 42.1% in 2019, mainly due to the disruptions of the Group's high-margin drilling service projects as a result of COVID-19 and the lower service price offered by some domestic clients.

Well Completion Cluster

In 2020, the Group's well completion technology cluster posted revenue of RMB750.0 million, a decrease of 10.3% from RMB836.0 million in 2019.

Analysis of major product lines in this cluster:

1) Well completion integration: During the reporting period, well completion integration services recorded revenue of RMB101.0 million, representing a decrease of approximately 49.6% from RMB200.4 million in 2019. The decrease was mainly due to delays in the implementation of overseas projects as a result of the pandemic.

2) Pressure pumping services: In 2020, pressure pumping services recorded revenue of RMB331.7 million, representing an increase of 21.1% from RMB274.0 million in 2019. The increase was mainly attributable to the execution of many new orders for pressure pumping services secured by the Group in the Shanxi coalbed methane and Erdos tight gas markets during the year.

3) Coiled tubing services: In 2020, this product line recorded revenue of RMB106.4 million, a decrease of 47.0% from RMB200.8 million in 2019. The decrease was mainly the result of delayed construction of the coiled tubing project in Iraq due to the pandemic.

4) Fracturing/acidizing and chemical materials: During the reporting period, this product line recorded revenue of RMB66.7 million, up 40.4% from RMB47.5 million in 2019, mainly from the growth of fracturing services in Shanxi and Erdos in China.

5) Gravel packing services: This product line recorded revenue of RMB144.2 million in 2020, an increase of 28.1% compared to RMB112.6 million in 2019.

The EBITDA of the well completion cluster decreased by 21.5% to RMB276.5 million in 2020 from RMB352.2 million in 2019, with an EBITDA margin of 36.9%, a decrease of 5.2 percentage points from 42.1% in 2019, mainly due to the suspension of some higher-margin overseas projects due to COVID-19.

Oil Production Service Cluster

In 2020, revenue from the oil production services cluster reached RMB1,033.8 million, a decrease of 8.5% from RMB1,129.3 million in 2019.

Analysis of major product lines in this cluster:

1) Production operation services: During the reporting period, production operation services recorded revenue of RMB823.3 million, up 4.4% from RMB788.5 million in 2019, mainly benefiting from the smooth operation of the Majnoon oilfield management project in Iraq and oilfield management project in Chad throughout the year.

2) Workover services: During the reporting period, workover services recorded revenue of RMB161.3 million, a decrease of 43.0% from RMB283.2 million in 2019, mainly suffering from delayed execution of overseas projects.

3) Oil tubing and casing and anti-corrosion technology services: During the reporting period, this product line recorded revenue of RMB49.2 million, a decrease of 14.6% from RMB57.6 million in 2019.

The EBITDA of the oil production services cluster decreased by 19.7% to RMB376.5 million in 2020 from RMB468.7 million in 2019, with an EBITDA margin of 36.4%, a decrease of 5.1 percentage points from 41.5% last year. The decline in EBITDA for the oil production services cluster was mainly due to construction delays of some of the higher-margin workover projects relative to the asset-light oilfield management business. The two large asset-light management projects in this cluster contributed stable revenue streams and cash flows to the Group throughout the year.

Strategic Resources Alignment

In 2020, the Group continued to maintain tight control on new capital expenditures and maintain safe levels of liquidity in strict accordance with the "asset-light" business model guideline and firmwide discipline with cash flow management at the core, while, as part of the payment the Group had made for the previous investment was done through notes, which due in the first half of 2020, was recorded as outflow in this year, net capital expenditure for the year amounted to RMB169.9 million, representing an increase of 66.7% from RMB101.9 million in 2019.

Alignment of Investment

In 2020, the Group's investments were mainly in supplementary equipment for projects under implementation.

Alignment of Research and Development ("R&D")

In 2020, recognizing clients' practical needs for production increase and cost reduction, and along with the increasing demand for efficient and environmentally friendly products under the Group's sustainable development concept, the Group improved and reinvented relevant technologies and tools and promoted the optimization and upgrade of the Group's products through technical cooperation. In 2020, the Group invested RMB56.3 million in research and development, an increase of 8.9% from RMB51.7 million in 2019. Key research pipelines include:

– Strengthen research and application of "Sweet-spot" technology regarding to reservoir engineering

– Development and application of high-end production completion tools

– High-temperature, high-density, high-performance, environmentally-friendly water-based drilling fluid system

– Development of volumetric fracturing supporting technologies

– Automatic fluid control process and technology research project – Phase II

– Biosynthetic-based environmentally-friendly drilling fluid system Ant-Druid indoor research and field application

– Development of new emulsion breakers

Alignment of Human Resources

In 2020, in the face of the sudden outbreak of COVID-19, the Group responded swiftly and adequately complied with the rigorous COVID control policies to fully protect the health and safety of its employees. At the same time, recognizing the broad impact of the pandemic on the Group's overseas business, the Group promptly updated its HR policies by introducing flexible office and minimum pay leave depending on the specific circumstances of the business line. Such practices kept payroll costs moderate while maintaining business continuity. Further optimization was made towards employees that were unable to deliver business outcomes for a certain period of time. As at 31 December, 2020, the Group has a total workforce of 4,005, a decrease of 321 compared to 31 December, 2019.

During COVID-19, the Group intensified comprehensive training to upskill its workforce. During the year, the Group provided a full range of online training courses through its HR training platform, the Anton Academy, powered by digital tools. During the year, Anton Academy offered 212 training courses on subjects such as COVID prevention knowledge, information technology, language skills, finance, oil expertise and management skills, which were highly praised by the employees. Employee attendance of these training sessions reached 356,160.

During 2020, the Group implemented the Restricted Share Incentive Scheme for the first time and used the Company's own cash to purchase a total of 95,226,000 shares of the Company in the secondary market to incentivize employees during a period of low oil prices and encourage them to make a positive impact and thrive together with the Group in the long run.

Outlook

In 2021, new vaccines have been marketed and mass vaccination campaigns are starting one after another. The world economy is showing incipient signs of recovery. OPEC's continued discipline on crude production propped up crude oil prices significantly. In this context, the Group will continue to execute its upgrading strategy to create a brand new Anton, fully leverage its strengths, seize the opportunity of industry recovery, and promote high-quality business growth.

In terms of markets, the Group will continue to exploit its global markets and develop its all-round services. In the domestic market, the Group will continue to focus on natural gas and unconventional oil and gas development, and provide comprehensive services to help its clients achieve efficient oil and gas development. At the same time, driven by China's commitment to carbon neutrality by 2060, the Group will provide low-carbon solutions to our customer, actively explore the carbon capture and storages, geothermal energy and gas storage market. In the overseas markets, the Group will closely monitor the post-pandemic recovery of oil and gas development and further pursue partnership opportunities with more international oil companies and venture into new regional markets in Iraq. Meanwhile, it will engage closely with the client in the Majnoon oilfield and work towards the renewal of the oilfield management contract. The Group is confident that through quality management, it will continue to create value for the client and provide premier services of oilfield management for the long term. In other overseas markets, the Group is well positioned under the current oil price dynamics for promising growth in West Africa. In addition, the Group will establish a global strategy consulting team to help it to identify and capture market opportunities in a timely manner in emerging markets around the world, further expand its market footprint while unlocking value in mature regional markets. The Group will pursue large-scale integrated projects by providing a full spectrum of solutions around the diverse client needs while strictly managing risks and maintaining a safe liquidity position.

In terms of products, technologies and service capabilities, the Group will focus on precise engineering services that combine geological engineering and digital technology and closely align reservoir survey results with clients' engineering needs for oil and gas development. It will help maximize the value of oil and gas resources for its clients; make every effort to build an efficient solution-driven execution team, develop proprietary technologies with strong advantages, and achieve differentiation vis-à-vis its competition. It will enable and collaborate with its clients and partners to fully mobilize internal and external resources and progress towards a platform and ecosystem vision.

In terms of strategic resource alignment, the Group remains committed to positive free cash flow and high return on equity as its core objectives. It will make high-return investment and align strategic resources, increase technology investment and project investment, resolutely eliminate inefficient investment, and achieve optimal allocation of resources. It will adopt diverse and open forms of cooperation, engage the most advanced players in the oilfield service industry and beyond as strategic partners, establish a thriving ecosystem of partners. In terms of human resources, it will nurture fully committed entrepreneurs, put talent to productive use, share resources, drive synergies and collaboration, and share the fruits of success through targeted incentives.

On the financial side, the Group will aim towards its pre-pandemic performance as the baseline, seize market opportunities, set ambitious targets, embrace challenges and drive topline growth. It will continue to focus on free cash flow and return on equity as the core parameters of operations management, target premium clients and premium products, select projects wisely and develop an asset-light business model while improving margin through management fine-tuning and feedback. The Group will further deepen the integration of industry and finance, enlist external financial resources and assets, and drive large projects.

In terms of environmental, social and governance (ESG), the Group will continue to focus on its corporate vision of becoming "a model of harmonious development between man and environment", actively develop its new businesses in low-carbon and digital intelligence fields, and actively fulfill its corporate social responsibility, fully advancing for its sustainable development.

FINANCIAL REVIEW

Revenue

The Group's revenue in 2020 was RMB3,087.7 million, representing a decrease of RMB501.8 million or 14.0% from RMB3,589.5 million for 2019. The revenue decline was largely due to the broad-based impact of COVID-19 on the Group's overseas operations.

Costs of Sales

Cost of sales decreased by 1.3% from RMB2,308.0 million in 2019 to RMB2,277.8 million in 2020, lower than the pace of revenue decrease, mainly due to the increase of project operation costs affected by the pandemic, which leaded to the increase of lower gross margin projects.

Other Gains

Other gains increased by RMB40.1 million from RMB0.2 million in 2019 to RMB40.3 million in 2020, mainly gains on the Group's repurchase of 2020 USD-denominated bonds in the secondary market and from government grants and subsidies received during the year.

Impairment Loss on Financial Assets

Impairment loss on financial assets decreased from RMB87.7 million in 2019 to RMB83.4 million in 2020, down 4.9%. The impairment loss was mainly from the Group provides for impairment of accounts receivable in accordance with the expected credit loss model under IFRSs.

Selling Expenses

Selling expenses were RMB175.5 million in 2020, representing a decrease of RMB17.8 million, or 9.2%, from RMB193.3 million in 2019, mainly benefited from the Group's optimization of staffs, adjustment of salary structure and tight control on business expenses.

Administrative Expenses

Administrative expenses were RMB199.0 million in 2020, a decrease of RMB16.4 million, or 7.6%, compared to RMB215.4 million in 2019, mainly due to the savings on staff's expenses and strengthened control on various expenses.

R&D Expenses

Research and development expenses were RMB56.3 million in 2020, an increase of RMB4.6 million, or 8.9%, compared to RMB51.7 million in 2019.

Sales Tax and Surcharges

Sales tax and surcharges amounted to RMB11.4 million in 2020, representing a decrease of RMB2.6 million, or 18.6 percent, from RMB14.0 million in 2019.

Operating Profit

Operating profit in 2020 was RMB324.5 million, a decrease of RMB395.1 million, or 54.9%, from RMB719.6 million in 2019. The operating profit margin in 2020 was 10.5%, down 9.5 percentage points from 20.0% in 2019, mainly due to the lower than expected project executions affected by the COVID-19 pandemic, which resulted in a decrease in revenue, while fixed costs such as depreciation and labor costs still need to be recorded, operating profit decreased significantly.

Net Finance Costs

In 2020, net finance costs were RMB293.9 million, representing a decrease of approximately RMB1.2 million compared to RMB295.1 million in 2019.

Income Tax Expense

In 2020, income tax expense was RMB114.5 million, a decrease of RMB28.3 million from RMB142.8 million in 2019.

Profit/Loss for the Year

The Group reported a loss of RMB83.8 million in 2020, compared to a net profit of RMB282.4 million in 2019.

Profit/Loss Attributable to Equity Holders of the Company

In 2020, the Group's loss attributable to equity holders of the Company was RMB95.8 million, compared to a profit of RMB268.6 million in 2019.

Trade and Notes Receivables

As at 31 December 2020, the Group's net trade and notes receivables amounted to RMB2,133.8 million, representing a decrease of RMB66.4 million as compared to 31 December 2019. The average trade receivable turnover days for the year was 226 days, representing an increase of 30 days as compared to 2019.

Inventories

As at 31 December 2020, the value of the Group's inventories was RMB930.6 million, representing an increase of RMB165.1 million compared to that of 31 December 2019, mainly due to the effect of the slower overseas projects' execution which slowed down the turnover of the inventory, caused by the continuous global-wise spread of the COVID-19 pandemic.

Liquidity and Capital Resources

As at 31 December 2020, the Group had cash and bank deposits of approximately RMB1,333.3 million (including: restricted bank deposits, cash and cash equivalents), representing a decrease of RMB1,458.3 million as compared to 31 December 2019. This was mainly due to the Group's repayment in full of USD300 million worth of bonds during the year.

The Group's outstanding short-term borrowings as at 31 December 2020 amounted to approximately RMB764.0 million. Approximately RMB929.8 million of the credit facilities underwritten to the Group by domestic banks remained unused.

As at 31 December 2020, the Group's gearing ratio was 61.4%, representing a decrease of 5.6 percentage points from the gearing ratio of 67.0% as at 31 December 2019. The calculation of gearing is based on total borrowings divided by total capital. Total borrowings include borrowings, bonds, lease liabilities and trade and notes payables (as shown in the consolidated statement of financial position). Total capital is calculated based on equity (as shown in the consolidated statement of financial position) plus total borrowings.

As at 31 December 2020, equity attributable to equity holders of the Company was RMB2,626.1 million, a decrease of RMB276.0 million from RMB2,902.1 million as at 31 December 2019.

Acquisition and Disposal of Major Subsidiaries, Associates and Joint Ventures

During the twelve months ended 31 December 2020, the Group had no material acquisitions or disposals of subsidiaries, associates and joint ventures.

Exchange Risk

The Group conducts its business mainly in RMB and USD, and some of its import and export purchases are settled in foreign currencies. The Group maintains that the exchange risk involved in the Group's settlement amounts denominated in foreign currencies is not material. The Group's exchange risk mainly arises from its foreign currency deposits, trade receivables, and long-term bonds denominated in foreign currencies. Fluctuations in the exchange rate of RMB against USD may adversely affect the Group's operating results and financial position.

Cash Flow from Operating Activities

For the twelve months ended 31 December 2020, the Group's net cash flow from operating activities was a net inflow of RMB805.4 million for the year, representing an increase of RMB195.1 million over 2019, mainly due to the Group increased the proportion of notes payments to suppliers, resulted in a decrease in the amount of cash payments.

Capital Expenditure and Investment

The Group's net capital expenditure for the year 2020 was RMB169.9 million, of which RMB130.9 million was invested in fixed assets and RMB39.0 million in intangible assets.

Contractual Commitments

The Group's contractual commitments mainly comprise its capital commitments, which stood at approximately RMB79.6 million as at 31 December 2020 (but not yet provisioned for in the consolidated statement of financial position).

Contingent Liabilities

As at 31 December 2020, the Group did not have any material contingent liabilities or guarantees.

Pledge of Assets

As at 31 December 2020, the Group's assets pledged for bank financing were property, plant and equipment with a net book value of RMB328.1 million, right-of-use assets with a net book value of RMB5.5 million, and trade receivables with a net book value of RMB1,036.7 million.

Off-Balance Sheet Arrangements

As at 31 December 2020, the Group did not have any off-book arrangements.

DIRECTORS' REPORT

The Board of the Company is pleased to present the Directors' Report together with the audited financial statements of the Group for the year ended 31 December 2020.

PRINCIPAL ACTIVITIES

The Company acts as an investment holding company. The Group provides integrated oil and gas field development technical services covering the entire life cycle of oil and gas field development, including drilling, completion and oil production stages.

The Group's performance analysis based on segments is set out on Note 5.

RESULTS OF OPERATIONS

The financial results of the Group for 2020 are set out on pages 67 to 154 of this Annual Report.

FIVE YEAR FINANCIAL SUMMARY

The five year financial summary of the Group is set out on pages 6 to 7 in the section headed "Financial Summary" of this Annual Report.

FINAL DIVIDEND

At the Board meeting held on 28 March 2021, the Board did not recommend a payment of a final dividend for the year ended 31 December 2020(2019: NIL).

BUSINESS REVIEW

Overview

The fair review of the Group's business is detailed in the Management Discussion and Analysis on pages 16 to 24 of this annual report. The discussion constitutes a part of this Director's Report.

Principal Risks and Uncertainties

The Group provides oil and gas fields technical services, the main market risk and uncertainties come from the fluctuation of oil and gas price and oil and gas development activities. The Board of the Company pays close attention to the market condition and will change the Group's market strategy according to the market changes to ensure a stable business development of the Group.

Business Outlook

The business outlook of the Group is detailed in the Management Discussion and Analysis on pages 25 to 26 of this annual report. The discussion constitutes a part of this Director's Report.

Key Performance Indicators

The key performance indicators are detailed in the financial review set out in the Management Discussion and Analysis on pages 26 to 29 of this annual report. This discussion constitutes a part of this Directors' Report.

Environmental Policies and Performance and Compliance with Laws and Regulations

Matters in relation to Environmental Policies and Performance and Compliance with Laws and Regulations, please refer to the "2020 Sustainability Report" which would be published separately by the Group at a later time. The discussion constitutes a part of this Director's Report.

Relationships with Employees

Please refer to the "2020 Sustainability Report" which would be published separately by the Group. The discussion constitutes a part of this Director's Report.

Relationships with Customers and Suppliers

Main customers of the Group are domestic and overseas oil companies. The Group aims to provide its customer with high quality services as well as low costs and high efficiency. Target of the Group is to make oil and gas development much easier through the services it provides. The Group has formed a long- term strategic partnership with its main customers.

Main providers of the Group are equipment, tools and chemicals providers of this industry. The Group keeps good communication with those providers and formed close cooperation for the production and delivery according to the Group's business needs as well as lowering material costs according to long- term cooperation and batch purchases.

For matters in relation to Relationships with Customers and Suppliers, Please refer to the "2020 Sustainability Report" which would be published separately by the Group. The discussions constitutes a part of this Director's Report.

MAJOR CUSTOMERS AND SUPPLIERS

The largest customer and the five largest customers of the Group accounted for approximately 31.4% and 74.6% respectively of the Group's revenues for the year ended 31 December 2020.

For the year ended 31 December 2020, the total amount of purchases made by the Group from the largest supplier and its five largest suppliers accounted for 6.5% and 22.4% respectively of the total purchases for the year. As far as the Company is aware, none of the Directors, their associates and shareholders who are interested in more than 5% of the share capital of the Company has any interest in the five largest suppliers and customers.

SUBSIDIARIES

Particulars of the Company's subsidiaries are set out in Note 36 to the consolidated financial statements.

PROPERTIES, PLANT AND EQUIPMENT

Additions to the property, plant and equipment of the Group for the year ended 31 December 2020 totaled RMB293 million. Details of movements are shown under Note 6 to the consolidated financial statements.

SHARE CAPITAL

Details of the movements in share capital of the Company during the year are set out in Note 14 to the consolidated financial statements.

PRE-EMPTIVE RIGHTS

There is no provision regarding pre-emptive right under the Articles of Association of the Company and the Cayman Islands laws, which would oblige the Company to offer new shares on a pro rata basis to its existing shareholders.

PURCHASE, SALE OR REDEMPTION OF THE COMPANY'S LISTED SECURITIES

During the reporting period, the Group repurchased through tender offer USD102,737,000 aggregate principal amount of the Group's 9.75% senior notes due 2020 (the "2020 Notes"), repurchased USD92,638,000 aggregate principal amount of the 2020 Notes in the secondary market, and repaid the remaining USD104,625,000 aggregate principal amount of the 2020 Notes in cash on their maturity date in December 2020, thus completing the repayment of all the 2020 Notes. During the reporting period, the Group repurchased USD10,100,000 aggregate principal amount of the 7.5% senior notes due 2022 (the "2022 Notes") in the secondary market.

During the reporting period, the Group through the trustee purchased a total of 95,226,000 shares of the Company, representing 3.17% of the total number of issued shares of the Company at the time of the announcement regarding the purchase of such shares, in the secondary market for the Restricted Share Incentive Scheme of the Company.

Save as disclosed, neither the Company nor any of its subsidiaries has purchased, sold or repurchased any of the Company's listed securities during the year ended 31 December 2020.(2019: on 2 December 2019, the Company issued US$300 million 7.50% senior notes due in 2022 (the "Notes"). The Notes are listed on the Stock Exchange.)

RESERVES

Details of movements in the reserves of the Group and the Company during the year ended 31 December 2020 are set out in Notes 15 and 37 to the consolidated financial statements.

DISTRIBUTABLE RESERVES

As at 31 December 2020, the Company's reserves available for distribution amounted to RMB1,025.1 million.

BOND AND SENIOR NOTES

Details of the bonds and senior notes are set out in Note 16 to the consolidated financial statements.

EQUITY-LINKED AGREEMENTS

Save for the share option scheme of the Company disclosed in this Directors' Report on pages 30 to 44 and Note 14 to the consolidated financial statements, no equity-linked agreements were entered into by the Company during the year.

DIRECTORS

The members of the Board during the year and up to the date of this Annual Report are:

Executive Directors	
Mr. Luo Lin	(appointed on 3 August 2007)
Mr. Pi Zhifeng	(appointed on 25 March 2015)
Mr. Fan Yonghong	(appointed on 16 April 2019)
Non-executive Directors	
Mr. John William Chisholm	(resigned on 21 May 2020)
Mr. Huang Song	(appointed on 31 December 2020)
Independent Non-executive Directors	
Mr. Zhang Yongyi	(appointed on 17 November 2007)
Mr. Zhu Xiaoping	(appointed on 17 November 2007)
Mr. Wee Yiaw Hin	(appointed on 19 April 2017)

The biographical details of the Directors and senior management are set out under the section headed "Profiles of Directors and Senior Management" of this Annual Report.

In accordance with Article 130 of the Articles of Association, one-third of the Directors shall retire from office by rotation provided that every Director (including those appointed for a specific term) shall be subject to retirement by rotation at least once every three years. In addition, in accordance with the letters of appointment for two of the Independent Non-executive Directors, namely Mr. Zhang Yongyi and Mr. Zhu Xiaoping, they shall retire and being eligible, will offer themselves for re-election at the AGM. Accordingly, Mr. Pi Zhifeng, Mr. Zhang Yongyi and Mr. Zhu Xiaoping shall retire and being eligible, will offer themselves for re-election at the forthcoming annual general meeting (the "AGM") of the Company.

In accordance with Article 114 of the Articles of Association, Mr. Huang Song, being a non-executive director appointed within the year, shall only hold office to the next following general meeting. Accordingly, Mr. Huang Song shall retire at the AGM and, being eligible, shall offer himself for re-election.

DIRECTORS' SERVICE CONTRACTS AND LETTERS OF APPOINTMENT

Mr. Luo Lin, being the Executive Director, has renewed his service contract with the Company for a term of three years commencing from 3 June 2019, which may be terminated by not less than three months' notice in writing served by either party on the other.

Mr. Pi Zhifeng, being the Executive Director, has renewed his service agreement with the Company for a term of three years commencing from 25 May 2018, which may be terminated by not less than three months' notice in writing served by either party on the other.

Mr. Fan Yonghong, being the Executive Director, has entered into a service agreement with the Company for a term of three years commencing from 16 April 2019, which may be terminated by not less than three months' notice in writing served by either party on the other.

Mr. Huang Song, being the Non-executive Director, has entered into a letter of appointment with the Company under which he will act as a Non-executive Director for a period of 3 years with effect from 31 December 2020, which may be terminated by not less than three months' notice in writing served by either party on the other.

Mr. Zhang Yongyi and Mr. Zhu Xiaoping, being the Independent Non-executive Directors, has renewed their letter of appointment with the Company for a term of one year commencing from 9 January 2021, which may be terminated by not less than three months' notice in writing served by either party on the other.

Mr. Wee Yiaw Hin, being the Independent Non-executive Director, has renewed his letter of appointment with the Company for a term of 3 years commencing from 19 April 2020, which may be terminated by not less than three months' notice in writing served by either party on the other.

Save as disclosed above, no Director for re-election at the AGM has a service contract with the Company or any of its subsidiaries which is not determinable by the employing company within one year without payment of compensation other than the normal statutory compensation.

DIRECTORS' MATERIAL INTEREST IN TRANSACTIONS, ARRANGEMENT OR CONTRACTS

There was no transactions, arrangements or contract of significance connected to the business of the Group to which the Company, its subsidiaries, or its holding company or any of its fellow subsidiaries was a party and in which any Director and the Director's connected party had a direct or indirect material interest, subsisting at the end of the year or at any time during the year.

PERMITTED INDEMNITY PROVISION

During the financial year, the Company has in force indemnity provisions as permitted under the relevant statutes for the benefit of the Directors. The permitted indemnity provisions are provided for in the Company's Articles of Association in respect of potential loses and liability associated with legal proceedings that may be brought against such Directors and the payment of any sum primarily due from the Company that may be liable by the Directors.

MANAGEMENT CONTRACTS

No contracts concerning the management and administration of the whole or any substantial part of the business of the company were entered into or exited during the year.

DIRECTORS' INTERESTS IN COMPETING BUSINESS

None of the Directors and their respective associates (as defined in the Rules Governing the Listing of Securities on the Stock Exchange (the "Listing Rules") had an interest in any business which competes or may compete with the business in which the Group is engaged during the year.

Pro Development Holdings Corp. is beneficially controlled by Mr. Luo Lin, the Executive Director.

Pro Development Holdings Corp. and the Executive Directors have provided the Company with an annual confirmation in respect of the compliance with non-competition undertaking given by them.

The Independent Non-executive Directors have also reviewed the compliance by Pro Development Holdings Corp. and the Executive Directors with the Non-competition Undertaking during the year. The Independent Non-executive Directors have confirmed that, as far as they can ascertain, there is no breach by Pro Development Holdings Corp. and the Executive Directors of the non-competition undertaking given by them.

REMUNERATION OF DIRECTORS

In compliance with the Corporate Governance Code (the "Code") as set out in Appendix 14 to the Listing Rules, the Company has established a remuneration committee (the "Remuneration Committee") to make recommendations to the Board on the Company's policy and structure for all the Directors' remuneration. The Director's remuneration structure may include a director's fee, a fixed salary, share options and performance bonus. The Directors' remuneration is determined by the Board with reference to the Directors' duties and responsibilities, the recommendations of the Remuneration Committee and the performance and results of the Group. Details of the remuneration of the Directors are set out in Note 38 to the consolidated financial statements of this Annual Report.

CONFIRMATION OF INDEPENDENCE OF INDEPENDENT NON-EXECUTIVE DIRECTORS

The Company has received an annual confirmation of independence pursuant to Rule 3.13 of the Listing Rules from each of the Independent Non-executive Directors and considers that all the Independent Non-executive Directors, namely Mr. Zhang Yongyi, Mr. Zhu Xiaoping and Mr. Wee Yiaw Hin to be independent.

DIRECTORS' AND CHIEF EXECUTIVE'S INTERESTS AND SHORT POSITIONS IN SHARES, UNDERLYING SHARES AND DEBENTURES OF THE COMPANY AND ITS ASSOCIATED CORPORATIONS

As at 31 December 2020, the interests and short positions of the Directors and chief executive of the Company, underlying shares and debentures of the Company and its associated corporations (within the meaning of Part XV of the Securities and Futures Ordinance (the "SFO")) as recorded in the register required to be kept by the Company under Section 352 of the SFO or otherwise notified to the Company and The Stock Exchange of Hong Kong Limited (the "Stock Exchange") pursuant to the Model Code for Securities Transaction by Directors of Listed Issuers (the "Model Code") contained in Appendix 10 to the Listing Rules were as follows:

(i) Long positions in ordinary shares of HK$0.10 each:

Name of Director	Note	Capacity	Number of ordinary shares held	Approximate percentage of shareholding
LUO Lin	1, 2	Founder of a discretionary trust and beneficial owner	737,494,330	24.52%
PI Zhifeng	2	Beneficial owner	14,448,000	0.48%
FAN Yonghong	2	Beneficial owner	26,520,000	0.88%
ZHANG Yongyi	2	Beneficial owner	4,240,000	0.14%
ZHU Xiaoping	2	Beneficial owner	3,800,000	0.12%
WEE Yiaw Hin	2	Beneficial owner	2,900,000	0.09%

1. Pro Development Holdings Corp. is a company wholly-owned by Avalon Assets Limited and holds 664,140,740 Shares; Serangoon Limited and Seletar Limited owns 50% interest of Avalon Assets Limited respectively. Serangoon Limited and Seletar Limited are wholly-owned by Credit Suisse Trust Limited. Credit Suisse Trust Limited is the trustee of Loles Trust. Mr. Luo Lin is the founder of Loles Trust of which Mr. Luo Lin and his family members are the beneficiaries. By virtue of the SFO, Credit Suisse Trust Limited, Serangoon Limited, Seletar Limited, Avalon Assets Limited are deemed to be interested in the shares held by Pro Development Holdings Corp.

2. These share includes the share options granted to each director pursuant to the Company's Share Option Scheme ("Share Option Scheme") as well as the shares granted to each directors pursuant to the Company's Restricted Share Award Scheme ("Restricted Share Award Scheme"). Details of such options of each director were disclosed in the following "SHARE OPTION SCHEME" section.

Save as disclosed above, at no time during the year ended 31 December 2020, the Directors and chief executive (including their spouses and children under the age of 18 years) had or were deemed to have any interests or short positions in the shares, underlying shares or debentures of the Company, its particular undertakings or its associated corporations as required to be disclosed pursuant to the SFO or otherwise notified to the Company and the Stock Exchange pursuant to the Model Code.

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

As at 31 December 2020, so far was known to any Director or the chief executive, the substantial shareholders, other than the Directors or the chief executive of the Company, who had an interest or short position in the shares or the underlying shares of the Company as recorded in the register required to be kept by the Company pursuant to Section 336 of the SFO were as follows:

Long positions in the shares or underlying shares of the Company:

Name of Substantial Shareholders	Notes	Capacity	Long/Short Position	Number of Ordinary Shares Held	Approximate Percentage of Shareholding
Pro Development Holdings Corp.	1	Beneficiary Owner	Long Position	664,140,740	22.08%
China Oil HBP Science & Technology Co., Ltd.	2	Interest of controlled corporation	Long Position	193,766,678	6.44%

Notes:

1. Pro Development Holdings Corp. is a company wholly-owned by Avalon Assets Limited and holds 664,140,740 Shares; Serangoon Limited and Seletar Limited owns 50% interest of Avalon Assets Limited respectively. Serangoon Limited and Seletar Limited are wholly-owned by Credit Suisse Trust Limited. Credit Suisse Trust Limited is the trustee of Loles Trust. Mr. Luo Lin is the founder of Loles Trust of which Mr. Luo Lin and his family members are the beneficiaries. By virtue of the SFO, Credit Suisse Trust Limited, Serangoon Limited, Seletar Limited, Avalon Assets Limited are deemed to be interested in the shares held by Pro Development Holdings Corp.

2. Hong Kong Huihua Global Technology Limited, which is a company wholly-owned by China Oil HBP Science & Technology Co., Ltd. and holds 193,766,678 shares. By virtue of the SFO, China Oil HBP Science & Technology Co., Ltd. is deemed to be interested in the shares held by Hong Kong Huihua Global Technology Limited.

Save as disclosed above, as at 31 December 2020, so far was known to the Directors, no other persons (other than the Directors or the chief executive of the Company) had an interest or short position in the shares and underlying shares of the Company which would fall to be disclosed to the Company and the Stock Exchange under the provisions of Divisions 2 and 3 of Part XV of the SFO or as recorded in the register required to be kept by the Company under Section 336 of the SFO.

SHARE OPTION SCHEME

The existing share option scheme of the Company (the "Share Option Scheme") was adopted by the Company at the annual general meeting of the Company held on 26 May 2017. For the year ended 31 December 2020, the group granted a total of 113,439,592 share options for the company's ordinary share on 1 April 2020 according to the option scheme. The purpose of the Share Option Scheme is to grant option to the eligible participants in recognition and acknowledgement of their contributions made or to be made to the Group. Under the Share Option Scheme, the Board may offer to grant an option to any director or employee, or any advisor, consultant, suppliers, customers or agents.

The shares which may be issued upon exercise of all outstanding options granted and yet to be exercised under the Share Option Scheme and any other share option schemes of the Company at any time shall not exceed 30% of the shares in issue from time to time.

The maximum number of shares available for issue under options which may be granted under the Share Option Scheme or other share option scheme adopted by the Company must not in aggregate exceed 10% of the shares in issue as at the date of approval of the share option Scheme limit (i.e. 26 May 2017), being 266,006,925 shares.

As at the date of this Annual Report, the total number of shares available for issue which includes share options available to be granted and outstanding options under the Share Option Scheme was 444,726,259 shares, representing 14.8% of the issued share capital of the Company.

The total number of shares issued and which may fall to be issued upon exercise of the options granted pursuant to the Share Option Scheme to an eligible participant in any 12-month period shall not exceed 1% of the number of shares in issue as at the date of grant unless approved by the shareholders in general meeting.

The subscription price of a share in respect of any particular option granted under the Share Option Scheme shall be determined by the Board provided that it shall not be less than the highest of: (i) the closing price of the shares as stated in the Stock Exchange's daily quotation sheet on the date of grant; (ii) the average of closing prices of the shares as stated in the Stock Exchange's daily quotation sheets for the 5 business days immediately preceding the date of grant; and (iii) the nominal value of a share. Upon acceptance of the option, the grantee shall pay HK$1.00 to the Company by way of consideration for the grant. An option may be exercised in accordance with the terms of the Share Option Scheme at any time after the date upon which the option is deemed to be granted and accepted and prior to the expiry of 10 years from that date. The period during which an option may be exercised will be determined by the Board in its absolute discretion, save that no option may be exercised more than 10 years after it has been granted.

As at 31 December 2020, the Directors individually and other employees in aggregate of the Company had the following interests in options to subscribe for shares of the Company under the Share Option Scheme. Each option gives the holder the right to subscribe for one ordinary share of the Company of HK$0.10 each. Details of the movements in the number of share options during the year ended 31 December 2020 under the Share Option Scheme are as follows:

Grantees	Date of grant of share options	Exercise period of share options	Exercise price per share: HK$	Note	Number of share options as at 1 January 2020	Number of share options granted during the period	Number of share options exercised during the period	Number of share options cancelled during the period	Number of share options lapsed during the period	Number of share options as at 31 December 2020
Directors										
LUO Lin	2 December 2016	2 December 2017 to 1 December 2022	1.100	1,5	2,216,000	-	-	-	-	2,216,000
	23 May 2017	23 May 2018 to 22 May 2023	0.810	1,6	442,000	-	-	-	-	442,000
	3 April 2018	3 April 2019 to 2 April 2024	1.020	1,7	2,218,000	-	-	-	-	2,218,000
	7 January 2019	7 January 2020 to 6 January 2025	0.790	1,8	784,922	-	-	-	-	784,922
				Subtotal:	5,660,922					5,660,922
PI Zhifeng	1 April 2016	1 April 2017 to 31 March 2022	0.800	1,4	3,000,000	-	-	-	-	3,000,000
	23 May 2017	23 May 2018 to 22 May 2023	0.810	1,6	3,000,000	-	-	-	-	3,000,000
	3 April 2018	3 April 2019 to 2 April 2024	1.020	1,7	2,600,000	-	-	-	-	2,600,000
	7 January 2019	7 January 2020 to 6 January 2025	0.790	1,8	2,600,000	-	-	-	-	2,600,000
				Subtotal:	11,200,000					11,200,000

Grantees	Date of grant of share options	Exercise period of share options	Exercise price per share: HK$	Note	Number of share options as at 1 January 2020	Number of share options granted during the period	Number of share options exercised during the period	Number of share options cancelled during the period	Number of share options lapsed during the period	Number of share options as at 31 December 2020
FAN Yonghong	24 February 2016	24 February 2017 to 23 February 2022	0.74	1,3	2,700,000	-	-	-	-	2,700,000
	23 May 2017	23 May 2018 to 22 May 2023	0.810	1,6	2,700,000	-	-	-	-	2,700,000
	3 April 2018	3 April 2019 to 2 April 2024	1.020	1,7	3,500,000	-	-	-	-	3,500,000
	7 January 2019	7 January 2020 to 6 January 2025	0.790	1,8	4,020,000	-	-	-	-	4,020,000
				Subtotal:	12,920,000					12,920,000
Zhang Yongyi	1 April 2016	1 April 2017 to 31 March 2022	0.800	2,4	900,000	-	-	-	-	900,000
	23 May 2017	23 May 2018 to 22 May 2023	0.810	2,6	700,000	-	-	-	-	700,000
	3 April 2018	3 April 2019 to 2 April 2024	1.020	2,7	700,000	-	-	-	-	700,000
	7 January 2019	7 January 2020 to 6 January 2025	0.790	2,8	700,000	-	-	-	-	700,000
				Subtotal:	3,000,000	-	-	-	-	3,000,000
ZHU Xiaoping	1 April 2016	1 April 2017 to 31 March 2022	0.800	2,4	900,000	-	-	-	-	900,000
	23 May 2017	23 May 2018 to 22 May 2023	0.810	2,6	700,000	-	-	-	-	700,000
	3 April 2018	3 April 2019 to 2 April 2024	1.020	2,7	700,000	-	-	-	-	700,000
	7 January 2019	7 January 2020 to 6 January 2025	0.790	2,8	700,000	-	-	-	-	700,000
				Subtotal:	3,000,000	-	-	-	-	3,000,000

Grantees	Date of grant of share options	Exercise period of share options	Exercise price per share: HK$	Note	Number of share options as at 1 January 2020	Number of share options granted during the period	Number of share options exercised during the period	Number of share options cancelled during the period	Number of share options lapsed during the period	Number of share options as at 31 December 2020
WEE Yiaw Hin	23 May 2017	23 May 2018 to 22 May 2023	0.810	2,6	700,000	-	-	-	-	700,000
	3 April 2018	3 April 2019 to 2 April 2024	1.020	2,7	700,000	-	-	-	-	700,000
	7 January 2019	7 January 2020 to 6 January 2025	0.790	2,8	700,000	-	-	-	-	700,000
				Subtotal:	2,100,000	-				2,100,000
Employees in aggregate	24 February 2016	24 February 2017 to 23 February 2022	0.740	1,3	80,557,334	-	8,000	-	4,748,000	75,801,334
	1 April 2016	1 April 2017 to 31 March 2022	0.800	1,4	1,500,000	-	-	-	-	1,500,000
	23 May 2017	23 May 2018 to 22 May 2023	0.810	1,6	86,958,000	-	-	-	3,508,000	83,450,000
	3 April 2018	3 April 2019 to 2 April 2024	1.020	1,7	56,395,333	-	-	-	4,330,000	52,065,333
	7 January 2019	7 January 2020 to 6 January 2025	0.790	1,8	82,895,078	-	-	-	5,616,000	77,279,078
	1 April 2020	1 April 2021 to 31 March 2026	0.495	1,9	-	113,439,592	-	-	-	113,439,592
				Subtotal:	308,305,745	113,439,592	8,000	-	18,202,000	403,535,337
				Total	346,186,667	113,439,592	8,000	-	18,202,000	441,416,259

Notes:

1. The option period for the share options granted above commences on the date of grant and ends on the last day of seventy-two months counting respectively from the said date. The grantees are vested with, and entitled to exercise up to one-third of their share options during the option period commencing from each of the first, second and third anniversary of the date of grant.

2. The option period for the share options granted above commences on the date of grant and ends on the last day of seventy-two months counting respectively from the said date. The grantees are vested with, and entitled to exercise up to 50% of their share options during the option period commencing from each of the first and second anniversary of the date of grant.

3. The closing price of the Company's shares listed on the Stock Exchange immediately before the date on which the options were granted was HK$0.77.*

4. The closing price of the Company's shares listed on the Stock Exchange immediately before the date on which the options were granted was HK$0.81.*

5. The closing price of the Company's shares listed on the Stock Exchange immediately before the date on which the options were granted was HK$1.12.*

6. The closing price of the Company's shares listed on the Stock Exchange immediately before the date on which the options were granted was HK$0.84.*

7. The closing price of the Company's shares listed on the Stock Exchange immediately before the date on which the options were granted was HK$0.97.*

8. The closing price of the Company's shares listed on the Stock Exchange immediately before the date on which the options were granted was HK$0.84.*

9. The closing price of the Company's shares listed on the Stock Exchange immediately before the date on which the options were granted was HK$0.495.*

* Source from website of Hong Kong Exchange

SUFFICIENCY OF PUBLIC FLOAT

Based on the information publicly available to the Company and within the knowledge of the Directors, the Company has maintained a sufficient public float in compliance with the requirement of the Listing Rules during the year and to the date of this Annual Report.

CORPORATE GOVERNANCE

The Company has complied with the code provisions set out in the Corporate Governance Code (the "Code") contained in Appendix 14 to the Listing Rules during the year ended 31 December 2020.

ARRANGEMENTS TO ACQUIRE SHARE OR DEBENTURES

Save as disclosed under the section headed "Share Option Scheme" above, at no time during or at the end of the year was the Company or its subsidiaries a party to any arrangements which enabled the Directors (including their spouses or children under 18 years of age), to acquire benefits by means of acquisition of shares in, debentures of, the Company or any other body corporate.

DIRECTOR'S SECURITIES TRANSACTIONS

The directors of the Company (the "Directors") have adopted the Model Code for Securities Transactions by Directors of Listed Issuers (the "Model Code") as set out in Appendix 10 to the Listing Rules as the code of practice for securities transactions by the Directors. Having made specific inquiry with all the Directors, the Company confirms that all Directors have fully complied with the applicable requirements stipulated in the said Code throughout the reporting period.

TAXATION

For the year ended 31 December 2020, no foreign shareholder who is not resident of the PRC is liable for individual or Enterprise Income Tax, Capital Gains Tax, Stamp Duty or Estate Duty of the PRC in relation to their holding of shares of the Company. Shareholders are urged to consult their tax advisers regarding the PRC, Hong Kong and other tax consequences of owing and disposing of the Company's shares.

RELATED PARTY/CONTINUING CONNECTED TRANSACTIONS

The related party transactions for the year ended 31 December 2020 are set out in Note 36 to the Financial Statements of this Annual Report. None of the related party transitions continuing to connected transition or continuing connected transitions subject to independent shareholders' approval, annual review and will disclosure requirements in Chapter 14A of the Listing Rules.

AMENDMENTS TO THE MEMORANDUM AND ARTICLES OF ASSOCIATION

There had been no change to the Company's constitutional documents during the year ended 31 December 2020.

ANNUAL GENERAL MEETING

The annual general meeting of the Company (the "AGM") will be held on 25 May 2021 (Tuesday) and the notice of the AGM will be published and dispatched to the shareholders of the Company in due course in the form prescribed under the Rules Governing the Listing of Securities (the "Listing Rules") on the Stock Exchange of Hong Kong Limited (the "Stock Exchange").

CLOSURE OF REGISTER OF MEMBERS

The register of members of the Company will be closed from 20 May 2021 (Thursday) to 25 May 2021 (Tuesday), both days inclusive, during which period no transfer of shares will be registered. In order to qualify for attending and voting at the 2021 AGM, all transfers accompanied by the relevant documentation and share certificates must be lodged with the Company's Branch Share Registrar in Hong Kong, Computershare Hong Kong Investor Services Limited, at Shops 1712-1716, 17th Floor, Hopewell Centre, 183 Queen's Road East, Wanchai, Hong Kong, no later than 4:30 p.m. on 18 May 2021 (Tuesday).

AUDIT COMMITTEE

Pursuant to the requirements of the Code and the Listing Rules, the Company has established an audit committee (the "Audit Committee") comprising all three Independent Non-executive Directors, namely, Mr. Zhu Xiaoping (Chairman of the Audit Committee), Mr. Zhang Yongyi and Mr. Wee Yiaw Hin. The Audit Committee has reviewed the audited financial statements of the Group for the year ended 31 December 2020.

AUDITORS

The consolidated financial statements for the year ended 31 December 2020 have been audited by Deloitte Touche Tohmatsu, who shall retire and, being eligible, offer themselves for reappointment at the forthcoming annual general meeting of the Company. A resolution for the reappointment of Deloitte Touche Tohmatsu as auditor of the Company is to be proposed at the forthcoming annual general meeting of the Company.

By order of the Board

Luo Lin
Chairman

28 March 2021

PROFILES OF DIRECTORS AND SENIOR MANAGEMENT

EXECUTIVE DIRECTORS

LUO Lin (羅林), aged 54, is the Chairman and the founder of the Group, in charge of the overall business of the Group. Prior to establishing the Group, Mr. Luo worked at the Tarim Basin from 1992 to 1999. Mr. Luo has 29 years of experience in the petroleum industry. He has an Executive Master of Business Administration (EMBA) degree from Tsinghua University and a bachelor's degree in well bore engineering from Southwest Petroleum Institute (西南石油學院). Mr. Luo is also a certified lawyer and a chartered accountant in the PRC.

PI Zhifeng (皮至峰), aged 43, is the Executive Director and Chief Executive Officer of the Company, in charge of the Group's strategy making, the overall business operation target achievement and capital market work. Mr. Pi joined the Group in 2004, and was responsible for the management of strategies, business establishment and capital market. Prior to joining the Group, Mr. Pi was responsible for investment in China Chengxin Financial Consultancy Co., Ltd (中誠信財務顧問有限公司). Mr. Pi has a Master of Business Administration degree from the University of Chicago Booth School of Business in the U.S.

FAN Yonghong (范永洪), aged 50, is the Executive Director, the President and Chief Technology Officer of the Company, and is responsible for daily operations of the Company and its technical construction. Mr. Fan joined the Group in 2004, and was responsible for the setup and technical construction of the well service business and the management of business clusters of the Group. Prior to joining the Group, Mr. Fan was employed by PetroChina Tarim Oilfield Company (中石油塔里木油田分公司) between 1991 and 2004. He has 30 years of experience in the petroleum industry. Mr. Fan has an Executive Master of Business Administration (EMBA) degree from China Europe International Business School (CEIBS).

NON-EXECUTIVE DIRECTOR

HUANG Song (黃松), aged 58, is the Non-executive Director of the Company, is also a senior engineer of water supply and drainage who is an inventor of many patents in the industry and won the first prize of Science and Technology progress of Petro China. Mr. Huang acted as the Chairman and General Manager of Beijing Oil HBP Technology Co., Ltd from 1998 to 2009, he was also the former Chairman of China Oil HBP Science & Technology Co., Ltd ("China Oil HBP") from 2009 to 2019 and is currently the Vice Chairman and General Manager of China Oil HBP. Mr. Huang was appointed as an Engineer and Senior Engineer in The Investigation and Design Research Institute of Henan Petroleum Exploration Bureau of Sinopec from 1986 to 1998. Before his career in The Investigation and Design Research Institute of Henan Petroleum Exploration Bureau of Sinopec, he served in Henan Oilfield Drilling Company and Oil Recovery Technology Research Institute from 1981 to 1986.

INDEPENDENT NON-EXECUTIVE DIRECTORS

ZHANG Yongyi (張永一), aged 85, is the Independent Non-executive Director of the Company. Mr. Zhang has extensive experience in the petroleum industry. Mr. Zhang was appointed as the Deputy General Manager of CNPC in 1992. Prior to this, he had taught in the Southwest Petroleum Institute (西南石油學院) for more than 32 years. Mr. Zhang was appointed as Chairman of the Supervisory Committee for State-owned Large and Medium Enterprises (國有大中型企業監事會主席) in 2000 and appointed by the State Council of the PRC as inspector (國務院稽察特派員) in 1998.

ZHU Xiaoping (朱小平), aged 72, is the Independent Non-executive Director. Mr. Zhu has extensive experience in corporate finance and is currently an Accounting Professor of the Renmin University of China (中國人民大學). He served as the Director of the China Accounting Society (中國會計學會理事) and Director of the China Audit Society (中國審計學會理事).

Wee Yiaw Hin, aged 62, is the Independent Non-executive Director. Mr. Wee has more than 32 years of experience in the Oil & Gas Industry. He spent 21 years in Shell in Malaysia and Overseas, and joined PETRONAS as Executive Vice President and Chief Executive Officer of Upstream Business in May 2010. Mr. Wee was Executive Director and Executive Committee member of the board of PETRONAS Group. Mr. Wee graduated as a Civil Engineer and holds a Masters of Science Degree from Imperial College, UK.

SENIOR MANAGEMENT

SHEN Haihong (沈海洪), aged 52, is an Executive Vice President of the Company, and is in charge of operation, and QHSE management. Mr. Shen also acts as head of "Anton College" (HR training centre). Mr. Shen joined the Group in 2007, and was in charge of the tubular service cluster as well as operational management of the Group. Prior to joining the Group, Mr. Shen was employed by CNPC between 1991 and 2006. He has more than 30 years of experience in the petroleum industry. Mr. Shen has a Master of Business Administration degree from Tsinghua University.

XU Hongjian (徐宏劍), aged 40, The financial controller of the company, is in charge of the Group's financial management, asset and capital management work. Mr. Xu joined the Group in 2006 and was responsible for the financial work, risk control and marketing of the Group. Prior to joining the Group, from 2003 to 2006, Mr. Xu worked at Deloitte & Touche LLP and was engaged in financial audit. Mr. Xu holds a bachelor's degree in finance from Fudan University, and a Master of Business Administration degree from Tsinghua University.

CORPORATE GOVERNANCE REPORT

Since the listing of its shares on the Stock Exchange on 14 December 2007, the Company is committed to maintaining a high standard of corporate governance and has adopted the code provisions (the "Code Provision(s)") under Appendix 14 to the Listing Rules as its own code. The Company has been in compliance with all the applicable Code Provisions for the year ended 31 December 2020.

Under the structure of the existing Board of Directors, there are three Executive Directors, one Non-executive Directors and three Independent Non-executive Directors to ensure the independent and objective running of the Board, and the relevant Board committees play an important role in the Company's decision-making, monitoring and advisory work.

CORPORATE GOVERNANCE STRUCTURE

As the core of corporate governance for the Company, the Board has distinct duties from those of the management. The Board is responsible for providing direction to and effective supervision of the management, while the management is in charge of executing established strategies and directions. Generally speaking, the Board is responsible for:

- formulating long term strategies of the Group and supervising their execution, its subsidiaries and associated companies;
- approval of operational plan and financial budget;
- approval of the relevant annual and interim results;
- reviewing and monitoring the risk management and internal control of the Group;
- ensuring good corporate governance and compliance; and
- ensuring high quality ESG Management according to the requirement under sustainable growth.

The Board authorized the management to execute established strategies and directions of the Group, the management is in charge of the Group's daily operation and reports to the Board. Accordingly, the Board has set out clear written guidelines, in particular, it clearly determined the scope of authority of the management, and those items requiring the Board's approval.

There are agreed procedures for the Directors, upon reasonable request, to seek independent professional advice at the Company's expense in appropriate circumstances.

BOARD OF DIRECTORS

The Company is headed by an effective Board which oversees the Group's businesses, strategic decisions and performance and takes 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 of the Company comprises the following Directors:

Executive Directors

Mr. LUO Lin *(Chairman)*
Mr. PI Zhifeng
Mr. FAN Yonghong

Non-executive Directors

Mr. John William CHISHOLM (Resigned on 21 May 2020)
Mr. HUANG Song (Appointed on 31 December 2020)

Independent Non-executive Directors

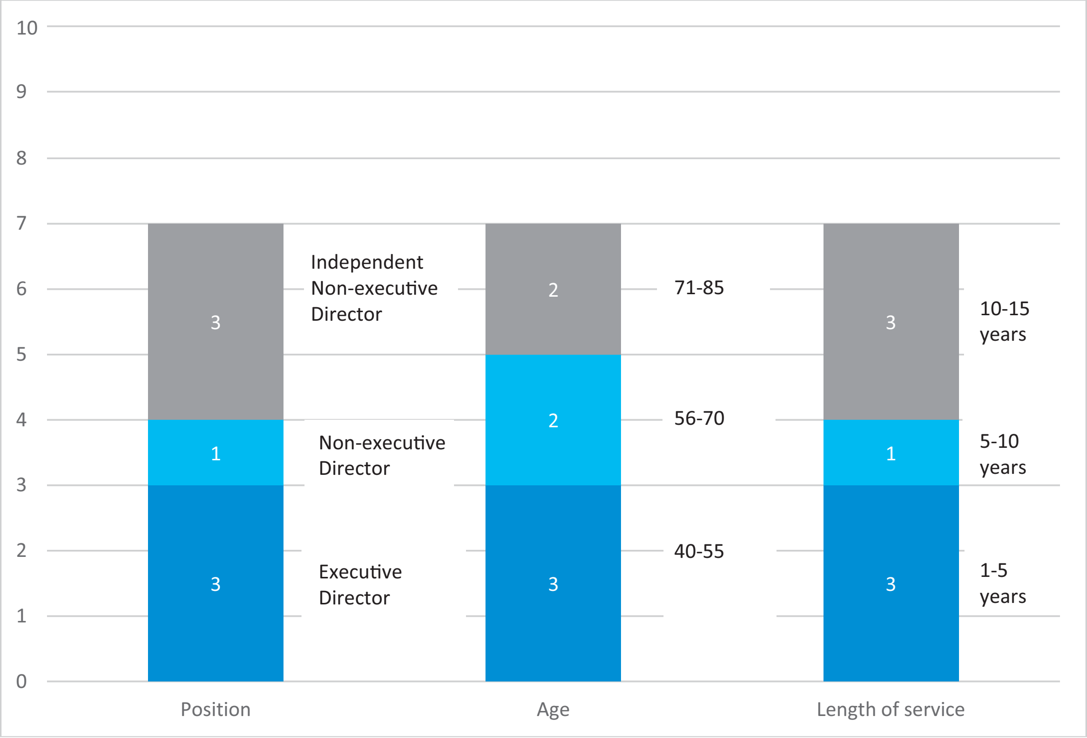
Mr. ZHANG Yongyi
Mr. ZHU Xiaoping
Mr. WEE Yiaw Hin

The biographical information of the Directors are set out on pages 45 to 46 of this Annual Report.

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

Board Diversity

The Board recognized the benefits of diversity in the Board in enhancing the Board's effectiveness. In this regard, the Board has adopted a Board Diversity Policy (the "Board Diversity Policy") in August 2013 which sets out the approach to achieve diversity on the Board. The Nomination Committee will give consideration to a number of factors as set out in the Board Diversity Policy when identifying suitably qualified candidates to become members of the Board, including but not limited to gender, age, cultural and educational background, ethnicity, professional experience, industry experience, skills, knowledge and length of service. Details on the biographies and experience of the Directors are set out on page 45 to page 46 of this annual report.



The Board is considered well balanced and of a diverse mix appropriate for the needs of the Company. The Company will also take into account its own business model and specific needs from time to time to determine the optimal composition of the Board. The Nomination Committee will review the Board Diversity Policy on a regular basis to ensure its continued effectiveness.

Chairman and Chief Executive Officer

Code Provision A.2.1 stipulates that the roles of chairman and chief executive should be separate and should not be performed by the same individual. The division of responsibilities between the chairman and chief executive should be clearly established and set out in writing. The Company has been in compliance with Code Provision A.2.1 with Mr. Luo Lin serving as the Chairman of the Company and Mr. Pi Zhifeng serving as the Chief Executive Officer.

Independence of Independent Non-Executive Directors

The Company has received annual confirmation of independence from all the Independent Non-executive Directors pursuant to Rule 3.13 of the Listing Rules. Consequently, the Board is of the opinion that all the current Independent Non-executive Directors comply with the relevant guidelines set out in Rule 3.13 of the Listing Rules, thus the Company regards all the Independent Non-executive Directors as independent parties.

During the year, the Company has complied with the requirements of Rule 3.10 of the Listing Rules and has at least three Independent Non-executive Directors, including one Independent Non-executive Director, Mr. Zhu Xiaoping, with appropriate professional qualifications or accounting or related financial management expertise. Throughout the year, the Board has at least one-third in number of its members comprising Independent Non- executive Directors in compliance with Rule 3.10A of the Listing Rules.

Mr. Zhang Yongyi and Mr. Zhu Xiaoping have served the Board since 17 November 2007. They have served as independent directors for more than 10 years. Mr. Wee Yiaw Hin have served the Board since 19 April 2017. During their years of appointment, Mr. Zhang Yongyi, Mr. Zhu Xiaoping and Mr. Wee Yiaw Hin have demonstrated their ability to provide an independent view to the Company's matters. Notwithstanding their years of service as Independent Non-executive Directors, the Board is of the view that they are able to continue to fulfill their role as required.

Appointment And Re-Election of The Directors

The term of the appointment for all three Executive Directors, one Non-executive Director and one Independent Non-executive Director, Mr. Wee Yiaw Hin, is three years and the term of the appointment for the another two Independent Non-executive Directors, Mr. ZHANG Yongyi and Mr. ZHU Xiaoping, is one year. According to the Company's Articles of Association, at every annual general meeting of the Company, one-third of the current Directors shall retire from office by rotation (or if the number of the Directors is not three or a multiple of three, then the nearest but not less than one- third) provided that each Director (including those appointed for a specific term but not including those appointed to fill a casual vacancy or as an addition to the existing Board in accordance with Articles 114 and 115) must retire by rotation at least once every three years. The retiring Directors can be re-elected and continue to participate in the relevant meeting in the capacity as Director.

The procedures and process of appointment, re-election and removal of directors are set out in the Articles of Association of the Company. The Nomination Committee is responsible for reviewing the Board composition, monitoring and make recommendations to the Board on the appointment, re-election and succession planning of Directors.

The newly appointed Directors will receive induction packages containing the duties and responsibilities of directors under the Listing Rules and other applicable rules and regulations.

The Company has arranged appropriate insurance cover to indemnify the Directors and officers of the Group for their potential liabilities incurred by them in discharging their duties.

Corporate Governance Functions

The Board has adopted the written terms of reference on corporate governance functions in March 2012 so as to perform corporate governance functions effectively. The relevant authority and duties are clearly set out in its terms of reference which are summarized as follows:

(a) To develop and review the Company's corporate governance policies and implementation on corporate governance;

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

(c) To review and monitor the Company's policies and implementation on compliance with legal and regulatory requirements;

(d) To develop, review and monitor the code of conduct and compliance manual (if any) applicable to employees and directors; and

(e) To review the Company's compliance with the Code Provisions and disclosure in the Corporate Governance Report.

The following is a summary of the work performed by the Board on corporate governance functions during 2020:

(a) Reviewed the Company's corporate governance policy and the implementation thereof;

(b) Reviewed and monitored the code of conduct and compliance manual applicable to the Directors and employees;

(c) Reviewed the Company's compliance with the Code Provisions; and

(d) Reviewed the Board composition.

DIRECTORS' SECURITIES TRANSACTIONS

The Directors have adopted the Model Code (the "Model Code") set out in Appendix 10 to the Listing Rules as its own code of practice for carrying out securities transactions by the Directors. After specific enquiry with all members of the Board, the Company confirms that all the Directors have fully complied with the required standards stipulated in the Model Code during the year.

CONTINUOUS PROFESSIONAL DEVELOPMENT

During the year ended 31 December 2020, the Directors confirmed that they have complied with the Code Provision A.6.5 on Directors' training. During the year, all the Directors have participated in continuous professional development by attending seminars and/or reading materials on the following topics to develop and refresh their knowledge and skills and provided a record of training to the Company.

Name of Directors	Topics on training covered (Notes)	Hours spent
Mr. Luo Lin	C, L, R	7
Mr. Pi Zhifeng	C, L, R	7
Mr. Fan Yonghong	C, L, R	7
Mr. John William Chisholm (resigned on 21 May 2020)	C, L, R	3
Mr. Zhang Yongyi	C, L, R	7
Mr. Zhu Xiaoping	C, L, R	7
Mr. Wee Yiaw Hin	C, L, R	7

Notes:

C: Corporate governance

L: Listing Rules updates

R: Other relevant regulatory updates

BOARD/BOARD COMMITTEE MEETINGS AND GENERAL MEETINGS

The Company has set up the Audit Committee, Remuneration Committee and Nomination Committee on 17 November 2007 and set up QHSE (Quality, Health, Safety, Environment) committee on 21 January 2013 and then subsequently upgrade to ESG (Environmental, Social and Governance) Committee on 21 May 2020. During the reporting year, the Company had convened 9 Board meetings, 2 Audit Committee meetings, 1 Remuneration Committee meetings, 1 Nomination Committee meeting and 1 ESG committee meeting. Also, the Company had convened an Annual General Meeting during the reporting year.

Attendances of meetings by the Directors during the year were set out in the table below:

	Meeting attendance/number of meetings					
Directors	**Board Meeting**	**Audit Committee Meeting**	**Remuneration Committee Meeting**	**Nomination Committee Meeting**	**ESG Committee Meeting**	**Annual General Meeting**
Executive Directors						
Mr. Luo Lin (Chairman of the Board)	9/9	N/A	1/1	1/1	1/1	1/1
Mr. Pi Zhifeng (Chief Executive Officer)	9/9	2/2	N/A	N/A	1/1	1/1
Mr. Fan Yonghong (President)	9/9	N/A	N/A	N/A	1/1	1/1
Non-executive Director						
Mr. John William Chisholm (resigned on 21 May 2020)	3/9	N/A	N/A	N/A	N/A	0/1
Independent Non-executive Directors						
Mr. Zhang Yongyi	9/9	2/2	N/A	1/1	N/A	1/1
Mr. Zhu Xiaoping	9/9	2/2	1/1	N/A	N/A	1/1
Mr. Wee Yiaw Hin	9/9	2/2	1/1	1/1	N/A	1/1

In addition to the Board Meetings for results announcement, which are held twice per year, the Company also holds Board Meetings every quarter (the "Quarterly Meetings") to better exercise the strategic and monitoring roles of the Board. Senior management is invited to attend to enhance Board and management communications. The Quarterly Meetings mainly focus on the Group's strategy execution, operation status, financial operation and budgeting, and capital market etc.,. Each quarter, a summary report is made on these areas in the previous quarter and discussions are conducted on the plans in these areas for the next quarter. During the year, the dates of holding the Quarterly Meetings were set out as follows:

	1st Quarterly Meeting	**2nd Quarterly Meeting**	**3rd Quarterly Meeting**	**4th Quarterly Meeting**
Date	19 January 2020	21 April 2020	21 July 2020	21 October 2020

MONTHLY MANAGEMENT REPORT

During the inter-sessional period, each Executive Director receives a copy of the financial report and the management report each month, and holds business meetings with the management to obtain information of monthly operating conditions, monitor business progress, and mentor the management with effective planning.

Management will report to all Board Members a monthly briefing which concludes important issues in relation to the marketing, operation, business development, human resources and capital market etc.

BOARD COMMITTEES

The Board has established the Audit Committee, Remuneration Committee and Nomination Committee (all chaired by Independent Non-executive Director) with defined terms of reference (available on the Company's website) since the listing of the Company, which are of no less exacting terms than those set out in the Corporate Governance Code.

In addition, the Board has also established QHSE (Quality, Health, Safety, Environment) Committee on 21 January 2013 and subsequently upgrade to ESG (Environmental, Social and Governance) Committee on 21 May 2020.

The Board of Directors

Membership:
Three Independent Non-executive Directors,
one Non-executive Director, three Executive Directors

Audit Committee	Remuneration Committee	Nomination Committee	ESG Committee
Membership: Three Independent Non-executive Directors	Membership: Two Independent Non-executive Directors and one Executive Director	Membership: Two Independent Non-executive Directors and one Executive Director	Membership: Three Executive Directors

Each Committee has authority to engage outside consultants or experts as it considers necessary to discharge the Committee's responsibilities. To further reinforce independence and effectiveness, all the Audit Committee members are the Independent Non-executive Directors, and the Nomination and Remuneration Committees have been structured with a majority of the Independent Non-executive Directors as members since their establishment in November 2007.

Audit Committee

There are three members in the Audit Committee, all of them are the Independent Non-executive Directors, namely Mr. Zhu Xiaoping, Mr. Zhang Yongyi and Mr. Wee Yiaw Hin. Mr. Zhu Xiaoping is the Chairman of the Audit Committee. Mr. Zhu Xiaoping has appropriate professional qualifications or accounting or related financial management expertise as required under Rule 3.10 (2) of the Listing Rules. The authority and duties of this Committee are clearly set out in its terms of reference.

The major roles and functions of the Audit Committee are as follows:

(a) To monitor the relationship between the Company and the external auditors, make proposals to the Board on the appointment, renewal and dismissal of the external auditors of the Group as well as the relevant remuneration and terms of appointment;

(b) To review the Company's financial information; and

(c) To oversee of the Company's financial reporting system and internal control procedures.

The Audit Committee held 2 meetings during 2020 and the following major matters were reviewed and discussed in the meetings:

(a) Reviewed the Group's annual results of 2019 and the interim results of 2020 and made recommendations to the Board for approval;

(b) Made recommendation on the re-appointment of the auditor; and

(c) Reviewed the financial reporting system and the internal control system.

Remuneration Committee

The Remuneration Committee comprises two Independent Non-executive Directors, Mr. Wee Yiaw Hin and Mr. Zhu Xiaoping, and one Executive Director, Mr. Luo Lin. Mr. Wee Yiaw Hin is the Chairman of the Remuneration Committee. The authority and duties of this Committee are clearly set out in its terms of reference.

The major roles and functions of the Remuneration Committee are as follows:

(a) To review and recommend the terms of remuneration, benefits, bonus and other allowances of the Directors and senior management;

(b) To submit proposals to the Board on the remuneration policy and structure of all the Directors and senior management; and

(c) To approve and monitor the execution of the Company's Share Option Scheme.

The Board has authority to approve the recommendations made by the Remuneration Committee.

The Remuneration Committee held 1 meeting during 2020 and reviewed overall remuneration structure adjustment and the performance based incentive mechanism of the Group.

Nomination Committee

The Nomination Committee is composed of two Independent Non-executive Directors, Mr. Zhang Yongyi and Mr. Wee Yiaw Hin, and one Executive Director, Mr. Luo Lin. Mr. Wee Yiaw Hin is the Chairman of the Nomination Committee. The authority and duties of this Committee are clearly set out in its terms of reference.

The major roles and functions of the Nomination Committee are as follows:

(a) To review the structure, number and composition and diversity of the Board and make recommendation to the Board on the policy and procedures for the nomination of Directors;

(b) To identify individuals suitably qualified to become Board members and may select individuals nominated for directorship, and consider individuals on merit and against the objective criteria, with due regard for the benefits of diversity on the Board;

(c) To make recommendations to the Board on the appointment or re-appointment of Directors, succession planning for Directors, in particular the chairman and the chief executive;

(d) To review the independence of the Independent Non-executive Directors and submit proposals to the Board; and

(e) To review the Board Diversity Policy in particular the measurable objectives contained therein to ensure their appropriateness and the progress made towards achieving those objectives will be ascertained.

The Nomination Committee held 1 meeting during 2020 and made recommendation to the board for the appointment of an Independent Non-executive Director to discuss the current structure of the Board of Directors and discuss the candidates for nominations to the Board of Directors.

ESG (ENVIRONMENTAL, SOCIAL AND GOVERNANCE) COMMITTEE (FORMERLY KNOWN AS QHSE (QUALITY, HEALTH, SAFETY, ENVIRONMENT) COMMITTEE)

The Company set up the QHSE Committee on 21 January 2013 and further upgraded to ESG Committee on 21 May 2020. The ESG Committee is composed of three Executive Directors, Mr. Luo Lin, Mr. Pi Zhifeng and Mr. Fan Yonghong. Mr. Pi Zhifeng is the Chairman of the ESG Committee. The ESG Committee aims to build an advanced governance structure of employee stock ownership and construct an environmental-friendly business model to reduce harm to the environment, improve the efficiency of resource use, help talents grow, promote stakeholder development, community progress and achieve long-term sustainable development. Such upgrading of the Board committee is aimed to further enhance and better promote the ESG-related work of the Group on a top-down basis. The ESG Committee meets at least once every year.

The major roles and functions of the ESG Committee are as follows:

1. To assist the Board to review and evaluate the current status of the Group's environmental, social and governance performance;

2. To make recommendations to the Board in respect of matters potentially affecting the Group's environmental, social and governance standards and the Group's environmental, social and governance policy formulation and system establishment;

3. To assist the Board to supervise the implementation of the Group's environmental, social and governance policies; and

4. To evaluate and review the ESG report, and be responsible for submitting the reviewed report to the Board to ensure the Board's full participation in ESG governance and report disclosure.

The ESG Committee held 1 meeting during the year to reviewing and discuss the Company's work on ESG and planning the forthcoming work.

REMUNERATION OF THE MEMBERS OF THE SENIOR MANAGEMENT BY BAND

Pursuant to Code B.1.5 of the Code Provisions, the remuneration of the members of the senior management by band for the year ended 31 December 2020 was set out below:

Remuneration band	Number of individuals
HK$1,500,001 – HK$2,000,000	2

ACCOUNTABILITY AND AUDIT

The Directors understand that they must assume the responsibility of preparing the financial accounts of each year. The Board was not aware of any material uncertainties relating to events or conditions that might cast significant doubt upon the Group's ability to continue as a going concern and the Board has prepared the financial statements on a going concern basis.

The declaration of duties by the Auditors of the Group on the Group's financial statements is contained on pages 62 to 154 of the Independent Auditor's Report.

AUDITOR'S REMUNERATION

An analysis of the remuneration for audit and non-audit services provided by the auditor appointed by the Group during the year is as follows:

	2020 RMB '000
Audit services	4,700
Non-audit services	300
Total:	5,000

COMPANY SECRETARY

The Company has engaged Tricor Services Limited, external service provider, and Ms. Lau Jeanie ("Ms. Lau") has been appointed in replacement of of Dr. Ngai Wai Fung of SWCS Corporate Services Group (Hong Kong) Limited as the Company's company secretary with effect from 7 August 2020. Then, Ms. Au-Yeung Nelly ("Ms. Au-Yeung") has been appointed as the company secretary of the Company in replacement of Ms. Lau on 30 October 2020.

Ms. Au-Yeung has complied with Rule 3.29 of the Listing Rules by taking no less than 15 hours of the relevant professional training during the year.

RISK MANAGEMENT AND INTERNAL CONTROL

The Board acknowledges its responsibility to maintain effective risk management and internal control systems of the Company in order to manage rather than eliminate risks of failure to achieve business objectives, and to provide reasonable but not absolute assurance against material misstatement or loss.

The Company implemented various policies and procedures to ensure effective risk management at each aspect of its operation, including the provision of construction operations management, on-site inspection, surveying and sampling services, administration of daily operation, financial reporting and recording, compliance with applicable laws and regulations on environmental protection and workplace safety.

During the year, the Group had reviewed its internal control system. Based on the review, the Board was satisfied with the effectiveness of the current internal control system of the Group, including the adequacy of resources, staff qualifications and experience, training programmes and budget of the Group's activity and financial reporting function.

The Group has set up the Internal Audit Department, the Legal Department and the Quality Control Department in charge of the internal control and risk management duties. The Executive Directors of the Company receive internal financial report and management report every month for monitoring the operational progress of each business department and making reasonable planning.

The Group has put in place a set of policy for the disclosure of inside information which sets out the procedures and internal controls for the handling and dissemination of inside information in a timely manner and in compliance with the Securities and Futures Ordinance.

SHAREHOLDERS' RIGHTS

The Company encourages shareholders to attend shareholders' meetings. Directors, chairman of each of Audit Committee, Remuneration Committee, Nomination Committee (or a delegated member of the Committee), chairman of the independent board committee (if any) and management will attend the annual general meeting of the Company to answer queries about the Group's business.

In 2020, the Company had convened one annual general meeting (the "2020 AGM"). The 2020 AGM provided an ideal chance for communication between the Board and the shareholders. The Chairmen of the Board, Audit Committee, Remuneration Committee and Nomination Committee and the Company's external auditor were all present at the AGM held on 25 May 2020, to answer shareholders' inquiries.

THE PROCEDURES FOR SHAREHOLDERS TO CONVENE AN EXTRAORDINARY GENERAL MEETING ("EGM")

Pursuant to the Article 79 of the Articles of Association of the Company, any two or more members of the Company or any one member of the Company which is a recognized clearing house (or its nominee (s)) holding at the date of the requisition not less than one-tenth of the paid up capital of the Company which carries the right of voting at general meetings of the Company shall deposit the written requisition at the principal office of the Company in Hong Kong, which is presently situated at Level 54, Hopewell Centre, No. 183 Queen's Road East, Wanchai, Hong Kong specifying the objects of the meeting and signed by the requisitionist(s) (the "Requisitionist(s)").

The request will be verified with the Company's branch share registrars in Hong Kong and upon their confirmation that the request is proper and in order, the company secretary of the Company will ask the Board to convene an EGM by serving sufficient notice in accordance with the statutory requirements to all the registered members. On the contrary, if the request has been verified is not in order, the shareholders will be advised of this outcome and accordingly, an EGM will not be convened as requested.

If within 21 days from the date of the deposit of the requisition the Board fails to proceed to convene such meeting to be held within a further 21 days, the Requisitionist(s) themselves or any of them representing more than one-half of the total voting rights of all of them, may convene a meeting in the same manner, as nearly as possible, as that in which meetings may be convened by the Board provided that any meeting so convened shall not be held after the expiration of three months form the date of deposit of the requisition, and all reasonable expenses incurred by the Requisitionist(s) as a result of the failure of the Board shall be reimbursed to them by the Company.

THE PROCEDURES AND CONTACT DETAILS FOR PUTTING FORWARD PROPOSALS AT SHAREHOLDERS' MEETING

The annual general meeting and other general meetings provide an important opportunity for shareholders to express their views and the Company encourages and promotes shareholder attendance and participation at general meetings.

The Board members, in particular, the chairman or his delegates, appropriate members of management team and external auditors of the Company will attend annual general meetings to answer shareholders' questions.

Shareholders attending at the annual general meeting and other general meetings are allowed to have a reasonable opportunity to ask questions regarding the items on the meeting agenda, including but not limiting to questions to the external auditor regarding the conduct of the audit and the preparation and content of the auditor's report.

CONSTITUTIONAL DOCUMENTS

There was no change in the Company's constitutional documents during the year ended 31 December 2020.

THE PROCEDURES BY WHICH ENQUIRIES MAY BE PUT TO THE BOARD AND SUFFICIENT CONTACT DETAILS TO ENABLE THESE ENQUIRIES TO BE PROPERLY DIRECTED

Shareholders, investors and members of the public should direct their questions about their shareholdings to the Company's Branch Share Registrar in Hong Kong. The contact details for the Share Registrar are:

Computershare Hong Kong Investor Services Limited

17M Floor, Hopewell Centre
183 Queen's Road East
Wanchai, Hong Kong
Telephone: (852) 2862 8628
Fax: (852) 2865 0990
Website: www.computershare.com

To contact the Company in relation to your query about the Company, the contact details are as follows:

Tel: (86 10) 5739 7746
Email: ir@antonoil.com

DISCLAIMERS

The information contained in the section headed "Shareholders' Rights" in this Annual Report is for reference only and does not represent and shall not be regarded as legal or professional advice to the shareholders. Shareholders should seek their own independent legal advice as to their rights as shareholders of the Company. The Company disclaims any and all liabilities and losses that may be incurred by the shareholders for using or relying on any information contained in the section headed "Shareholders' Rights" in this Annual Report.

FINANCIAL CALENDAR 2021

Final Results Announcement For The Year Ended 31 December 2020

28 March 2021

Last Day to Register for Attending 2021 Annual General Meeting

18 May 2021

2021 Annual General Meeting

25 May 2021

Deloitte. 德勤

INDEPENDENT AUDITOR'S REPORT
TO THE SHAREHOLDERS OF ANTON OILFIELD SERVICES GROUP
(incorporated in the Cayman Islands with limited liability)

OPINION

We have audited the consolidated financial statements of Anton Oilfield Services Group (the "Company") and its subsidiaries (collectively referred to as the "Group") set out on pages 67 to 154, which comprise the consolidated statement of financial position as at 31 December 2020, and the consolidated statement of profit or loss, consolidated statement of profit or loss and other comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the consolidated financial statements give a true and fair view of the consolidated financial position of the Group as at 31 December 2020, and of its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards ("IFRSs") issued by the International Accounting Standards Board ("IASB") and have been properly prepared in compliance with the disclosure requirements of the Hong Kong Companies Ordinance.

BASIS FOR OPINION

We conducted our audit in accordance with International Standards on Auditing ("ISAs"). Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Consolidated Financial Statements section of our report. We are independent of the Group in accordance with the International Ethics Standards Board for Accountants' Code of Ethics for Professional Accountants (the "IESBA Code"), and we have fulfilled our other ethical responsibilities in accordance with the IESBA Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

INDEPENDENT AUDITOR'S REPORT
TO THE SHAREHOLDERS OF ANTON OILFIELD SERVICES GROUP *(Continued)*
(incorporated in the Cayman Islands with limited liability)

KEY AUDIT MATTERS

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

Key audit matter	How our audit addressed the key audit matter
Revenue recognition from provision of services	
We identified revenue recognition from provision of services as a key audit matter due to the significance of revenue generated from provision of services and the inherent risk of manipulating revenue recognition from provision of services by the management. As disclosed in Note 22, the Group is mainly engaged in provision of services through contracts with its customers. Revenue from provision of services amounting to RMB2,802,448,000 for the year ended 31 December 2020 accounted for 90.8% of the Group's total revenue in the consolidated statement of profit or loss. Revenue performance from provision of services is a key performance indicator of the Group which affects the management's reward and also is a focus of investors. Details of revenue recognition from provision of services and its accounting policies are set out in Note 22 and Note 3, respectively, to the consolidated financial statements.	Our procedures in relation to revenue recognition from provision of services included: • understanding and evaluating the key internal controls relevant to the audit on revenue recognition from provision of services; • examining, on a sample basis, the key terms set out in the Group's contracts with its customers governing the performance obligations and the associated revenue recognition; • obtaining confirmations for the services provided to the selected major customers; and • inspecting, on a sample basis, the customer acceptance documents, the contracts and invoices evidencing that the performance obligations of services were satisfied and control was transferred.

INDEPENDENT AUDITOR'S REPORT
TO THE SHAREHOLDERS OF ANTON OILFIELD SERVICES GROUP *(Continued)*
(incorporated in the Cayman Islands with limited liability)

OTHER INFORMATION

The directors of the Company are responsible for the other information. The other information comprises the information included in the annual report, but does not include the consolidated financial statements and our auditor's report thereon.

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

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

RESPONSIBILITIES OF DIRECTORS AND THOSE CHARGED WITH GOVERNANCE FOR THE CONSOLIDATED FINANCIAL STATEMENTS

The directors of the Company are responsible for the preparation of the consolidated financial statements that give a true and fair view in accordance with IFRSs issued by the IASB and the disclosure requirements of the Hong Kong Companies Ordinance, and for such internal control as the directors 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.

Those charged with governance are responsible for overseeing the Group's financial reporting process.

INDEPENDENT AUDITOR'S REPORT
TO THE SHAREHOLDERS OF ANTON OILFIELD SERVICES GROUP *(Continued)*
(incorporated in the Cayman Islands with limited liability)

AUDITOR'S RESPONSIBILITIES FOR THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS

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

As part of an audit in accordance with ISAs, we exercise professional judgment and maintain professional skepticism 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.

INDEPENDENT AUDITOR'S REPORT
TO THE SHAREHOLDERS OF ANTON OILFIELD SERVICES GROUP *(Continued)*
(incorporated in the Cayman Islands with limited liability)

AUDITOR'S RESPONSIBILITIES FOR THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS *(Continued)*

We communicate with those charged with governance 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 those charged with governance 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 those charged with governance, 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 the independent auditor's report is Mak Chi Lung.

Deloitte Touche Tohmatsu
Certified Public Accountants
Hong Kong
28 March 2021

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

AS AT 31 DECEMBER 2020
(Amounts expressed in thousands of Renminbi ("RMB"), unless otherwise stated)

	Notes	**As at 31 December** **2020**	2019
ASSETS			
Non-current assets			
Property, plant and equipment	6	**2,099,390**	2,137,866
Right-of-use assets	7	**137,951**	189,901
Goodwill	8	**242,004**	242,004
Intangible assets	9	**273,652**	259,986
Interest in a joint venture		**3,949**	3,808
Interest in an associate		**2,000**	2,000
Prepayments and other receivables	12	**66,428**	155,696
Deferred income tax assets	21	**21,993**	34,637
		2,847,367	3,025,898
Current assets			
Inventories	10	**930,618**	765,496
Trade and notes receivables	11	**2,133,789**	2,200,247
Contract assets	22(ii)(a)	**30,618**	75,519
Prepayments and other receivables	12	**605,475**	648,048
Restricted bank deposits	13	**454,169**	368,730
Cash and cash equivalents	13	**879,085**	2,422,874
		5,033,754	6,480,914
Total assets		**7,881,121**	9,506,812

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

AS AT 31 DECEMBER 2020
(Amounts expressed in thousands of Renminbi ("RMB"), unless otherwise stated)

	Notes	As at 31 December **2020**	2019
EQUITY			
Capital and reserves attributable to the owners of the Company			
Share capital	14	**268,179**	276,273
Reserves	15	**2,357,933**	2,625,865
		2,626,112	2,902,138
Non-controlling interests		**137,609**	55,525
Total equity		**2,763,721**	2,957,663
LIABILITIES			
Non-current liabilities			
Long-term bonds	16	**1,855,625**	2,028,423
Long-term borrowings	17	**131,388**	202,426
Lease liabilities	18	**31,771**	69,259
Deferred income tax liabilities	21	**9,998**	10,219
		2,028,782	2,310,327
Current liabilities			
Short-term borrowings	17	**763,953**	497,749
Current portion of long-term bonds	16	**11,034**	2,116,445
Current portion of long-term borrowings	17	**163,639**	92,174
Trade and notes payables	19	**1,403,295**	957,406
Accruals and other payables	20	**534,581**	404,528
Lease liabilities	18	**34,384**	45,834
Contract liabilities		**37,982**	13,976
Current income tax liabilities		**139,750**	110,710
		3,088,618	4,238,822
Total liabilities		**5,117,400**	6,549,149
Total equity and liabilities		**7,881,121**	9,506,812

The consolidated financial statements on pages 67 to 154 were approved and authorised for issue by the Board of Directors on 28 March 2021 and were signed on its behalf by:

Chairman	*Executive Director*
Luo Lin	**Pi Zhifeng**

CONSOLIDATED STATEMENT OF PROFIT OR LOSS

For the year ended 31 December 2020
(Amounts expressed in thousands of RMB, unless otherwise stated)

	Notes	Year ended 31 December 2020	2019
Revenue			
Goods and services	22	**2,823,638**	3,328,839
Rental	22	**264,014**	260,658
Total revenue	22	**3,087,652**	3,589,497
Cost of sales	23	**(2,277,830)**	(2,308,042)
Gross profit		**809,822**	1,281,455
Other gains, net	24	**40,279**	176
Impairment losses under expected credit loss model, net of reversal	23, 25	**(83,437)**	(87,693)
Selling expenses	23	**(175,487)**	(193,298)
Administrative expenses	23	**(198,959)**	(215,403)
Research and development expenses	23	**(56,327)**	(51,682)
Sales tax and surcharges	23	**(11,360)**	(13,973)
Operating profit		**324,531**	719,582
Interest income	26	**18,760**	3,367
Finance expenses	26	**(312,693)**	(298,500)
Finance costs, net	26	**(293,933)**	(295,133)
Share of profit of a joint venture		**141**	762
Profit before income tax		**30,739**	425,211
Income tax expense	28	**(114,499)**	(142,791)
(Loss)/profit for the year		**(83,760)**	282,420
(Loss)/profit attributable to:			
Owners of the Company		**(95,844)**	268,583
Non-controlling interests		**12,084**	13,837
		(83,760)	282,420
(Loss)/earnings per share attributable to the owners of the Company for the year (expressed in RMB per share)			
– Basic	29	**(0.0322)**	0.0894
– Diluted	29	**(0.0322)**	0.0889

CONSOLIDATED STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME

For the year ended 31 December 2020
(Amounts expressed in thousands of RMB, unless otherwise stated)

	Notes	Year ended 31 December 2020	2019
(Loss)/profit for the year		**(83,760)**	282,420
Other comprehensive income/(expense), net of tax:			
Items that may be reclassified subsequently to profit or loss			
Net investment hedge	15(b)	**111,612**	(30,239)
Financial instruments measured at fair value through other comprehensive income		**(7,512)**	–
Currency translation differences	15(a)	**(269,051)**	16,859
Other comprehensive expense for the year, net of tax		**(164,951)**	(13,380)
Total comprehensive (expense)/income for the year		**(248,711)**	269,040
Total comprehensive (expense)/income attributable to:			
– Owners of the Company		**(260,795)**	255,203
– Non-controlling interests		**12,084**	13,837
		(248,711)	269,040

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

For the year ended 31 December 2020
(Amounts expressed in thousands of RMB, unless otherwise stated)

		Attributable to the owners of the Company								
	Notes	Share capital	Share premium	Capital reserve	Statutory reserve	Retained earnings	Other reserves	Subtotal	Non-controlling interests	Total equity
Balance at 1 January 2019		275,959	1,076,529	416,485	76,900	819,796	(19,795)	2,645,874	48,688	2,694,562
Comprehensive income										
Profit for the year		-	-	-	-	268,583	-	268,583	13,837	282,420
Other comprehensive income/(expense)										
Net investment hedge	15(b)	-	-	-	-	-	(30,239)	(30,239)	-	(30,239)
Currency translation differences	15(a)	-	-	-	-	-	16,859	16,859	-	16,859
Total comprehensive income		-	-	-	-	268,583	(13,380)	255,203	13,837	269,040
Share option scheme	14(i)	-	-	29,167	-	-	-	29,167	-	29,167
Share option exercised	14	314	3,148	(1,461)	-	-	-	2,001	-	2,001
Dividends	30	-	(30,107)	-	-	-	-	(30,107)	(7,000)	(37,107)
Total transactions with owners, recognised directly in equity		314	(26,959)	27,706	-	-	-	1,061	(7,000)	(5,939)
Balance at 31 December 2019		276,273	1,049,570	444,191	76,900	1,088,379	(33,175)	2,902,138	55,525	2,957,663
Balance at 1 January 2020		**276,273**	**1,049,570**	**444,191**	**76,900**	**1,088,379**	**(33,175)**	**2,902,138**	**55,525**	**2,957,663**
Comprehensive (expense)/income										
(Loss)/profit for the year		**-**	**-**	**-**	**-**	**(95,844)**	**-**	**(95,844)**	**12,084**	**(83,760)**
Other comprehensive (expense)/income										
Net investment hedge	15(b)	**-**	**-**	**-**	**-**	**-**	**111,612**	**111,612**	**-**	**111,612**
Financial instruments measured at fair value through other comprehensive income		**-**	**-**	**-**	**-**	**-**	**(7,512)**	**(7,512)**	**-**	**(7,512)**
Currency translation differences	15(a)	**-**	**-**	**-**	**-**	**-**	**(269,051)**	**(269,051)**	**-**	**(269,051)**
Total comprehensive (expense)/income		**-**	**-**	**-**	**-**	**(95,844)**	**(164,951)**	**(260,795)**	**12,084**	**(248,711)**
Repurchase of ordinary shares	14(ii)	**(8,094)**	**(24,506)**	**-**	**-**	**-**	**-**	**(32,600)**	**-**	**(32,600)**
Share option scheme	14(i)	**-**	**-**	**17,369**	**-**	**-**	**-**	**17,369**	**-**	**17,369**
Capital injection from a non-controlling interest		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**70,000**	**70,000**
Total transactions with owners, recognised directly in equity		**(8,094)**	**(24,506)**	**17,369**	**-**	**-**	**-**	**(15,231)**	**70,000**	**54,769**
Balance at 31 December 2020		**268,179**	**1,025,064**	**461,560**	**76,900**	**992,535**	**(198,126)**	**2,626,112**	**137,609**	**2,763,721**

CONSOLIDATED STATEMENT OF CASH FLOWS

For the year ended 31 December 2020
(Amounts expressed in thousands of RMB, unless otherwise stated)

	Notes	Year ended 31 December **2020**	2019
Cash flows from operating activities			
Net cash inflows from operations	31	**859,642**	684,514
Interest received	26	**18,760**	3,367
Income tax paid		**(73,036)**	(77,631)
Net cash generated from operating activities		**805,366**	610,250
Cash flows from investing activities			
Purchase of property, plant and equipment		**(138,485)**	(86,105)
Proceeds from disposal of property, plant and equipment		**7,558**	21,461
Purchase of intangible assets		**(38,992)**	(35,240)
Investment in an associate		**-**	(2,000)
Net cash used in investing activities		**(169,919)**	(101,884)
Cash flows from financing activities			
Proceeds from short-term borrowings		**993,653**	865,147
Repayments of short-term borrowings		**(728,194)**	(1,246,543)
Proceeds from long-term borrowings		**147,000**	100,000
Repayments of long-term borrowings		**(146,915)**	(135,714)
Proceeds from long-term bonds		**-**	2,037,836
Repayments of long-term bonds		**(685,367)**	–
Repurchase of long-term bonds		**(1,418,078)**	–
Repayments of lease liabilities		**(43,535)**	(45,094)
Net cash paid to non-controlling interests for additional interest in subsidiaries		**-**	(920)
Proceeds from share options exercised	14(i)	**-**	2,001
Capital injection from a non-controlling interest		**70,000**	–
Interest paid		**(325,568)**	(269,584)
Repurchase of ordinary shares		**(32,600)**	–
Dividends distribution		**-**	(92,818)
Placement of restricted bank deposits		**-**	(10,260)
Withdrawal of restricted bank deposits		**10,260**	–
Net cash (used in)/generated from financing activities		**(2,159,344)**	1,204,051
Net (decrease)/increase in cash and cash equivalents		**(1,523,897)**	1,712,417
Cash and cash equivalents at beginning of the year		**2,422,874**	686,636
Exchange (loss)/gain on cash and cash equivalents		**(19,892)**	23,821
Cash and cash equivalents at end of the year		**879,085**	2,422,874

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2020
(Amounts expressed in thousands of RMB, unless otherwise stated)

1. GENERAL INFORMATION

Anton Oilfield Services Group (the "Company") was incorporated in the Cayman Islands on 3 August 2007 as an exempted company with limited liability under the Companies Law of Cayman Islands. The address of its registered office is PO Box 309, Ugland House, Grand Cayman, KY1-1104, Cayman Islands.

The Company is an investment holding company. The Company and its subsidiaries (the "Group") are mainly engaged in providing oilfield technology services, manufacturing and trading of related products in the People's Republic of China (the "PRC") and other overseas countries. The Company listed its shares on the Main Board of The Stock Exchange of Hong Kong Limited (the "Stock Exchange") on 14 December 2007.

The directors of the Company (the "Directors") regard Pro Development Holdings Corp., a company incorporated in British Virgin Islands, as the immediate and ultimate holding company of the Company, which is controlled by Mr. Luo Lin, the Company's controlling shareholder.

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

2. APPLICATION OF NEW AND AMENDMENTS TO INTERNATIONAL FINANCIAL REPORTING STANDARDS ("IFRSs")

Amendments to IFRSs that are mandatorily effective for the current year

In the current year, the Group has applied the *Amendments to References to the Conceptual Framework in IFRS Standards* and the following amendments to IFRSs issued by the International Accounting Standards Board ("IASB") for the first time, which are mandatorily effective for the annual period beginning on or after 1 January 2020 for the preparation of the consolidated financial statements:

Amendments to IAS 1 and IAS 8	*Definition of Material*
Amendments to IFRS 3	*Definition of a Business*
Amendments to IFRS 9, IAS 39 and IFRS 7	*Interest Rate Benchmark Reform*

The application of the *Amendments to References to the Conceptual Framework in IFRS Standards* and the amendments to IFRSs in the current year has had no material impact on the Group's financial positions and performance for the current and prior years and/or on the disclosures set out in these consolidated financial statements.

(Amounts expressed in thousands of RMB, unless otherwise stated)

2. APPLICATION OF NEW AND AMENDMENTS TO INTERNATIONAL FINANCIAL REPORTING STANDARDS ("IFRSs") *(Continued)*

New and amendments to IFRSs in issue but not yet effective

The Group has not early applied the following new and amendments to IFRSs that have been issued but are not yet effective:

IFRS 17	*Insurance Contracts and the related Amendments*[1]
Amendment to IFRS 16	*Covid-19-Related Rent Concessions*[4]
Amendments to IFRS 3	*Reference to the Conceptual Framework*[2]
Amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16	*Interest Rate Benchmark Reform-Phase 2*[5]
Amendments to IFRS 10 and IAS 28	*Sale or Contribution of Assets between an Investor and its Associate or Joint Venture*[3]
Amendments to IAS 1	*Classification of Liabilities as Current or Non-current*[1]
Amendments to IAS 1 and IFRS Practice Statement 2	*Disclosure of Accounting Policies*[1]
Amendments to IAS 8	*Definition of Accounting Estimates*[1]
Amendments to IAS 16	*Property, Plant and Equipment: Proceeds before Intended Use*[2]
Amendments to IAS 37	*Onerous Contracts – Cost of Fulfilling a Contract*[2]
Amendments to IFRS Standards	*Annual Improvements to IFRS Standards 2018-2020*[2]

1 Effective for annual periods beginning on or after 1 January 2023

2 Effective for annual periods beginning on or after 1 January 2022

3 Effective for annual periods beginning on or after a date to be determined

4 Effective for annual periods beginning on or after 1 June 2020

5 Effective for annual periods beginning on or after 1 January 2021

The Directors anticipate that the application of all new and amendments to IFRSs will have no material impact on the consolidated financial statements in the foreseeable future.

3. SIGNIFICANT ACCOUNTING POLICIES

Statement of compliance

The consolidated financial statements of the Group have been prepared in accordance with IFRSs issued by IASB. For the purpose of preparation of the consolidated financial statements, information is considered material if such information is reasonably expected to influence decisions made by primary users. In addition, the consolidated financial statements include applicable disclosures required by the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited ("Listing Rules") and by the Hong Kong Companies Ordinance ("CO").

Basis of preparation

The consolidated financial statements have been prepared on the historical cost basis at the end of each reporting period, as explained in the accounting policies set out below.

Historical cost is generally based on the fair value of the consideration given in exchange for goods and services.

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date, regardless of whether that price is directly observable or estimated using another valuation technique. In estimating the fair value of an asset or a liability, the Group takes into account the characteristics of the asset or liability if market participants would take those characteristics into account when pricing the asset or liability at the measurement date. Fair value for measurement and/or disclosure purposes in these consolidated financial statements is determined on such a basis, except for share-based payment transactions that are within the scope of IFRS 2 *Share-based Payment*, leasing transactions that are accounted for in accordance with IFRS 16 *Leases*, and measurements that have some similarities to fair value but are not fair value, such as net realisable value in IAS 2 *Inventories*, or value in use in IAS 36 *Impairment of Assets*.

In addition, for financial reporting purposes, fair value measurements are categorised into Level 1, 2 or 3 based on the degree to which the inputs to the fair value measurements are observable and the significance of the inputs to the fair value measurement in its entirety, which are described as follows:

- Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date;

- Level 2 inputs are inputs, other than quoted prices included within Level 1, that are observable for the asset or liability, either directly or indirectly; and

- Level 3 inputs are unobservable inputs for the asset or liability.

The principal accounting policies are set out below.

3. SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

Basis of consolidation

A subsidiary is an entity over which the Group has control. The Group controls an entity when the Group has the power over the entity, 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.

Profit or loss and each item of other comprehensive income are attributed to the owners of the Company and to the non-controlling interests. Total comprehensive income of subsidiaries is attributed to the owners of the Company and to the non-controlling interests even if this results in the non-controlling interests having a deficit balance.

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.

Non-controlling interests in subsidiaries are presented separately from the Group's equity therein, which represent present ownership interests entitling their holders to a proportionate share of net assets of the relevant subsidiaries upon liquidation.

Changes in the Group's ownership interests in existing subsidiaries

Transactions with non-controlling interests that do not result in loss of control are accounted for as equity transactions – that is, as transactions with the owners in their capacity as owners. The difference between fair value of any consideration paid and the relevant share acquired of the carrying value of net assets of the subsidiary is recorded in equity. Gains or losses on disposals to non-controlling interests are also recorded in equity. The carrying amounts of the Group's relevant components of equity and the non-controlling interests are adjusted to reflect the changes in their relative interests in the subsidiaries, including re-attribution of relevant reserves between the Group and non-controlling interests according to the Group's and the non-controlling interests' proportionate interests.

When the Group loses control of a subsidiary, the assets and liabilities of that subsidiary and non-controlling interest (if any) are derecognised. A gain or loss is recognised in profit or loss and is calculated as the difference between (i) the aggregate of the fair value of the consideration received and the fair value of any retained interest and (ii) the carrying amount of the assets (including goodwill), and liabilities of the subsidiary attributable to the owners of the Company. All amounts previously recognised in other comprehensive income in relation to that subsidiary are accounted for as if the Group had directly disposed of the related assets or liabilities of the subsidiary (i.e. reclassified to profit or loss or transferred to another category of equity as specified/permitted by applicable IFRSs). The fair value of any investment retained in the former subsidiary at the date when control is lost is regarded as the fair value on initial recognition for subsequent accounting under IFRS 9 *Financial Instruments* or, when applicable, the cost on initial recognition of an investment in an associate or a joint venture.

3. SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

Basis of consolidation *(Continued)*

Separate financial statements

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

Impairment testing of the investments in subsidiaries is required upon receiving dividends 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.

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 chief executive officer, executive vice presidents and directors who make strategic decisions.

Foreign currency translation

Functional and presentation currency

Items included in the financial statements of each of the Group's entities are measured using the functional currency. The financial statements are presented in RMB, which is the Company's functional currency.

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 recognised in the consolidated statement of profit or loss, except when deferred in other comprehensive income as qualifying net investment hedge.

3. SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

Foreign currency translation *(Continued)*

Group companies

The results and financial position of all 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 consolidated statement of financial position presented are translated at the closing rate at the end of the financial period;

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

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

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

Property, plant and equipment

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

Construction-in-progress represents property, plant and equipment under construction and is stated at cost. This includes the costs of construction, machinery and other expenditures necessary for the purpose of preparing the construction-in-progress for its intended use and those borrowing costs incurred before the assets ready for intended use that are eligible for capitalisation. Construction-in-progress is not depreciated until such time as the relevant asset is completed and ready for its intended use.

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.

3. SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

Property, plant and equipment *(Continued)*

Depreciation of property, plant and equipment is calculated using the straight-line method except for drill pipes are depreciated using unit-of-production method, to allocate their costs to their residual values over their estimated useful lives, as follows:

	Estimated useful life
Buildings	5-50 years
Machinery and equipment	5-10 years
Motor vehicles	5-10 years
Furniture, fixtures, leasehold improvements and others	3-5 years

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

Gains and losses on disposals are determined by comparing the proceeds with the carrying amount and are recognised within "other gains, net", in the consolidated statement of profit or loss.

Goodwill

Goodwill arises on the acquisition of subsidiaries, and represents the excess of the consideration transferred over the Group's interest in net fair value of the net identifiable assets, liabilities and contingent liabilities of the acquiree and the fair value of the non-controlling interest in the acquiree.

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 and not larger than an operating segment.

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 to sell. Any impairment is recognised immediately as an expense and is not subsequently reversed.

3. SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

Intangible assets

Computer software

Computer software are capitalised on the basis of the costs incurred to acquire and bring to use the specific software. These costs are amortised over their estimated useful lives of 5 to 10 years.

Patents

Patents are initially recorded at actual cost incurred to acquire and amortised on a straight-line basis over their estimated useful lives, ranging from 3 to 10 years. Development costs that are directly attributable to the design, development and application of patents are recognised as intangible assets when the following criteria are met:

- It is technically feasible to complete the patents so that it will be available for use;
- Management intends to complete the patents and use or sell it;
- There is an ability to use or sell the patents;
- It can be demonstrated how the patents will generate probable future economic benefits;
- Adequate technical, financial and other resources to complete the development and to use or sell the patents are available; and
- The expenditure attributable to the patents during its development can be reliably measured.

Directly attributable costs that are capitalised as part of the patent include material costs, patent development employee costs and an appropriate portion of relevant overheads. 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.

3. SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

Impairment on property, plant and equipment, right-of-use assets and intangible assets other than goodwill

At the end of the reporting period, the Group reviews the carrying amounts of its property, plant and equipment, right-of-use assets, intangible assets with finite useful lives to determine whether there is any indication that these assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the relevant asset is estimated in order to determine the extent of the impairment loss (if any).

The recoverable amount of property, plant and equipment, right-of-use assets and intangible assets are estimated individually. When it is not possible to estimate the recoverable amount individually, the Group estimates the recoverable amount of the CGU to which the asset belongs.

In addition, the Group assesses whether there is indication that corporate assets may be impaired. If such indication exists, corporate assets are also allocated to individual CGU, when a reasonable and consistent basis of allocation can be identified, or otherwise they are allocated to the smallest group of CGUs for which a reasonable and consistent allocation basis can be identified.

Recoverable amount is the higher of fair value less costs of disposal and value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset (or a CGU) for which the estimates of future cash flows have not been adjusted.

If the recoverable amount of an asset (or a CGU) is estimated to be less than its carrying amount, the carrying amount of the asset (or a CGU) is reduced to its recoverable amount. For corporate assets or portion of corporate assets which cannot be allocated on a reasonable and consistent basis to a CGU, the Group compares the carrying amount of a group of CGUs, including the carrying amounts of the corporate assets or portion of corporate assets allocated to that group of CGUs, with the recoverable amount of the group of CGUs. In allocating the impairment loss, the impairment loss is allocated first to reduce the carrying amount of any goodwill (if applicable) and then to the other assets on a pro-rata basis based on the carrying amount of each asset in the unit or the group of CGUs. The carrying amount of an asset is not reduced below the highest of its fair value less costs of disposal (if measurable), its value in use (if determinable) and zero. The amount of the impairment loss that would otherwise have been allocated to the asset is allocated pro rata to the other assets of the unit or the group of CGUs. An impairment loss is recognised immediately in profit or loss.

Where an impairment loss subsequently reverses, the carrying amount of the asset (or a CGU or a group of CGUs) is increased to the revised estimate of its recoverable amount, but so that the increased carrying amount does not exceed the carrying amount that would have been determined had no impairment loss been recognised for the asset (or a CGU or a group of CGUs) in prior years. A reversal of an impairment loss is recognised immediately in profit or loss.

3. SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

Financial instruments

Financial assets and financial liabilities are recognised when a group entity becomes a party to the contractual provisions of the instrument. All regular way purchases or sales of financial assets are recognised and derecognised on a trade date basis. Regular way purchases or sales are purchases or sales of financial assets that require delivery of assets within the time frame established by regulation or convention in the market place.

Financial assets and financial liabilities are initially measured at fair value except for trade receivables arising from contracts with customers which are initially measured in accordance with IFRS 15 *Revenue from Contracts with Customers*. Transaction costs that are directly attributable to the acquisition or issue of financial assets and financial liabilities (other than financial assets or financial liabilities at fair value through profit or loss) are added to or deducted from the fair value of the financial assets or financial liabilities, as appropriate, on initial recognition. Transaction costs directly attributable to the acquisition of financial assets or financial liabilities at fair value through profit or loss are recognised immediately in profit or loss.

The effective interest method is a method of calculating the amortised cost of a financial asset or financial liability and of allocating interest income and interest expense over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash receipts and payments (including all fees and points paid or received that form an integral part of the effective interest rate, transaction costs and other premiums or discounts) through the expected life of the financial asset or financial liability, or, where appropriate, a shorter period, to the net carrying amount on initial recognition.

Financial assets

Classification and subsequent measurement of financial assets

Financial assets that meet the following conditions are subsequently measured at amortised cost:

- the financial asset is held within a business model whose objective is to collect contractual cash flows; and

- the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Financial assets that meet the following conditions are subsequently measured at FVTOCI:

- the financial asset is held within a business model whose objective is achieved by both selling and collecting contractual cash flows; and

- the contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

3. SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

Financial instruments *(Continued)*

Financial assets *(Continued)*

Classification and subsequent measurement of financial assets *(Continued)*

(i) Amortised cost and interest income

Interest income is recognised using the effective interest method for financial assets measured subsequently at amortised cost. Interest income is calculated by applying the effective interest rate to the gross carrying amount of a financial asset, except for financial assets that have subsequently become credit-impaired (see below). For financial assets that have subsequently become credit-impaired, interest income is recognised by applying the effective interest rate to the amortised cost of the financial asset from the next reporting period. If the credit risk on the credit-impaired financial instrument improves so that the financial asset is no longer credit-impaired, interest income is recognised by applying the effective interest rate to the gross carrying amount of the financial asset from the beginning of the reporting period following the determination that the asset is no longer credit impaired.

(ii) Debt instruments/receivables classified as at FVTOCI

Subsequent changes in the carrying amounts for debt instruments/receivables classified as at FVTOCI as a result of interest income calculated using the effective interest method are recognised in profit or loss. All other changes in the carrying amount of these debt instruments/receivables are recognised in other comprehensive income and accumulated under the heading of other reserves. Impairment allowances are recognised in profit or loss with corresponding adjustment to other comprehensive income without reducing the carrying amounts of these debt instruments/receivables. When these debt instruments/receivables are derecognised, the cumulative gains or losses previously recognised in other comprehensive income are reclassified to profit or loss.

3. SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

Financial instruments *(Continued)*

Financial assets *(Continued)*

Impairment of financial assets and other items subject to impairment assessment under IFRS 9

The Group performs impairment assessment under expected credit loss ("ECL") model on financial assets (including trade receivables from goods and services, notes receivable, other receivables, restricted bank deposits and cash and cash equivalents), and other items (lease receivables and contract assets) which are subject to impairment assessment under IFRS 9. The amount of ECL is updated at each reporting date to reflect changes in credit risk since initial recognition.

Lifetime ECL represents the ECL that will result from all possible default events over the expected life of the relevant instrument. In contrast, 12-month ECL ("12m ECL") represents the portion of lifetime ECL that is expected to result from default events that are possible within 12 months after the reporting date. Assessment are done based on the Group's historical credit loss experience, adjusted for factors that are specific to the debtors, general economic conditions and an assessment of both the current conditions at the reporting date as well as the forecast of future conditions.

The Group always recognises lifetime ECL for trade receivables from goods and services, contract assets and lease receivables. For trade receivables from goods and services, contract assets and lease receivables with significant balances mainly from large multinational and state-owned oil companies, the ECL are assessed individually. For trade receivables from goods and services from private and relatively small customers, the ECL are assessed collectively using a provision matrix with appropriate groupings.

For all other instruments, the Group measures the loss allowance equal to 12m ECL, unless when there has been a significant increase in credit risk since initial recognition, in which case the Group recognises lifetime ECL. The assessment of whether lifetime ECL should be recognised is based on significant increases in the likelihood or risk of a default occurring since initial recognition.

3. SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

Financial instruments *(Continued)*

Financial assets *(Continued)*

Impairment of financial assets and other items subject to impairment assessment under IFRS 9 *(Continued)*

(i) Significant increase in credit risk

In assessing whether the credit risk has increased significantly since initial recognition, the Group compares the risk of a default occurring on the financial instrument as at the reporting date with the risk of a default occurring on the financial instrument as at the date of initial recognition. In making this assessment, the Group considers both quantitative and qualitative information that is reasonable and supportable, including historical experience and forward-looking information that is available without undue cost or effort.

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

- an actual or expected significant deterioration in the financial instrument's external (if available) or internal credit rating;
- significant deterioration in external market indicators of credit risk, e.g. a significant increase in the credit spread, the credit default swap prices for the debtor;
- existing or forecast adverse changes in business, financial or economic conditions that are expected to cause a significant decrease in the debtor's ability to meet its debt obligations;
- an actual or expected significant deterioration in the operating results of the debtor;
- an actual or expected significant adverse change in the regulatory, economic, or technological environment of the debtor that results in a significant decrease in the debtor's ability to meet its debt obligations.

Irrespective of the outcome of the above assessment, the Group presumes that the credit risk has increased significantly since initial recognition when contractual payments are more than 30 days past due, unless the Group has reasonable and supportable information that demonstrates otherwise.

The Group regularly monitors the effectiveness of the criteria used to identify whether there has been a significant increase in credit risk and revises them as appropriate to ensure that the criteria are capable of identifying significant increase in credit risk before the amount becomes past due.

3. SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

Financial instruments *(Continued)*

Financial assets *(Continued)*

Impairment of financial assets and other items subject to impairment assessment under IFRS 9 *(Continued)*

(ii) Definition of default

For internal credit risk management, the Group considers an event of default occurs when information developed internally or obtained from external sources indicates that the debtor is unlikely to pay its creditors, including the Group, in full (without taking into account any collaterals held by the Group).

Irrespective of the above, the Group considers that default has occurred when a financial asset is more than 90 days past due unless the Group has reasonable and supportable information to demonstrate that a more lagging default criterion is more appropriate.

(iii) Credit-impaired financial assets

A financial asset is credit-impaired when one or more events that have a detrimental impact on the estimated future cash flows of that financial asset have occurred. Evidence that a financial asset is credit-impaired includes observable data about the following events:

- significant financial difficulty of the issuer or the borrower;
- a breach of contract, such as a default or past due event;
- the lender(s) of the borrower, for economic or contractual reasons relating to the borrower's financial difficulty, having granted to the borrower a concession(s) that the lender(s) would not otherwise consider;
- it is becoming probable that the borrower will enter bankruptcy or other financial reorganisation; or
- the disappearance of an active market for that financial asset because of financial difficulties; or
- the purchase or origination of a financial asset at a deep discount that reflects the incurred credit losses.

(iv) Write-off policy

The Group writes off a financial asset when there is information indicating that the counterparty is in severe financial difficulty and there is no realistic prospect of recovery, for example, when the counterparty has been placed under liquidation or has entered into bankruptcy proceedings. Financial assets written off may still be subject to enforcement activities under the Group's recovery procedures, taking into account legal advice where appropriate. A write-off constitutes a derecognition event. Any subsequent recoveries are recognised in profit or loss.

3. SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

Financial instruments *(Continued)*

Financial assets *(Continued)*

Impairment of financial assets and other items subject to impairment assessment under IFRS 9 *(Continued)*

(v) Measurement and recognition of ECL

The measurement of ECL is a function of the probability of default, loss given default (i.e. the magnitude of the loss if there is a default) and the exposure at default. The assessment of the probability of default and loss given default is based on historical data and forward-looking information. Estimation of ECL reflects an unbiased and probability-weighted amount that is determined with the respective risks of default occurring as the weights.

Generally, the ECL is the difference between all contractual cash flows that are due to the Group in accordance with the contract and the cash flows that the Group expects to receive, discounted at the effective interest rate determined at initial recognition. For a lease receivable, the cash flows used for determining the ECL is consistent with the cash flows used in measuring the lease receivable in accordance with IFRS 16.

Where ECL is measured on a collective basis or cater for cases where evidence at the individual instrument level may not yet be available, the financial instruments are grouped on the following basis:

- Nature of financial instruments (i.e. the Group's trade receivables from goods and services from private and relatively small customers are assessed as a separate group. Other financial instruments and other items are assessed for expected credit losses on an individual basis);
- Past-due status;
- Nature, size and industry of debtors; and
- External credit ratings where available.

The grouping is regularly reviewed by management to ensure the constituents of each group continue to share similar credit risk characteristics.

Interest income is calculated based on the gross carrying amount of the financial asset unless the financial asset is credit impaired, in which case interest income is calculated based on amortised cost of the financial asset.

The Group recognises an impairment gain or loss in profit or loss for all financial instruments by adjusting their carrying amount, with the exception of trade receivables from goods and services, other receivables, contract assets and lease receivables where the corresponding adjustment is recognised through a loss allowance account.

3. SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

Financial instruments *(Continued)*

Financial assets *(Continued)*

Derecognition of financial assets

The Group derecognises a financial asset only when the contractual rights to the cash flows from the asset expire, or when it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another entity. If the Group retains substantially all the risks and rewards of ownership of a transferred financial asset, the Group continues to recognise the financial asset and also recognises a collateralised borrowing for the proceeds received.

On derecognition of a financial asset, the difference between the asset's carrying amount and the sum of the consideration received and receivable and the cumulative gain or loss that had been recognised in other comprehensive income and accumulated in equity is recognised in profit or loss.

Offsetting financial instruments

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

Financial liabilities and equity

Classification as debt or equity

Debt and equity instruments issued by a group entity are classified as either financial liabilities or as equity in accordance with the substance of the contractual arrangements and the definitions of a financial liability and an equity instrument.

Financial liabilities at amortised cost

Financial liabilities including long-term borrowings, current portion of long-term borrowings, short-term borrowings, long-term bonds, current portion of long-term bonds, trade and notes payables and part of accruals and other payables are subsequently measured at amortised cost, using the effective interest method.

Derecognition of financial liabilities

The Group derecognises financial liabilities when, and only when, the Group's obligations are discharged, cancelled or have expired. The difference between the carrying amount of the financial liability derecognised and the consideration paid and payable is recognised in profit or loss.

3. SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

Financial instruments *(Continued)*

Financial liabilities and equity *(Continued)*

Non-substantial modifications of financial liabilities

For non-substantial modifications of financial liabilities that do not result in derecognition, the carrying amount of the relevant financial liabilities will be calculated at the present value of the modified contractual cash flows discounted at the financial liabilities' original effective interest rate. Transaction costs or fees incurred are adjusted to the carrying amount of the modified financial liabilities and are amortised over the remaining term. Any adjustment to the carrying amount of the financial liability is recognised in profit or loss at the date of modification.

Hedging activities

The Group documents at the inception of the transaction the relationship between hedging instruments and hedged items, as well as its risk management objectives and strategy for undertaking various hedging transactions. The Group also documents its assessment, both at hedge inception and on an ongoing basis, of whether the derivatives that are used in hedging transactions are highly effective in offsetting changes in fair values or cash flows of hedged items.

Assessment of hedging relationship and effectiveness

For hedge effectiveness assessment, the Group considers whether the hedging instrument is effective in offsetting changes in fair values or cash flows of the hedged item attributable to the hedged risk, which is when the hedging relationships meet all of the following hedge effectiveness requirements:

- there is an economic relationship between the hedged item and the hedging instrument;
- the effect of credit risk does not dominate the value changes that result from that economic relationship; and
- the hedge ratio of the hedging relationship is the same as that resulting from the quantity of the hedged item that the Group actually hedges and the quantity of the hedging instrument that the entity actually uses to hedge that quantity of hedged item.

If a hedging relationship ceases to meet the hedge effectiveness requirement relating to the hedge ratio but the risk management objective for that designated hedging relationship remains the same, the Group adjusts the hedge ratio of the hedging relationship (i.e. rebalances the hedge) so that it meets the qualifying criteria again.

3. SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

Hedging activities *(Continued)*

Net investment hedge

Any gain or loss on the hedging instrument relating to the effective portion of the hedge is recognised in other comprehensive income. The gain or loss relating to the ineffective portion is recognised in profit or loss.

Gains and losses accumulated in equity are included in the profit or loss when the foreign operation is partially disposed of or sold.

Inventories

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

Cash and cash equivalents

In the consolidated statement of cash flows, cash and cash equivalents include cash on hand and bank deposits.

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. The difference between the aggregate considerations paid for repurchase of shares and the deduction of share capital is recognised in share premium.

Borrowing costs

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

Current and deferred income tax

The tax expense for the period comprises current and deferred tax. Tax is recognised in the consolidated statement of 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.

3. SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

Current and deferred income tax *(Continued)*

Current income tax

The current income tax charge is calculated on the basis of the tax laws enacted or substantively enacted at the end of the financial period in the countries where the Company's subsidiaries 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.

Deferred income tax

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 substantively enacted by the end of financial period and are expected to apply when the related deferred income tax asset is realised or the deferred income tax liability is settled.

Deferred income 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.

Deferred income tax liabilities are provided on temporary differences arising from investments in subsidiaries, a joint venture and an associate, 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.

Deferred income tax assets are recognised on deductible temporary differences arising from investments in subsidiaries, a joint venture and an associate 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.

For the purposes of measuring deferred tax for leasing transactions in which the Group recognises the right-of-use assets and the related lease liabilities, the Group first determines whether the tax deductions are attributable to the right-of-use assets or the lease liabilities.

For leasing transactions in which the tax deductions are attributable to the lease liabilities, the Group applies IAS 12 *Income Taxes* requirements to the lease transaction as a whole. Temporary differences relating to right-of-use assets and lease liabilities are assessed on a net basis. Excess of depreciation on right-of-use assets over the lease payments for the principal portion of lease liabilities resulting in net deductible temporary differences.

3. SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

Current and deferred income tax *(Continued)*

Offsetting

Deferred income tax assets and liabilities are offset when there is a legally enforceable right to set off current tax assets against current tax liabilities and when they relate to income taxes levied to the same taxable entity by the same taxation authority.

Employee benefits

Pension and other social obligations

The Group has various defined contribution plans for pensions, housing fund and other social obligations in accordance with the local conditions and practices in the municipalities and provinces in which they operate. A defined contribution plan is a pension and/or other social benefits plan under which the Group pays fixed contributions into a separate publicly administered pension and/or other social insurance plan on mandatory bases. The Group will have no legal or constructive obligations to pay further contributions if the fund does not hold sufficient assets to pay all employees benefits relating to employee service in the current and prior periods. The contributions are recognised as employee benefit expenses when incurred.

Share-based compensation

The Group operates a number of equity-settled share-based compensation plans, under which the Group 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 at the grant date:

- Including any market performance conditions;
- 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.

Non-market vesting conditions are included in assumptions about the number of options that are expected to vest. The total expense is recognised over the vesting period, which is the period over which all of the specified vesting conditions are to be satisfied. 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 vesting conditions. It recognises the impact of the revision to original estimates, if any, in the consolidated statement of profit or loss, with a corresponding adjustment to equity.

3. SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

Employee benefits *(Continued)*

Share-based compensation *(Continued)*

When the options are exercised, the cash subscribed for the shares issued is credited to share capital (nominal value) and share premium, net of any directly attributable transaction costs; and the amount previously recognised in capital reserve will be transferred to share premium. When the share options are forfeited after the vesting date or are still not exercised at the expiry date, the amount previously recognised in capital reserve will continue to be held in capital reserve.

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.

Revenue from contracts with customers

The Group recognises revenue when (or as) a performance obligation is satisfied, i.e. when "control" of the goods or services underlying the particular performance obligation is transferred to the customer.

A performance obligation represents a good and service (or a bundle of goods or services) that is distinct or a series of distinct goods or services that are substantially the same.

Control is transferred over time and revenue is recognised over time by reference to the progress towards complete satisfaction of the relevant performance obligation if one of the following criteria is met:

- the customer simultaneously receives and consumes the benefits provided by the Group's performance as the Group performs;

- the Group's performance creates and enhances an asset that the customer controls as the Group performs; or

- the Group's performance does not create an asset with an alternative use to the Group and the Group has an enforceable right to payment for performance completed to date.

Otherwise, revenue is recognised at a point in time when the customer obtains control of the distinct good or service.

A contract asset represents the Group's right to consideration in exchange for goods or services that the Group has transferred to a customer that is not yet unconditional. It is assessed for impairment in accordance with IFRS 9. In contrast, a receivable represents the Group's unconditional right to consideration, i.e. only the passage of time is required before payment of that consideration is due.

A contract liability represents the Group's obligation to transfer goods or services to a customer for which the Group has received consideration (or an amount of consideration is due) from the customer.

A contract asset and a contract liability relating to the same contract are accounted for and presented on a net basis.

3. SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

Revenue from contracts with customers *(Continued)*

Contracts with multiple performance obligations (including allocation of transaction price)

For contracts that contain more than one performance obligations, typically drilling technology service and well completion service (within oilfield technology services) in one contract, the Group allocates the transaction price to each performance obligation on a relative stand-alone selling price basis.

The stand-alone selling price of the distinct good or service underlying each performance obligation is determined at contract inception. It represents the price at which the Group would sell a promised good or service separately to a customer. If a stand-alone selling price is not directly observable, the Group estimates it using appropriate techniques such that the transaction price ultimately allocated to any performance obligation reflects the amount of consideration to which the Group expects to be entitled in exchange for transferring the promised goods or services to the customer.

Over time revenue recognition: measurement of progress towards complete satisfaction of a performance obligation

Output method

The progress towards complete satisfaction of a performance obligation is measured based on output method, which is to recognise revenue on the basis of direct measurements of the value of the goods or services transferred to the customer to date relative to the remaining goods or services promised under the contract, that best depict the Group's performance in transferring control of goods or services.

Interest income

Interest income is recognised on a time-proportion basis using the effective interest method.

Leases

Definition of a lease

A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

For contracts entered into or modified on or after the date of initial application, the Group assesses whether a contract is or contains a lease based on the definition under IFRS 16 at inception or modification date. Such contract will not be reassessed unless the terms and conditions of the contract are subsequently changed.

3. SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

Leases *(Continued)*

The Group as a lessee

Short-term leases and leases of low-valued assets

The Group applies the short-term lease recognition exemption to leases of buildings and equipment that have a lease term of 12 months or less from the commencement date and do not contain a purchase option. It also applies the recognition exemption for lease of low-value assets. Lease payments on short-term leases and leases of low-value assets are recognised as expense on a straight-line basis or another systematic basis over the lease term.

Right-of-use assets

The cost of right-of-use assets includes:

- the amount of the initial measurement of the lease liability;
- any lease payments made at or before the commencement date, less any lease incentives received;
- any initial direct costs incurred by the Group; and
- an estimate of costs to be incurred by the Group in dismantling and removing the underlying assets, restoring the site on which it is located or restoring the underlying asset to the condition required by the terms and conditions of the lease.

Right-of-use assets are measured at cost, less any accumulated depreciation and impairment losses, and adjusted for any remeasurement of lease liabilities.

Right-of-use assets in which the Group is reasonably certain to obtain ownership of the underlying leased assets at the end of the lease term is depreciated from commencement date to the end of the useful life. Otherwise, right-of-use assets are depreciated on a straight-line basis over the shorter of its estimated useful life and the lease term.

The Group presents right-of-use assets as a separate line item on the consolidated statement of financial position.

3. SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

Leases *(Continued)*

The Group as a lessee *(Continued)*

Lease liabilities

At the commencement date of a lease, the Group recognises and measures the lease liability at the present value of lease payments that are unpaid at that date. In calculating the present value of lease payments, the Group uses the incremental borrowing rate at the lease commencement date if the interest rate implicit in the lease is not readily determinable.

The lease payments include:

- fixed payments (including in-substance fixed payments) less any lease incentives receivable;
- variable lease payments that depend 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 the option; and
- payments of penalties for terminating a lease, if the lease term reflects the Group exercising an option to terminate the lease.

After the commencement date, lease liabilities are adjusted by interest accretion and lease payments.

The Group remeasures lease liabilities (and makes a corresponding adjustment to the related right-of-use assets) whenever:

- the lease term has changed or there is a change in the assessment of exercise of a purchase option, in which case the related lease liability is remeasured by discounting the revised lease payments using a revised discount rate at the date of reassessment.
- the lease payments change due to changes in market rental rates following a market rent review/ expected payment under a guaranteed residual value, in which cases the related lease liability is remeasured by discounting the revised lease payments using the initial discount rate.

The Group presents lease liabilities as a separate line item on the consolidated statement of financial position.

3. SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

Leases *(Continued)*

The Group as a lessor

Classification and measurement of leases

Leases for which the Group is a lessor are classified as operating leases. Rental income from operating leases is recognised in profit or loss on a straight-line basis over the term of the relevant lease. Rental income which are derived from the Group's ordinary course of business are presented as revenue.

Sublease

The Group leases certain drilling equipment from its suppliers and then leases to its customers. When the Group is an intermediate lessor, it accounts for the head lease and the sublease as two separate contracts. The sublease is classified as a finance or operating lease by reference to the right-of-use asset arising from the head lease, not with reference to the underlying asset.

Government grants

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

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

Dividend distribution

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

4. KEY SOURCES OF ESTIMATION UNCERTAINTY

In the application of the Group's accounting policies, which are described in Note 3, the Directors are required to make judgements, estimates and assumptions about the carrying amounts of assets and liabilities that are not readily apparent from other sources. The estimates and associated assumptions are based on historical experience and other factors that are considered to be relevant. Actual result may differ from these estimates.

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

The following are the key assumptions concerning the future, and other key sources of estimation uncertainty at the end of the reporting period, that may have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year.

(a) Provision of ECL for trade receivables from goods and services

The impairment of trade receivables from goods and services under ECL model is determined by the management based on the Group's historical credit loss experience, adjusted for factors that are specific to the debtors, general economic conditions and an assessment of both the current conditions at the reporting date as well as the forecast of future conditions.

The Group uses provision matrix to calculate ECL for the trade receivables from goods and services from private and relatively small customers. The provision rates are based on past due analysis as groupings of various debtors that have similar loss patterns. The provision matrix is based on the Group's historical default rates taking into consideration forward-looking information that is reasonable and supportable available without undue costs or effort. At every reporting date, the historical observed default rates are reassessed and changes in the forward-looking information are considered. In addition, trade receivables from goods and services with significant balances from large multinational and state-owned oil companies or credit impaired are assessed for ECL individually.

The provision of ECL is sensitive to changes in estimates. In estimating the provision of ECL, the management is required to consider all relevant factors with reasonable and supportable assumptions to make significant accounting estimations. As at 31 December 2020, the carrying amount of trade receivables was RMB1,852,706,000 (31 December 2019: RMB2,020,032,000), already net of accumulated expected credit loss of RMB268,490,000 (31 December 2019: RMB185,053,000). The information about the ECL and the Group's trade receivables from goods and services are disclosed in Note 34.2(b)(i) and Note 11.

(b) Impairment of inventory

Inventories are reviewed for impairment whenever events or changes in circumstances cause their cost to exceed their net realisable value. Cost is determined on the weighted average basis. The determination of net realisable value of the inventories requires the use of estimates. Net realisable value represents the estimated selling price for inventories less all estimated costs of completion and costs necessary to make the sale. Where the actual outcome or expectation in future is different from the original estimate, such difference will have an impact on the cost of inventories and a provision may be made or reversed in the year in which these estimates have been changed. As at 31 December 2020, the carrying amount of inventories was RMB930,618,000 (31 December 2019: RMB765,496,000), already net of accumulated impairment loss of RMB103,203,000 (31 December 2019: RMB83,232,000).

4. KEY SOURCES OF ESTIMATION UNCERTAINTY *(Continued)*

(c) Estimated impairment of goodwill

Determining whether goodwill is impaired requires an estimation of the value in use of the CGU to which goodwill has been allocated. The value in use calculations require the Group to estimate the future cash flows expected to arise from the CGU and a suitable discount rate in order to calculate the present value. Where the actual future cash flows are less than expected, or change in facts and circumstances which results in downward revision of future cash, a material impairment loss may arise. As at 31 December 2020 and 2019, the carrying amount of goodwill was RMB242,004,000, already net of accumulated impairment loss of RMB26,325,000. Details of the key assumptions used by the management in goodwill impairment assessment are set out in Note 8.

(d) Estimated impairment of property, plant and equipment

Property, plant and equipment is stated at cost less subsequent accumulated depreciation and impairment losses, if any. The carrying amount is 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 of disposal and value in use.

In estimating the recoverable amount, management is required to consider all relevant factors with reasonable and supportable assumptions to make significant accounting estimations. In estimating the recoverable amounts of assets, major assumptions, including future cash flow projections associated with forecast revenue, forecast gross margin and a discount rate, are made. If future events do not correspond to such assumptions, the recoverable amounts will need to be revised, and this may have an impact on the Group's financial position and results of operations.

The aggregate carrying amount of property, plant and equipment as at 31 December 2020 was RMB2,099,390,000 (31 December 2019: RMB2,137,866,000) (Note 6).

5. SEGMENT INFORMATION

The chief executive officer, president, executive vice presidents and Directors are the Group's chief operating decision makers (the "CODM"). Management has determined the operating segments based on the information reviewed by the CODM for the purposes of allocating resources and assessing performance.

The Group's reportable segments are entity or group of entities that offer different products and services, which is the basis by which the CODM make decisions about resources to be allocated to the segments and assesses their performance. Financial information of these entities has been separated to present discrete segment information to be reviewed by the CODM.

The CODM assess performance of three reportable segments: drilling technology, well completion and oil production services.

All of the three reportable segments include a number of direct service provision operations in various cities in China and overseas countries, each of which is considered as a separate operating segment by the CODM. For segment reporting, these individual operating segments have been aggregated into three single reportable segments based on their sharing of similar economic characteristics, including similar nature of the services and products, type of customer for their services and products and the method used to provide their services and distribute their products.

(Amounts expressed in thousands of RMB, unless otherwise stated)

5. SEGMENT INFORMATION *(Continued)*

The measurement of profit or loss, assets and liabilities of the operating segments are the same as those described in the summary of significant accounting policies in Note 3. The CODM evaluate the performance of the operating segments based on profit before income tax expense, certain depreciation and amortisation, interest income, finance expenses, share of profit of a joint venture, asset impairment provisions and corporate overheads ("EBITDA"). The corporate overheads and corporate assets are the general management expenses incurred and assets held by the headquarters of the Group.

	Drilling technology	Well completion	Oil production services	Total
For the year ended 31 December 2020				
Revenue (Note)	**1,303,840**	**749,986**	**1,033,826**	**3,087,652**
EBITDA	**412,548**	**276,457**	**376,534**	**1,065,539**
Depreciation and amortisation	**(186,957)**	**(121,574)**	**(31,047)**	**(339,578)**
Asset impairment provision of				
– Inventories	**(6,598)**	**(10,646)**	**(2,727)**	**(19,971)**
– Trade receivables	**(64,552)**	**(16,616)**	**(2,269)**	**(83,437)**
Interest income	**232**	**2,631**	**4**	**2,867**
Finance expenses	**(11,578)**	**(6,322)**	**(7,857)**	**(25,757)**
Share of profit of a joint venture	**141**	**–**	**–**	**141**
Income tax expense	**(28,380)**	**(17,697)**	**(68,422)**	**(114,499)**
For the year ended 31 December 2019				
Revenue (Note)	1,624,203	836,028	1,129,266	3,589,497
EBITDA	684,516	352,190	468,693	1,505,399
Depreciation and amortisation	(169,923)	(125,119)	(26,803)	(321,845)
Asset impairment provision of				
– Inventories	(16,559)	(15,380)	(5,050)	(36,989)
– Trade receivables	(26,122)	(17,812)	(18,999)	(62,933)
– Other receivables	(10,327)	(14,433)	–	(24,760)
Interest income	269	1,372	508	2,149
Finance expenses	(8,536)	(6,418)	(6,122)	(21,076)
Share of profit of a joint venture	762	–	–	762
Income tax expense	(50,332)	(30,976)	(61,483)	(142,791)

Note: Sales between segments, with details set out in Note 22, are carried out at terms mutually agreed between relevant group entities. The revenue from external parties reported to the CODM is measured in a manner consistent with that in the consolidated statement of profit or loss.

(Amounts expressed in thousands of RMB, unless otherwise stated)

5. SEGMENT INFORMATION *(Continued)*

	Drilling technology	Well completion	Oil production services	Total
As at 31 December 2020				
Total assets	**2,573,139**	**2,533,969**	**920,734**	**6,027,842**
Total assets include:				
Capital expenditures	**186,049**	**101,779**	**49,523**	**337,351**
As at 31 December 2019				
Total assets	2,304,384	2,786,231	712,727	5,803,342
Total assets include:				
Capital expenditures	122,618	65,984	32,106	220,708

Disclosure of liabilities has not been included here because these liabilities balances are not allocated to segments.

A reconciliation of total EBITDA to profit before income tax is provided as follows:

	Year ended 31 December	
	2020	2019
EBITDA for reportable segments	**1,065,539**	1,505,399
Corporate overheads	**(569,065)**	(615,496)
Depreciation		
– Property, plant and equipment	**(271,744)**	(255,815)
– Right-of-use assets	**(39,570)**	(38,224)
Amortisation	**(28,264)**	(27,806)
Asset impairment provisions	**(103,408)**	(124,682)
Interest income	**2,867**	2,149
Finance expenses	**(25,757)**	(21,076)
Share of profit of a joint venture	**141**	762
Profit before income tax	**30,739**	425,211

(Amounts expressed in thousands of RMB, unless otherwise stated)

5. SEGMENT INFORMATION *(Continued)*

Reportable segments' assets are reconciled to total assets as follows:

	As at 31 December	
	2020	2019
Assets for reportable segments	**6,027,842**	5,803,342
Corporate assets for general management	**1,853,279**	3,703,470
Total assets	**7,881,121**	9,506,812

Note:

During the current year, certain buildings previously occupied for corporate management were allocated to operating segments for business use, and the management of deposits to large state-owned oil company customers was delegated to operating segments.

The Group allocates revenue on the basis of the location in which the sales are originated.

Geographical Information

	Revenue Year ended 31 December		Non-current assets As at 31 December	
	2020	2019	**2020**	2019
PRC	**1,832,837**	1,683,365	**1,938,609**	2,069,023
Republic of Iraq ("Iraq")	**961,079**	1,419,755	**723,292**	741,214
Other countries	**293,736**	486,377	**163,473**	167,524
Total	**3,087,652**	3,589,497	**2,825,374**	2,977,761

Client information

For the year ended 31 December 2020, revenues of approximately RMB1,465,289,000 (2019: RMB1,666,245,000) were derived from two external independent customers, which contributed 31.40% and 16.06% (2019: 32.17% and 14.25%) to the total revenue respectively. These revenues were mainly attributable to drilling technology and well completion segments (2019: drilling technology and well completion segments).

(Amounts expressed in thousands of RMB, unless otherwise stated)

6. PROPERTY, PLANT AND EQUIPMENT

	Buildings	Machinery and equipment	Motor vehicles	Furniture, fixtures, leasehold improvements and others	Construction-in-progress	Total
As at 1 January 2019						
Cost	729,077	2,445,099	53,027	124,424	109,074	3,460,701
Accumulated depreciation	(104,313)	(993,332)	(39,667)	(67,584)	–	(1,204,896)
Carrying values	624,764	1,451,767	13,360	56,840	109,074	2,255,805
Year ended 31 December 2019						
As at 1 January 2019	624,764	1,451,767	13,360	56,840	109,074	2,255,805
Additions	–	43,971	315	15,046	133,757	193,089
Transfer in/(out)	5,564	34,914	2,590	10,697	(53,765)	–
Depreciation charge	(36,872)	(226,213)	(2,836)	(18,268)	–	(284,189)
Disposals	–	(40,021)	(328)	(310)	–	(40,659)
Currency translation differences	2,151	9,640	110	348	1,571	13,820
As at 31 December 2019	595,607	1,274,058	13,211	64,353	190,637	2,137,866
As at 31 December 2019						
Cost	737,310	2,473,968	54,626	149,550	190,637	3,606,091
Accumulated depreciation	(141,703)	(1,199,910)	(41,415)	(85,197)	–	(1,468,225)
Carrying values	595,607	1,274,058	13,211	64,353	190,637	2,137,866
Year ended 31 December 2020						
As at 1 January 2020	**595,607**	**1,274,058**	**13,211**	**64,353**	**190,637**	**2,137,866**
Additions	**-**	**21,983**	**439**	**318**	**269,792**	**292,532**
Transfer in/(out)	**50,476**	**112,429**	**4,378**	**6,112**	**(173,395)**	**-**
Depreciation charge	**(31,306)**	**(219,850)**	**(2,913)**	**(20,651)**	**-**	**(274,720)**
Disposals	**(3,316)**	**(6,728)**	**(70)**	**(375)**	**-**	**(10,489)**
Currency translation differences	**(7,985)**	**(22,074)**	**(334)**	**(1,294)**	**(14,112)**	**(45,799)**
As at 31 December 2020	**603,476**	**1,159,818**	**14,711**	**48,463**	**272,922**	**2,099,390**
As at 31 December 2020						
Cost	**772,651**	**2,413,947**	**57,604**	**147,323**	**272,922**	**3,664,447**
Accumulated depreciation	**(169,175)**	**(1,254,129)**	**(42,893)**	**(98,860)**	**-**	**(1,565,057)**
Carrying values	**603,476**	**1,159,818**	**14,711**	**48,463**	**272,922**	**2,099,390**

6. PROPERTY, PLANT AND EQUIPMENT *(Continued)*

During the year ended 31 December 2020, the depreciation charges of the Group were recorded in cost of sales with an amount of RMB225,396,000 (2019: RMB233,583,000), selling, general and administrative expenses with an amount of RMB28,426,000 (2019: RMB30,904,000), and cost of inventories which remained unsold as at year end with an amount of RMB20,898,000 (2019: RMB19,702,000), respectively.

As at 31 December 2020, long-term borrowings were secured by certain equipment with a carrying value of RMB240,791,000 (31 December 2019: RMB277,924,000) and certain buildings with a carrying value of RMB87,341,000 (31 December 2019: RMB63,362,000) (Note 17(a)).

As at 31 December 2019, short-term borrowings were secured by the Group's buildings with a carrying value of RMB46,815,000 (Note17(b)), which has been fully repaid in 2020.

As a result of the changes in the current economic environment related to the COVID-19 pandemic and the plunge in oil price, the Group is experiencing negative conditions including decreased revenues. During the year ended 31 December 2020, management has determined that the property, plant and equipment within one of the CGUs related to well completion services have impairment indicators. An impairment test has been performed on the CGU to which the property, plant and equipment are allocated after taking into account the Group's future operating plans and the outlook for the industry. The recoverable amount of the CGU has been determined based on value-in-use calculations through discounting the estimated future cash flows generated from the CGU to the present value. In estimating the recoverable amounts of assets, major assumptions, including future cash flow projections associated with forecast revenue, forecast gross margin and a discount rate, are made. As a result of the impairment test, management determined that no impairment charge was required for the property, plant and equipment of the CGU in year 2020.

(Amounts expressed in thousands of RMB, unless otherwise stated)

6. PROPERTY, PLANT AND EQUIPMENT *(Continued)*

The Group as lessor

The Group leases out a number of equipment under operating leases. The leases typically run for an initial period of 3 to 24 months. None of the leases includes variable lease payments. The disaggregation of the equipment under operating leases included within "machinery and equipment" and the reconciliation of the carrying amount at the beginning and end of the period are set out as below:

Year ended 31 December 2019	
As at 1 January 2019	178,447
Additions	–
Disposals	(12,926)
Depreciation charge	(35,023)
As at 31 December 2019	130,498
As at 31 December 2019	
Cost	222,025
Accumulated depreciation	(91,527)
Carrying values	130,498
Year ended 31 December 2020	
As at 1 January 2020	**130,498**
Additions	**3,961**
Disposals	**(5,761)**
Depreciation charge	**(23,542)**
As at 31 December 2020	**105,156**
As at 31 December 2020	
Cost	**206,549**
Accumulated depreciation	**(101,393)**
Carrying values	**105,156**

Furthermore, the Group leases certain drilling equipment from its suppliers and then leases to its customers. The Group accounts for the head lease and the sublease as two separate contracts. The sublease is classified as operating leases by reference to the right-of-use asset or expenses relating to short-term leases arising from the head lease, not with reference to the underlying asset.

(Amounts expressed in thousands of RMB, unless otherwise stated)

7. RIGHT-OF-USE ASSETS

	Leasehold lands	Equipment	Buildings	Total
Year ended 31 December 2019				
As at 1 January 2019	77,567	–	28,463	106,030
Additions	–	110,456	13,791	124,247
Depreciation charge	(1,932)	(28,073)	(10,371)	(40,376)
Carrying values				
As at 31 December 2019	75,635	82,383	31,883	189,901
Year ended 31 December 2020				
As at 1 January 2020	**75,635**	**82,383**	**31,883**	**189,901**
Additions	**-**	**-**	**4,602**	**4,602**
Terminations of leases previously entered	**-**	**(16,852)**	**-**	**(16,852)**
Depreciation charge	**(1,932)**	**(22,866)**	**(14,902)**	**(39,700)**
Carrying values				
As at 31 December 2020	**73,703**	**42,665**	**21,583**	**137,951**

During the current and prior years, the Group entered into new lease agreements for the use of buildings and equipment for 2 to 5 years with extension and termination options. The Group is required to make fixed quarterly, semi-annually or annually payments during the contract periods. On lease commencement, the Group recognised RMB4,602,000 (2019: RMB124,247,000) of right-of-use assets and RMB4,602,000 (2019: RMB124,247,000) lease liabilities. Lease terms are negotiated on an individual basis and contain a range of different terms and conditions. In determining the lease term and assessing the length of the non-cancellable period, the Group applies the definition of a contract and determines the period for which the contract is enforceable. In addition, 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 except for the leasehold lands may not be used as security for borrowing purposes.

For termination options, the Group assesses at lease commencement date that it is reasonably certain not to exercise. For extension options in lease contracts of equipment, the Group assesses at lease commencement date that it is reasonably certain not to exercise since those equipment is used to certain service projects with a limited duration. For extension options in lease contracts of buildings, the Group assesses at lease commencement date that it is not reasonably certain to exercise and the Directors consider the potential future lease payments for lease contracts of buildings not included in lease liabilities are immaterial and hence, no further disclosure is made.

During the year ended 31 December 2020, the depreciation charges of the Group were recorded in cost of sales with an amount of RMB37,418,000 (2019: RMB38,224,000) and cost of inventories which remained unsold as at year end with an amount of RMB2,282,000 (2019: RMB2,152,000), respectively.

During the year ended 31 December 2020, the expense relating to short-term leases and other leases with lease terms end within 12 months amounts to RMB123,933,000 (2019: RMB152,548,000).

(Amounts expressed in thousands of RMB, unless otherwise stated)

7. RIGHT-OF-USE ASSETS *(Continued)*

During the year ended 31 December 2020, the total cash outflow for leases amounts to RMB199,131,000 (2019: RMB160,146,000), consisting of RMB43,535,000 (2019: RMB45,094,000) paid for lease liabilities and RMB155,596,000 (2019: RMB115,052,000) paid for short-term leases and other leases with lease terms end within 12 months.

The Group has obtained the land use right certificates for all leasehold lands.

As at 31 December 2020, the outstanding lease commitment relating to short-term leases of certain equipment and buildings is RMB25,306,000 (2019: RMB39,777,000).

As at 31 December 2020, certain long-term borrowings were secured by right-of-use assets (leasehold lands) with a carrying value of RMB5,548,000 (31 December 2019: 3,281,000) (Note17(a)).

As at 31 December 2019, certain short-term borrowings were secured by right-of-use assets (leasehold lands) with a carrying value of RMB2,423,000 (Note17(b)).

8. GOODWILL

As at 1 January 2019, 31 December 2019 and 2020	
Cost	268,329
Accumulated impairment	(26,325)
Carrying value	242,004

An operating segment-level summary of the goodwill allocation is presented below.

As at 31 December 2020 and 2019	**Drilling technology**	**Well completion**	**Total**
Shandong Precede Petroleum Technology Co., Ltd. (山東普瑞思德石油技術有限公司, "Shandong Precede")	**-**	**132,486**	**132,486**
Beijing Haineng Haite Petroleum Technology Development Co., Ltd. (北京海能海特石油科技發展有限公司, "Beijing Haineng Haite")	**-**	**106,886**	**106,886**
Anton Machinery and Meter Testing Co., Ltd. (安東儀器儀表檢測服務有限公司, "Anton Testing", formerly 四川誠量檢測服務有限公司)	**2,632**	**-**	**2,632**
	2,632	**239,372**	**242,004**

(Amounts expressed in thousands of RMB, unless otherwise stated)

8. GOODWILL *(Continued)*

Goodwill is allocated to the CGUs of the Group identified according to their operations.

The recoverable amount of the CGUs is determined based on value-in-use calculations. These calculations use pre-tax cash flow projections based on financial budgets approved by management covering a five-year period. The Company expects cash flow beyond the five-year period will be similar to that of the fifth year based on existing production capacity. Cash flows beyond the five-year period are extrapolated using 2% growth rates after considering the inflation factor. Based on the assessments, no goodwill was further impaired as at 31 December 2020.

The key assumptions used for value-in-use calculations in 2020 are as follows:

As at 31 December 2020	**Shandong Precede**	**Beijing Haineng Haite**	**Anton Testing**
Gross margin	**16.72%**	**18.82%**	**13.92%**
Discount rate	**14.50%**	**16.07%**	**16.77%**

As at 31 December 2019	Shandong Precede	Beijing Haineng Haite	Anton Testing
Gross margin	18.52%	20.50%	12.23%
Discount rate	14.38%	15.87%	16.70%

Management determined budgeted gross margin based on past performance and its expectations of market development. The discount rates used are pre-tax long-term weighted average costs of capital, which are based on the management's best estimation of the investment returns that market participants would require for the relevant assets.

Except for the accumulated impairment loss already recognised, management believed that any reasonably possible change in any of these assumptions would not cause the aggregate carrying amount of the above CGUs to exceed their recoverable amount as of 31 December 2020.

(Amounts expressed in thousands of RMB, unless otherwise stated)

9. INTANGIBLE ASSETS

As at 31 December 2020 and 2019	Patents	Computer software	Total
As at 1 January 2019			
Cost	368,842	81,440	450,282
Accumulated amortisation	(156,369)	(41,199)	(197,568)
Carrying value	212,473	40,241	252,714
Year ended 31 December 2019			
As at 1 January 2019	212,473	40,241	252,714
Additions	38,122	2,384	40,506
Amortisation charge	(28,287)	(4,947)	(33,234)
As at 31 December 2019	222,308	37,678	259,986
As at 31 December 2019			
Cost	406,964	83,824	490,788
Accumulated amortisation	(184,656)	(46,146)	(230,802)
Carrying value	222,308	37,678	259,986
Year ended 31 December 2020			
As at 1 January 2020	**222,308**	**37,678**	**259,986**
Additions	**44,698**	**121**	**44,819**
Amortisation charge	**(26,229)**	**(4,924)**	**(31,153)**
As at 31 December 2020	**240,777**	**32,875**	**273,652**
As at 31 December 2020			
Cost	**451,662**	**83,945**	**535,607**
Accumulated amortisation	**(210,885)**	**(51,070)**	**(261,955)**
Carrying value	**240,777**	**32,875**	**273,652**

(Amounts expressed in thousands of RMB, unless otherwise stated)

10. INVENTORIES

	As at 31 December	
	2020	2019
Project materials, spare parts and other materials	**626,384**	478,679
Project-in-progress	**304,234**	286,817
	930,618	765,496

Movements of provision for inventory obsolescence during the year are analysed as follows:

	2020	2019
As at 1 January	**(83,232)**	(135,510)
Addition	**(19,971)**	(36,989)
Write-off	**-**	89,267
As at 31 December	**(103,203)**	(83,232)

11. TRADE AND NOTES RECEIVABLES

	As at 31 December	
	2020	2019
Trade receivables, net (a)		
– contracts with customers	**1,803,419**	1,944,361
– lease receivables	**49,287**	75,671
	1,852,706	2,020,032
Notes receivable (e)	**281,083**	180,215
	2,133,789	2,200,247

Notes:

(a) Ageing analysis of carrying value of trade receivables at the reporting date was as follows:

	As at 31 December	
	2020	2019
1 – 6 months	**921,222**	1,233,147
6 months – 1 year	**396,445**	362,996
1 – 2 years	**335,267**	390,047
2 – 3 years	**199,772**	33,842
	1,852,706	2,020,032

(Amounts expressed in thousands of RMB, unless otherwise stated)

11. TRADE AND NOTES RECEIVABLES *(Continued)*

Notes: *(Continued)*

(b) Most of the Group's past-due trade receivables were those receivables aged over one year. As at 31 December 2020, included in the Group's trade receivables balance are debtors with aggregate carrying amount of RMB369,932,000 (31 December 2019: RMB423,889,000) which are past due but not considered as in default as at the reporting date because the management considered such long ageing items were receivables from customers with good cooperation and would be collected subsequently.

(c) Most of the trade receivables are with credit terms of one year or less. The maximum exposure to credit risk at the reporting date is the carrying value of the trade receivables.

As at 31 December 2020, trade receivables of RMB754,199,000 (31 December 2019: RMB265,986,000) were pledged as security for short-term borrowings of RMB500,189,000 (31 December 2019: RMB128,263,000) (Note 17(b)).

As at 31 December 2020, trade receivables from a customer up to RMB282,420,000 (31 December 2019: RMB282,420,000) were pledged as security for long-term borrowings of RMB97,213,000 (31 December 2019: RMB99,217,000) (Note 17(a)).

(d) Movements of impairment of trade receivables are as follows:

	2020	2019
As at 1 January	**(185,053)**	(122,120)
Addition	**(83,437)**	(62,933)
As at 31 December	**(268,490)**	(185,053)

Details of impairment assessment of trade receivables and notes receivable for the year ended 31 December 2020 and 2019 are set out in Note 34.2(b)(i) and Note 34.2(b)(iii) respectively.

(e) As at 31 December 2020, total notes received amounting to RMB281,083,000 (31 December 2019: RMB180,215,000) are held by the Group as settlement of corresponding trade receivables. During the current year, in order to more effectively manage the overall cashflows under COVID-19, the Group further endorsed certain notes for settlement of trade payables and a new business model was adopted by the management whose objective is achieved by both selling and collecting contractual cash flows; therefore, notes receivable was subsequently measured at fair value through other comprehensive income from 1 July 2020 (31 December 2019: amortised cost). All notes received by the Group are with a maturity period of less than one year.

(f) Trade and notes receivables were denominated in the following currencies:

	As at 31 December	
	2020	2019
RMB	**1,163,195**	1,071,422
United States dollar ("US$")	**954,609**	975,246
Others	**15,985**	153,579
	2,133,789	2,200,247

(Amounts expressed in thousands of RMB, unless otherwise stated)

12. PREPAYMENTS AND OTHER RECEIVABLES

	As at 31 December	
	2020	2019
Current		
Advances to suppliers	**236,422**	262,148
Deposits and other receivables	**346,388**	375,200
Value-added tax recoverable	**22,665**	10,700
	605,475	648,048
Non-current		
Value-added tax recoverable	**40,358**	30,051
Advances to engineering equipment suppliers	**26,070**	112,145
Deposits and other receivables (a)	**-**	13,500
	66,428	155,696

Ageing analysis of the current portion of prepayments and other receivables at the reporting date was disclosed as follows:

	As at 31 December	
	2020	2019
1 – 6 months	**337,259**	401,411
6 months – 1 year	**107,453**	93,888
1 – 2 years	**104,521**	81,388
2 – 3 years	**53,009**	72,913
Over 3 years	**48,864**	44,079
	651,106	693,679
Less: allowance for impairment (b)	**(45,631)**	(45,631)
Prepayments and other receivables, net	**605,475**	648,048

Notes:

(a) The amount as at 31 December 2020 was included in current portion of other receivables.

(b) Movements of allowance for impairment are as follows:

	2020	2019
As at 1 January	**(45,631)**	(20,871)
Addition	**-**	(24,760)
As at 31 December	**(45,631)**	(45,631)

Details of impairment assessment of other receivables for the year ended 31 December 2020 and 2019 are set out in Note 34.2(b)(ii).

(Amounts expressed in thousands of RMB, unless otherwise stated)

13. CASH AND BANK

	As at 31 December	
	2020	2019
Restricted bank deposits (a)	**454,169**	368,730
Cash and cash equivalents		
– Cash on hand	**19,431**	19,743
– Deposits in bank	**859,654**	2,403,131
	1,333,254	2,791,604

Notes:

(a) As at 31 December 2020, bank deposits amounting to RMB454,169,000 (31 December 2019: RMB358,470,000) were held as securities for letter of guarantee and issuance of notes payable, and bank deposits amounting to RMB Nil (31 December 2019: RMB10,260,000) were held as securities for securing short-term bank borrowings (Note 17(b)). The restricted bank deposits carried a fixed interest rate at 0.30% per annum as at 31 December 2020 (2019: 0.35% per annum).

(b) Cash and bank were denominated in the following currencies:

	As at 31 December	
	2020	2019
RMB	**892,050**	750,915
US$	**411,981**	1,980,611
Hong Kong dollar ("HK$")	**2,875**	20,392
Others	**26,348**	39,686
	1,333,254	2,791,604

(c) As at 31 December 2020, cash and cash equivalents were bank deposits mainly bearing market interest rate at 0.3% per annum (31 December 2019: 0.35% per annum).

(d) Details of impairment assessment of restricted bank deposits and cash and cash equivalents for the year ended 31 December 2020 and 2019 are set out in Note 34.2(b)(iii).

(Amounts expressed in thousands of RMB, unless otherwise stated)

14. SHARE CAPITAL AND SHARE OPTIONS

	Number of shares issued and fully paid of HK$0.1 each (thousands)	Share capital HK$'000	RMB'000
Ordinary shares issued and fully paid:			
As at 1 January 2019	3,002,923	300,292	275,959
Exercise of share options (i)	3,640	364	314
As at 31 December 2019	3,006,563	300,656	276,273
Repurchase of ordinary shares (ii)	(95,226)	(9,522)	(8,094)
As at 31 December 2020	2,911,337	291,134	268,179

Notes:

(i) Share options

During the year ended 31 December 2020, options to subscribe for 113,440,000 shares at the exercise price of HK$0.495 have been conditionally granted to key employees (2019: 95,000,000 shares at the exercise price of HK$0.790 have been conditionally granted to three independent non-executive directors, other executive directors and certain key employees). 113,440,000 shares have a 3-year vesting period, 33.33% each exercisable per year, on the premises of achieving the performance conditions of the Group set out in the share option scheme. The options have an option period of 6 years.

Movements in the number of share options outstanding and their related weighted average exercise prices are as follows:

	Average exercise price in HK$ per share	Number of share options (thousands)
As at 1 January 2019		264,168
Granted (on 07 January 2019)	0.790	95,000
Forfeited	0.874	(7,907)
Exercised	0.758	(3,640)
Expired	5.692	(1,434)
As at 1 January 2020		346,187
Granted (on 01 April 2020)	0.495	113,440
Forfeited	0.834	(18,202)
As at 31 December 2020		441,425

14. SHARE CAPITAL AND SHARE OPTIONS *(Continued)*

Notes: *(Continued)*

(i) Share options *(Continued)*

Share options outstanding (in thousands) at the end of the year have the following expiry dates and exercise prices:

Expiry date	**Exercise price HK$ per share**	**Number of share options (thousands) As at 31 December 2020**
23 February 2022	0.740	78,510
31 March 2022	0.800	6,300
1 December 2022	1.100	2,216
22 May 2023	0.810	91,692
2 April 2024	1.020	62,483
6 Jan 2025	0.790	86,784
31 March 2026	0.495	113,440
		441,425

The exercise price of the granted options is equal to the highest of (i) the closing price of the shares of the Company in the daily quotation sheet issued by the Stock Exchange on the date of grant; (ii) the average closing price of the shares as stated in the daily quotation sheets issued by the Stock Exchange for the five business days immediately preceding the date of grant; and (iii) the par value of the shares. Options are conditional on the employee completing one to three years' service (the vesting period) and have a contractual option term of six years. The Group has no legal or constructive obligation to repurchase or settle the options in cash.

As of 31 December 2020, out of the 441,425,000 options (31 December 2019: 346,187,000 options), 249,301,000 options (31 December 2019: 150,497,000 options) were exercisable. Options exercised in 2019 resulted in 3,640,000 shares being issued at a weighted average price of HK$0.758 each. The related weighted average share price at the time of exercise was HK$1.066 per share in 2019.

The fair value of the options granted during the year ended 31 December 2020 was determined using the Binomial Option Pricing Model. The major assumptions used in the pricing model for options granted on 1 April 2020 were the exercise prices shown above and other parameters are shown below:

Parameters	**Options granted in 2020**	Options granted in 2019
Share price as of the valuation date (HK$)	**0.495**	0.790
Expected dividend yield	**-**	–
Forfeiture rate	**0.30%**	0.34%
Exercise multiples	**3.33**	3.38-3.39
Maturity years	**6.0**	6.0
Risk free rate	**0.61%**	1.79%
Annualised volatility	**57.24%**	59.54%

The weighted average fair value of options granted during the year determined using the Binomial valuation model was HK$0.251 per option (2019: HK$0.422 per option). The volatility measured at the standard deviation of continuously compounded share returns is derived from historical volatility of the share price over the last 6 years.

The total expense recognised in the consolidated statement of profit or loss for the year ended 31 December 2020 for share options amounted to RMB17,369,000 (31 December 2019: RMB29,167,000), with a corresponding amount credited in capital reserve (Note 15).

(Amounts expressed in thousands of RMB, unless otherwise stated)

14. SHARE CAPITAL AND SHARE OPTIONS *(Continued)*

Notes: *(Continued)*

(ii) Repurchase of ordinary shares

During July to November this year, the Company repurchased 95,226,000 of its own ordinary shares through The Stock Exchange of Hong Kong Limited, with the price per share from HK$0.330 to HK$0.490. The aggregate consideration paid was RMB32,600,000.

15. RESERVES

	Share premium	Capital reserve(d)	Statutory reserve(c)	Retained earnings	Other reserves	Total
As at 1 January 2019	1,076,529	416,485	76,900	819,796	(19,795)	2,369,915
Profit for the year	–	–	–	268,583	–	268,583
Net investment hedge (b)	–	–	–	–	(30,239)	(30,239)
Currency translation differences (a)	–	–	–	–	16,859	16,859
Share option exercised	3,148	(1,461)	–	–	–	1,687
Share option scheme (Note14 (i))	–	29,167	–	–	–	29,167
Dividends (Note 30)	(30,107)	–	–	–	–	(30,107)
As at 31 December 2019	1,049,570	444,191	76,900	1,088,379	(33,175)	2,625,865
Balance at 1 January 2020	**1,049,570**	**444,191**	**76,900**	**1,088,379**	**(33,175)**	**2,625,865**
Loss for the year	**-**	**-**	**-**	**(95,844)**	**-**	**(95,844)**
Repurchase of ordinary shares	**(24,506)**	**-**	**-**	**-**	**-**	**(24,506)**
Net investment hedge (b)	**-**	**-**	**-**	**-**	**111,612**	**111,612**
Financial instruments measured at fair value through other comprehensive income	**-**	**-**	**-**	**-**	**(7,512)**	**(7,512)**
Currency translation differences (a)	**-**	**-**	**-**	**-**	**(269,051)**	**(269,051)**
Share option scheme (Note14 (i))	**-**	**17,369**	**-**	**-**	**-**	**17,369**
As at 31 December 2020	**1,025,064**	**461,560**	**76,900**	**992,535**	**(198,126)**	**2,357,933**

(Amounts expressed in thousands of RMB, unless otherwise stated)

15. RESERVES *(Continued)*

Notes:

(a) Translation reserve

	2020	2019
Items that may be reclassified subsequently to profit or loss:		
At 1 January	**100,712**	83,853
Currency translation differences	**(269,051)**	16,859
At 31 December	**(168,339)**	100,712

Currency translation differences relating to the translation of the Group's foreign operations from their functional currencies to the Group's presentation currency are recognised directly in other comprehensive income and accumulated in the translation reserve which is shown in other reserves. Currency translation differences accumulated in the translation reserve are reclassified to profit or loss on the disposal/partial disposal of the foreign operations.

(b) Hedging reserve

	2020	2019
Items that may be reclassified subsequently to profit or loss:		
At 1 January	**(148,664)**	(118,425)
Net investment hedge	**111,612**	(30,239)
At 31 December	**(37,052)**	(148,664)

The net investment hedging reserve represents the cumulative effective portion of gains and losses arising on changes in exchange rate of hedging instruments entered into for net investment hedge. The cumulative gain and loss arising on changes in exchange rate of the hedging instrument that are recognised and accumulated under the heading of net investment hedging reserve which is further shown in other reserves will be reclassified to profit or loss on the disposal/partial disposal of the foreign operations.

During the year ended 31 December 2020, a proportion of the Group's US$ denominated long-term bonds amounting to US$243,291,000 (2019: US$265,889,000) has been designated as hedging instrument for the US$ denominated net investment in the Group's overseas subsidiaries. For the year ended 31 December 2020, foreign exchange translation gain of RMB111,612,000 (2019: loss of RMB30,239,000) on the hedging instrument was recognised in other comprehensive income as deduction in other reserves.

(c) Statutory reserve

Subsidiaries established in the PRC shall appropriate 10% of their annual statutory net profit (after offsetting any prior years' losses) to the statutory reserve fund account in accordance with the PRC Company Law and their articles of association. When the balance of such reserve fund reaches 50% of each entity's paid capital, any further appropriation is optional. The statutory reserve fund can be utilised to offset prior years' losses or increase capital after approval. However, except for offsetting prior years' losses, the statutory reserve fund must be maintained at a minimum of 25% of paid capital after such usage.

(d) Capital reserve

Capital reserve represents share-based payments reserve and capital injection before listing by shareholders. As at 31 December 2020, included in the balance of capital reserve, there is RMB226,098,000 (31 December 2019: RMB208,729,000) share-based payments reserve and RMB235,462,000 (31 December 2019: RMB235,462,000) capital injection before listing by shareholders.

For the year ended 31 December 2020
(Amounts expressed in thousands of RMB, unless otherwise stated)

16. LONG-TERM BONDS

Issue date	Par value	Coupon rate	As at 31 December 2020	As at 31 December 2019	Effective interest rate
5 December 2017 (a)	US$176.4 million	9.75%	-	1,247,484	8.31%
5 December 2017 (a)	US$123.6 million	9.75%	-	856,725	11.62%
2 December 2019 (b)	US$300.0 million	7.50%	**1,866,659**	2,040,659	8.91%
Subtotal			**1,866,659**	4,144,868	
Less: Current portion			**(11,034)**	(2,116,445)	
			1,855,625	2,028,423	

Notes:

(a) The Company issued US$300 million senior notes with the coupon rate of 9.75% at discount of par value on 5 December 2017 with direct transaction costs amounting to RMB39,989,000, in which US$176.4 million were arranged to exchange the senior notes issued on 31 October 2013 in the amount of US$172.2 million during the year ended 31 December 2017. The exchange was accounted as a non-substantial modification of financial liabilities. During the period ended 31 December 2020, US$176.4 million and US$19.0 million were repurchased out of US$176.4 million and US$123.6 million respectively. The notes mature in 3 years from the issue date at their nominal value. Interest is payable on a semi-annually basis. As at the due date, the Company fully repaid the remaining principal amount of US$104.6 million for all rest outstanding notes.

(b) The Company issued US$300 million senior notes with the coupon rate of 7.50% at discount of par value on 2 December 2019 with direct transaction costs amounting to RMB45,359,000, in which US$10.1 million were repurchased during the year ended 31 December 2020. The notes mature in 3 years from the issue date at their nominal value. Interest is payable on a semi-annually basis. As at 31 December 2020, interest payable amounted to approximately RMB11.0 million (31 December 2019: RMB12.2 million).

17. BORROWINGS

	As at 31 December			
	2020 Amount	**2020 Interest Rate**	2019 Amount	2019 Interest Rate
Long-term borrowings				
– Secured or guaranteed				
– RMB denominated (a)	**295,027**	**4.25%-9.70%**	294,600	7.10%-9.70%
Less: Current portion	**(163,639)**		(92,174)	
	131,388		202,426	
Short-term bank borrowings				
– Unsecured and unguaranteed				
– RMB denominated	**-**		80,406	5.44%-6.09%
– Secured or guaranteed				
– RMB denominated (b)	**631,628**	**3.50%-6.00%**	329,600	4.70%-6.79%
– USD denominated (b)	**82,035**	**3.02%**	87,743	4.70%-4.77%
Other short-term borrowings				
– Unsecured and unguaranteed				
– RMB denominated (c)	**50,290**	**5.65%**	–	
	763,953		497,749	

(Amounts expressed in thousands of RMB, unless otherwise stated)

17. BORROWINGS *(Continued)*

	As at 31 December	
	2020	2019
The carrying amounts of the above borrowings are repayable:		
– Within one year	**927,592**	589,923
– More than one year but not exceeding two years	**131,388**	202,426
	1,058,980	792,349
Less: Amount due for settlement within one year and shown under current liabilities	**(927,592)**	(589,923)
Amount due after one year	**131,388**	202,426

The exposure of the Group's borrowings are as follows:

	As at 31 December	
	2020	2019
Fixed-rate borrowings	**957,293**	546,873
Variable-rate borrowings	**101,687**	245,476
	1,058,980	792,349

The ranges of effective interest rates (which are also equal to contracted interest rates) on the Group's borrowings are as follows:

	Year ended 31 December	
	2020	2019
Effective interest rate:		
Fixed-rate borrowings	**3.02%-6.90%**	4.70%-7.10%
Variable-rate borrowings	**4.25%-9.70%**	6.09%-9.70%

17. BORROWINGS *(Continued)*

Notes:

(a) As at 31 December 2020, secured long-term borrowings of RMB56,425,000 (31 December 2019: RMB146,341,000) represented borrowings from China Railway Construction Financial Leasing Co., Ltd., a third party, which will mature in July 2021 (31 December 2019: July 2021), and secured by the Group's equipment with a carrying value of RMB240,791,000 (31 December 2019: RMB277,924,000) (Note 6). Secured long-term bank borrowings of RMB96,184,000 (31 December 2019: RMB49,042,000) were secured by the Group's buildings with a carrying value of RMB87,341,000 (31 December 2019: RMB63,362,000) (Note 6) and right-of-use assets (leasehold lands) with a carrying value of RMB5,548,000 (31 December 2019: RMB3,281,000) respectively (Note 7). Secured long-term bank borrowings of RMB97,213,000 (31 December 2019: RMB99,217,000) were secured by the Group's trade receivables amounting to RMB282,420,000 (31 December 2019: RMB282,420,000) (Note 11(c)).

Long-term bank borrowings of RMB45,205,000 (31 December 2019: Nil) were guaranteed by Beijing Zhongguancun Sci-tech Guaranty Co., Ltd. (北京中關村科技融資擔保有限公司), a third party.

(b) As at 31 December 2020, secured short-term bank borrowings of RMB500,189,000 (31 December 2019: RMB128,263,000) were secured by the Group's trade receivables amounting to RMB754,199,000 (31 December 2019: RMB265,986,000) (Note 11(c)). RMB denominated short-term bank borrowings of RMB131,439,000 (31 December 2019: RMB50,575,000) and US$ denominated short-term bank borrowings of RMB82,035,000 (31 December 2019: RMB87,743,000) were guaranteed by Mr. Luo Lin, the Company's ultimate controlling shareholder (Note 35(b)).

As at 31 December 2019, secured short-term bank borrowings of RMB40,021,000 were secured by the Group's buildings with a carrying value of RMB46,815,000 (Note 6) and right-of-use assets (leasehold lands) with a carrying value of RMB2,423,000 (Note 7) respectively.

As at 31 December 2019, short-term bank borrowings of RMB100,741,000 were guaranteed by Beijing Zhongguancun Sci-tech Guaranty Co., Ltd. (北京中關村科技融資擔保有限公司), a third party.

As at 31 December 2019, secured short-term bank borrowings of RMB10,000,000 were secured by the bank deposits amounting to RMB10,260,000 (Note 13(a)).

(c) As at 31 December 2020, other short-term borrowings represented a loan borrowed by Anton Oilfield Services (Group) Ltd. from Beijing Zhongguancun Sci-tech Guaranty Co., Ltd. (北京中關村科技融資擔保有限公司), a third party.

(d) As at 31 December 2020, the undrawn bank borrowing facilities of the Group of approximately RMB930 million (31 December 2019: RMB706 million), with expiry dates up to 8 July 2022 (31 December 2019: 8 July 2022), were unsecured (31 December 2019: unsecured).

(Amounts expressed in thousands of RMB, unless otherwise stated)

18. LEASE LIABILITIES

	As at 31 December 2020	As at 31 December 2019
Lease liabilities payable:		
Within one year	**34,384**	45,834
One to two years	**21,858**	49,829
Two to five years	**9,913**	19,430
	66,155	115,093
Less: Amount due for settlement with 12 months shown under current liabilities	**(34,384)**	(45,834)
Amount due for settlement after 12 months shown under non-current liabilities	**31,771**	69,259

19. TRADE AND NOTES PAYABLES

	As at 31 December	
	2020	2019
Trade payables	**590,670**	546,945
Notes payable	**812,625**	410,461
	1,403,295	957,406

Ageing analysis of trade and notes payables at the reporting date was as follows:

	As at 31 December	
	2020	2019
Less than 1 year	**1,195,605**	790,866
1 – 2 years	**98,618**	77,348
2 – 3 years	**50,903**	30,371
Over 3 years	**58,169**	58,821
	1,403,295	957,406

Trade and notes payables were denominated in the following currencies:

	As at 31 December	
	2020	2019
RMB	**1,285,721**	868,702
US$	**103,241**	80,105
Others	**14,333**	8,599
	1,403,295	957,406

(Amounts expressed in thousands of RMB, unless otherwise stated)

20. ACCRUALS AND OTHER PAYABLES

	As at 31 December	
	2020	2019
Payroll and welfare payables	**43,256**	28,125
Taxes other than income taxes payable	**12,506**	22,364
Payables to equipment venders	**273,437**	220,353
Others	**205,382**	133,686
	534,581	404,528

21. DEFERRED INCOME TAX

For the purpose of presentation in the consolidated statement of financial position, certain deferred income tax assets and liabilities have been offset. The following is the analysis of the deferred income tax balances for financial reporting purposes:

	As at 31 December	
	2020	2019
Deferred income tax assets	**21,993**	34,637
Deferred income tax liabilities	**9,998**	10,219
	11,995	24,418

Deferred tax assets:

	Taxable losses	**Impairment provision of receivables and inventories**	**Unrealised profit**	**Total**
As at 1 January 2019	31,305	13,789	6,982	52,076
(Debited)/credited to the consolidated statement of profit or loss	(12,150)	1,693	(6,982)	(17,439)
As at 31 December 2019	19,155	15,482	–	34,637
(Debited)/credited to the consolidated statement of profit or loss	(12,143)	(501)	–	(12,644)
As at 31 December 2020	7,012	14,981	–	21,993

(Amounts expressed in thousands of RMB, unless otherwise stated)

21. DEFERRED INCOME TAX *(Continued)*

Deferred income tax assets are recognised to the extent that the realisation of the related tax benefit through future taxable profits is probable. As at 31 December 2020, the Group did not recognise deferred income tax assets of RMB129,868,000 (31 December 2019: RMB107,334,000) in respect of accumulated tax losses and temporary difference amounting to RMB454,720,000 (31 December 2019: RMB392,641,000) that can be carried forward against taxable income as the Group is going to dissolve the subsidiaries or the losses are considered as unrecoverable in 5 years.

22. REVENUE

	Year ended 31 December	
	2020	2019
Sales of goods	**21,190**	163,157
Provision of services	**2,802,448**	3,165,682
Rental	**264,014**	260,658
	3,087,652	3,589,497

(i) Disaggregation of revenue

	For the year ended 31 December 2020		
Segments	**Drilling technology**	**Well completion**	**Oil production services**
Types of goods or service			
Sales of goods	**410**	**20,780**	**-**
Provision of services	**1,067,264**	**701,358**	**1,033,826**
Total	**1,067,674**	**722,138**	**1,033,826**
Geographical markets			
PRC	**879,630**	**561,441**	**127,752**
Iraq	**117,804**	**119,166**	**724,109**
Other countries	**70,240**	**41,531**	**181,965**
Total	**1,067,674**	**722,138**	**1,033,826**
Timing of revenue recognition			
A point in time	**1,067,674**	**722,138**	**209,655**
Over time	**-**	**-**	**824,171**
Total	**1,067,674**	**722,138**	**1,033,826**

(Amounts expressed in thousands of RMB, unless otherwise stated)

22. REVENUE *(Continued)*

(i) Disaggregation of revenue *(Continued)*

Set out below is the reconciliation of the revenue from contracts with customers with segment information.

	For the year ended 31 December 2020		
	Drilling technology	**Well completion**	**Oil production services**
Revenue disclosed in segment information			
External customers	**1,303,840**	**749,986**	**1,033,826**
Inter-segment	**1,064,901**	**668,212**	**795,287**
Total	**2,368,741**	**1,418,198**	**1,829,113**
Adjustments and eliminations	**(1,064,901)**	**(668,212)**	**(795,287)**
Rental income	**(236,166)**	**(27,848)**	**–**
Revenue from contracts with customers	**1,067,674**	**722,138**	**1,033,826**

	For the year ended 31 December 2019		
Segments	Drilling technology	Well completion	Oil production services
Types of goods or service			
Sales of goods	44,151	90,858	28,148
Provision of services	1,321,231	743,333	1,101,118
Total	1,365,382	834,191	1,129,266
Geographical markets			
PRC	750,566	519,826	152,315
Iraq	336,910	212,894	869,951
Other countries	277,906	101,471	107,000
Total	1,365,382	834,191	1,129,266
Timing of revenue recognition			
A point in time	1,365,382	834,191	310,954
Over time	–	–	818,312
Total	1,365,382	834,191	1,129,266

(Amounts expressed in thousands of RMB, unless otherwise stated)

22. REVENUE *(Continued)*

(i) Disaggregation of revenue *(Continued)*

Set out below is the reconciliation of the revenue from contracts with customers with segment information.

	For the year ended 31 December 2019		
	Drilling technology	Well completion	Oil production services
Revenue disclosed in segment information			
External customers	1,624,203	836,028	1,129,266
Inter-segment	978,903	614,249	731,062
Total	2,603,106	1,450,277	1,860,328
Adjustments and eliminations	(978,903)	(614,249)	(731,062)
Rental income	(258,821)	(1,837)	–
Revenue from contracts with customers	1,365,382	834,191	1,129,266

(ii) Performance obligations for contracts with customers

a. Provision of oilfield technology services (excluding operation and maintenance services)

The Group provides oilfield technology services (excluding operation and maintenance services) which include drilling technology, well completion and part of oil production services to customers like large multinational and state-owned oil companies.

Such services are each recognised as a performance obligation in different stages of a contract, with transaction price allocated to the different and separate performance obligations on a relative stand-alone price basis. Revenue will be recognised for each of these performance obligations when control over the corresponding services is transferred to the customer. Since the services are expected to meet certain specified technological criteria which are not simply based on size and weight characteristics, the Group cannot objectively determine that the services provided to the customer are in accordance with the agreed-upon specifications in the contract and then the Group would not be able to conclude that the customer has obtained control until it receives the customer's acceptance. Therefore, the revenue from oilfield technology services (excluding operation and maintenance services) is recognised at a point when the customer acceptance is concluded.

The Group's contracts for such services include the Group's entitlement to payment which requires customer acceptance.

22. REVENUE *(Continued)*

(ii) Performance obligations for contracts with customers *(Continued)*

a. Provision of oilfield technology services (excluding operation and maintenance services) *(Continued)*

The contract assets (retention money receivables from large multinational and state-owned oil companies), net of contract liabilities related to the same contract, primarily relate to the Group's right to consideration for services completed and not billed because the rights are conditioned on the Group's achieving specified milestones as stipulated in the contracts at the reporting date. The contract assets are transferred to trade receivables when the rights become unconditional. The Group typically agrees to a one-year retention period for 5% of the transaction price for certain customers like some large multinational and state-owned oil companies. This amount is included in contract assets until the end of the retention period as the Group's entitlement to this final payment is conditional on achieving specified milestones as stipulated in the contracts. The Group classifies these contract assets as current because the Group expects to realise them in its normal operating cycle. The Group typically bills the retention money receivables in one year after the completion of relevant services when trade receivables will be recognised.

b. Provision of oilfield-related operation and maintenance services

The Group provides oilfield-related operation and maintenance services which include oil production services to customers.

Such services are recognised as a performance obligation satisfied over time as the customer simultaneously receives and consumes the benefits during the course of operation and maintenance services provided by the Group based on the fact that these services are routine with no complicated processes involved and customer acceptance is a formality. Revenue from these services is recognised based on hours and unit labour cost using output method.

Payment of the transaction price will be settled monthly over the period of service.

c. Sales of oilfield-related goods

The Group sells oilfield-related goods, such as drilling tools, tubing and casing to customers.

Since the goods are not self-manufactured and the Group is not entitled to payment until the customer receives and accepts the goods, revenue will be recognised at a point when control over the corresponding goods is transferred to the customer.

The Group's contracts for such sales of goods include payment in the normal credit term granted to customers.

(Amounts expressed in thousands of RMB, unless otherwise stated)

22. REVENUE *(Continued)*

(iii) Transaction price allocated to the remaining performance obligation for contracts with customers

The transaction price allocated to the remaining performance obligations (unsatisfied or partially unsatisfied) as at 31 December 2020 and the expected timing of recognising revenue are as follows:

	PRC	**Iraq**	**Other countries**
Within one year	**2,138,123**	**1,152,292**	**183,416**
More than one year but not more than two years	**543,576**	**769,502**	**272,616**
More than two years	**-**	**379,207**	**30,477**
	2,681,699	**2,301,001**	**486,509**

The transaction price allocated to the remaining performance obligations (unsatisfied or partially unsatisfied) as at 31 December 2019 and the expected timing of recognising revenue are as follows:

	PRC	Iraq	Other countries
Within one year	1,705,460	1,634,561	231,619
More than one year but not more than two years	208,903	959,039	155,709
More than two years	60,423	681,998	158,685
	1,974,786	3,275,598	546,013

(iv) Leases

	Year ended 31 December 2020	Year ended 31 December 2019
For operating leases:		
Lease payments that are fixed or depend on an index or a rate	**264,014**	260,658
Total revenue arising from leases	**264,014**	260,658

For the year ended 31 December 2020
(Amounts expressed in thousands of RMB, unless otherwise stated)

23. EXPENSE BY NATURE

Operating profit is arrived at after charging the following:

	Year ended 31 December	
	2020	2019
Materials and services purchased	**1,020,668**	1,010,288
Staff costs	**738,742**	768,784
In which:		
– Salaries and other staff expenses	**721,373**	739,617
– Share-based compensation (Note 14(i))	**17,369**	29,167
Depreciation	**336,274**	341,805
In which:		
– Property, plant and equipment (Note 6)	**294,422**	301,429
– Right-of-use assets (Note 7)	**41,852**	40,376
Less: Capitalised in inventories (Note 6) (Note 7)	**(23,180)**	(21,854)
	313,094	319,951
Amortisation	**34,744**	36,226
Less: Capitalised in inventories	**(3,810)**	(3,591)
	30,934	32,635
In which:		
– Cost of sales	**26,370**	26,490
– Administrative expenses	**189**	160
– Selling expenses	**19**	18
– Research and development expenses	**4,356**	5,967
Sales tax and surcharges	**11,360**	13,973
Auditor's remuneration		
– Audit and related services	**4,700**	4,600
– Other services	**300**	300
Other operating expenses	**683,602**	719,560
In which:		
– Impairment of receivables	**83,437**	87,693
– Impairment of inventories	**19,971**	36,989

(Amounts expressed in thousands of RMB, unless otherwise stated)

24. OTHER GAINS, NET

	Year ended 31 December	
	2020	2019
Government grants and subsidies (a)	**6,057**	1,283
Loss on disposal of property, plant and equipment	**(2,931)**	(973)
Gains on repurchase of long-term bonds (Note 16) (Note 31)	**33,375**	–
Others	**3,778**	(134)
	40,279	176

Note:

(a) Government grants and subsidies of RMB6,057,000 (2019: RMB1,283,000) were received in the current year towards awarding of research and development expenditures.

25. IMPAIRMENT LOSSES UNDER EXPECTED CREDIT LOSS MODEL, NET OF REVERSAL

	Year ended 31 December	
	2020	2019
Impairment losses recognised on:		
– Trade receivables – goods and services	**83,437**	62,933
– Other receivables	**-**	24,760
	83,437	87,693

Details of impairment assessment for the year ended 31 December 2020 and 2019 are set out in Note 34.2(b).

26. FINANCE COSTS, NET

	Year ended 31 December	
	2020	2019
Interest expenses		
– on bank borrowings	**(56,932)**	(77,667)
– on bonds	**(300,126)**	(219,534)
– on lease liabilities	**(6,847)**	(7,477)
Exchange gain, net	**85,270**	19,334
Others	**(34,058)**	(13,156)
Finance expenses	**(312,693)**	(298,500)
Interest income	**18,760**	3,367
	(293,933)	(295,133)

(Amounts expressed in thousands of RMB, unless otherwise stated)

27. STAFF COSTS

	Year ended 31 December	
	2020	2019
Wages, salaries and allowances	**630,604**	652,246
Housing subsidies (a)	**13,036**	12,888
Contributions to pension plans (b)	**24,207**	23,705
Share option costs		
– equity settled share-based payment (Note 14(i))	**17,369**	29,167
Welfare and other expenses	**53,526**	50,778
	738,742	768,784

Notes:

(a) Housing subsidies mainly include the Group's contributions to government-sponsored housing funds, at rates ranging from 5% to 12% of the employees' salaries for the Group's Chinese employees in the PRC.

(b) This represents the Group's contributions to defined contribution plans or schemes organised by relevant government authorities or authorised entities in accordance with the requirements in the locations where the Group operates.

The Group has no other material obligations for the payment of pensions and other post-retirement benefits of employees or retirees other than those disclosed above.

(c) Five highest paid individuals

The five individuals whose emoluments were the highest in the Group for the year included three (2019: three) Directors whose emoluments are reflected in the analysis shown in Note 38. The emolument payable to the other two (2019: two) individuals during the year were as follows:

	Year ended 31 December	
	2020	2019
Basic salaries, housing allowances, other allowances and benefits-in-kind	**2,871**	3,114
Contributions to pension schemes	**96**	100
	2,967	3,214

The emoluments fell within the following bands:

	Number of individuals	
	2020	2019
Emoluments bands		
HK$1,500,001 – HK$2,000,000	**2**	2
	2	2

(d) During the years ended 31 December 2020 and 2019, no Directors or the five highest paid individuals of the Group waived any emoluments and no emoluments were paid by the Group to any of the Directors or the five highest paid individuals of the Group as an inducement to join or upon joining the Group or as compensation for loss of office.

(Amounts expressed in thousands of RMB, unless otherwise stated)

28. INCOME TAX EXPENSE

	Year ended 31 December	
	2020	2019
Current income tax		
– PRC enterprise income tax	**28,394**	20,681
– Iraq corporate income tax	**67,275**	98,289
– Others	**6,407**	6,603
Deferred income tax (Note 21)	**12,423**	17,218
	114,499	142,791

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

PRC enterprise income tax ("EIT") is provided on the basis of estimated taxable profits of PRC established subsidiaries at applicable tax rate of 25% in 2020 (2019: 25%), based on the relevant PRC tax laws and regulations. Certain subsidiaries have been granted a preferential rate of 15% as high technology enterprises or as enterprises set up in western area of the PRC.

The corporate income tax of Iraq entities is levied at the higher of 7% on the total turnover, or 35% on the net taxable profit.

The taxation of the Group's profit before income tax differs from the theoretical amount that would arise using applicable tax rates of the Group companies as follows:

	Year ended 31 December	
	2020	2019
Profit before income tax	**30,739**	425,211
Tax calculated at applicable tax rates	**83,654**	123,614
Income not subject to taxation	**(7,357)**	(3,593)
Expenses not deductible for taxation purposes	**861**	1,283
Additional deduction of research and development expense	**(5,030)**	(4,468)
Tax losses and deductible temporary difference for which no deferred income tax was recognised	**33,968**	32,109
Utilisation of unused deductible tax losses previously not recognised as deferred income tax	**(8,515)**	(6,405)
Reversal of the deferred tax assets from prior years	**14,387**	–
Effect of share of profit of a joint venture	**(21)**	(114)
Others	**2,552**	365
	114,499	142,791

(Amounts expressed in thousands of RMB, unless otherwise stated)

29. (LOSS)/EARNINGS PER SHARE

(a) Basic

Basic (loss)/earnings per share is calculated by dividing the (loss)/profit attributable to the owners of the Company by the weighted average number of ordinary shares in issue during the year.

	Year ended 31 December	
	2020	2019
(Loss)/profit attributable to the owners of the Company	**(95,844)**	268,583
Weighted average number of ordinary shares in issue (thousands of shares)	**2,977,620**	3,005,255
Basic (loss)/earnings per share (expressed in RMB per share)	**(0.0322)**	0.0894

(b) Diluted

Diluted (loss)/earnings per share is calculated adjusting the weighted average number of ordinary shares outstanding to assume conversion of all dilutive potential ordinary shares. For the year ended 31 December 2019, the only dilutive factor of the Company was the outstanding share options.

	Year ended 31 December	
	2020	2019
(Loss)/profit attributable to the owners of the Company	**(95,844)**	268,583
Weighted average number of ordinary shares in issue (thousands of shares)	**2,977,620**	3,005,255
Adjustments for assumed conversion of share options (thousands of shares)	**-**	17,260
Weighted average number of ordinary shares for computation of diluted (loss)/earnings per share (thousands of shares)	**2,977,620**	3,022,515
Diluted (loss)/earnings per share (expressed in RMB per share)	**(0.0322)**	0.0889

30. DIVIDENDS

No dividend was declared or paid for ordinary shareholders of the Company during 2020 (2019: RMB30,107,000).

The Directors have determined that no dividend will be proposed in respect of the current year (Year ended 31 December 2019: Nil).

(Amounts expressed in thousands of RMB, unless otherwise stated)

31. NOTES TO THE CONSOLIDATED STATEMENT OF CASH FLOWS

Reconciliation of profit for the year to net cash inflows generated from operations:

	Note	Year ended 31 December **2020**	 2019
(Loss)/profit for the year		**(83,760)**	282,420
Adjustments for:			
Property, plant and equipment			
– Depreciation charge		**273,524**	281,727
– Loss on disposals		**2,931**	973
Gains on repurchase of long-term bonds	24	**(33,375)**	–
Depreciation of right-of-use assets		**39,570**	38,224
Amortisation of intangible assets		**30,934**	32,635
Addition of impairment of receivables		**83,437**	87,693
Addition of impairment of inventories		**19,971**	36,989
Charge of share option scheme		**17,369**	29,167
Share of profit of a joint venture		**(141)**	(762)
Net foreign exchange gain		**(85,270)**	(19,334)
Interest income		**(18,760)**	(3,367)
Interest expenses		**363,905**	304,678
Income tax expense		**114,499**	142,791
Operating cash flows before movements in working capital		**724,834**	1,213,834
Changes in working capital:			
– Inventories		**(183,548)**	(22,913)
– Trade and notes receivables		**(217,650)**	(289,604)
– Contract assets		**44,901**	(16,940)
– Prepayments and other receivables and value-added tax recoverable		**45,766**	(230,099)
– Trade and notes payables		**440,063**	70,099
– Accruals and other payables		**76,969**	12,497
– Contract liabilities		**24,006**	(24,838)
– Restricted bank deposits		**(95,699)**	(27,522)
Net cash inflows from operations		**859,642**	684,514

(Amounts expressed in thousands of RMB, unless otherwise stated)

32. RECONCILIATION OF ASSETS AND LIABILITIES ARISING FROM FINANCING ACTIVITIES

The table below details changes in the Group's assets and liabilities arising from financing activities, including both cash and non-cash changes. Liabilities arising from financing activities are those for which cash flows were, or future cash flows will be, classified in the Group's consolidated statement of cash flows as cash flows from financing activities.

	Borrowings Note 17	Long-term bonds Note 16	Accruals and other payables	Prepayments and other receivables Note 12(a)	Restricted bank deposits Note 13(a)	Lease liabilities Note 18	Total
As at 1 January 2020	**792,349**	**4,144,868**	**-**	**(13,500)**	**(10,260)**	**115,093**	**5,028,550**
Financing cash flows	**209,699**	**(2,373,168)**	**-**	**-**	**10,260**	**(43,535)**	**(2,196,744)**
New leases entered (Note 7)	**-**	**-**	**-**	**-**	**-**	**4,602**	**4,602**
Terminations of leases previously entered (Note 7)	**-**	**-**	**-**	**-**	**-**	**(16,852)**	**(16,852)**
Currency translation differences	**-**	**(171,792)**	**-**	**-**	**-**	**-**	**(171,792)**
Interest expenses	**56,932**	**300,126**	**-**	**-**	**-**	**6,847**	**363,905**
Gains on repurchase of long-term bonds (Note 24) (Note 31)	**-**	**(33,375)**	**-**	**-**	**-**	**-**	**(33,375)**
As at 31 December 2020	**1,058,980**	**1,866,659**	**-**	**(13,500)**	**-**	**66,155**	**2,978,294**

	Borrowings	Long-term bonds	Accruals and other payables	Prepayments and other receivables	Restricted bank deposits	Lease liabilities	Total
As at 31 December 2018	1,204,747	2,065,901	56,631	(13,500)	-	-	3,313,779
Adjustment upon application of IFRS 16	-	-	-	-	-	28,463	28,463
As at 1 January 2019	1,204,747	2,065,901	56,631	(13,500)	-	28,463	3,342,242
Financing cash flows	(490,065)	1,841,207	(93,738)	-	(10,260)	(45,094)	1,202,050
Dividends	-	-	37,107	-	-	-	37,107
New leases entered	-	-	-	-	-	124,247	124,247
Currency translation differences	-	18,226	-	-	-	-	18,226
Interest expenses	77,667	219,534	-	-	-	7,477	304,678
As at 31 December 2019	792,349	4,144,868	-	(13,500)	(10,260)	115,093	5,028,550

(Amounts expressed in thousands of RMB, unless otherwise stated)

33. COMMITMENTS

Capital commitments

Capital commitments related to investments in property, plant and equipment at the reporting date but not yet provided for in the consolidated statement of financial position were as follows:

	As at 31 December	
	2020	2019
Contracted but not provided for	**79,586**	71,142

34. FINANCIAL RISK MANAGEMENT

34.1 Categories of financial instruments

	As at 31 December	
	2020	2019
Financial assets		
Amortised cost		
– Cash and cash equivalents	**879,085**	2,422,874
– Restricted bank deposits	**454,169**	368,730
– Included in trade and notes receivables	**1,803,419**	2,124,576
– Included in prepayments and other receivables	**309,974**	347,888
Fair value through other comprehensive income		
– Notes receivable	**281,083**	–
	3,727,730	5,264,068

	As at 31 December	
	2020	2019
Financial liabilities		
Amortised cost		
– Trade and notes payables	**1,403,295**	957,406
– Included in accruals and other payables	**515,543**	381,331
– Borrowings	**1,058,980**	792,349
– Long-term bonds	**1,866,659**	4,144,868
	4,844,477	6,275,954

34. FINANCIAL RISK MANAGEMENT *(Continued)*

34.2 Financial risk factors

The Group's activities expose it to a variety of financial risks: market risk (including foreign exchange risk and cash flow and fair value interest rate risk), credit risk and liquidity risk. The Group's overall risk management program focuses on the unpredictability of financial markets and seeks to minimise potential adverse effects on the Group's financial performance. The Group uses non-derivative financial instruments (part of US$ denominated long-term bonds) (Note 15(b)) to hedge certain foreign currency risk exposure.

(a) Market risk

(i) Foreign exchange risk

The Group mainly operates in the PRC with most of the transactions denominated and settled in RMB, while the Group also has purchases from and sales to overseas parties. During the year ended 31 December 2020, the Group developed its businesses overseas with most of the transactions denominated and settled in US$. Foreign exchange risk also arise from certain bank deposits, borrowings and long-term bonds denominated in US$. The Group is exposed to foreign currency exchange risk primarily with respect to US$.

As at 31 December 2020, if RMB had strengthened/weakened by 3% against the US$ with all other variables held constant, loss after income tax for the year would have been RMB4,786,000 lower/higher and equity reserves would have been RMB57,716,000 lower/higher, mainly as a result of foreign exchange gains/losses on translation of US$-denominated cash and bank, trade and other receivables, trade and other payables, borrowings, long-term bonds and net investment hedge of foreign operations.

As at 31 December 2019, if RMB had strengthened/weakened by 3% against the US$ with all other variables held constant, profit after income tax for the year would have been RMB11,540,000 higher/lower and equity reserves would have been RMB1,623,000 higher/lower, mainly as a result of foreign exchange gains/losses on translation of US$-denominated cash and bank, trade and other receivables, trade and other payables, borrowings, long-term bonds and net investment hedge of foreign operations.

34. FINANCIAL RISK MANAGEMENT *(Continued)*

34.2 Financial risk factors *(Continued)*

(a) Market risk *(Continued)*

(ii) Cash flow and fair value interest rate risk

The Group's interest rate risk arises from long-term bonds, long-term borrowings and short-term borrowings. Borrowings obtained at variable rates expose the Group to cash flow interest rate risk. Long-term bonds, long-term borrowings and lease liabilities obtained at fixed rates expose the Group to fair value interest rate risk.

Based on the balance of floating interest borrowings as at 31 December 2020, if interest rates on these borrowings for the year had been higher/lower by 100 basis points, profit before income tax for the year would have been RMB1,017,000 lower/higher.

Based on the balance of floating interest borrowings as at 31 December 2019, if interest rates on these borrowings for the year had been higher/lower by 100 basis points, profit before income tax for the year would have been RMB2,455,000 lower/higher.

(b) Credit risk and impairment assessment

As at 31 December 2020, the maximum exposure to credit risk of the Group is the carrying value of financial assets. The Group does not hold any collateral or other credit enhancements to cover its credit risks associated with its financial assets.

Trade receivables, contract assets and other receivables

The Group has policies in place to ensure that sales of products and services and other transactions are made to customers or counterparties with an appropriate credit history after internal approvals and follow-up action is taken to recover overdue debts. In addition, the Group performs impairment assessment under ECL model on trade receivables, contract assets and other receivables individually or based on provision matrix. In the regards, the Directors consider that the Group's credit risk is significantly reduced and are of the opinion that adequate provision for uncollectible receivables has been made in the consolidated financial statements.

A considerable portion of sales were made to several major oilfield operators of the PRC and their affiliates, which are state-owned entities with good credit reputation, therefore the trade receivables of the Group had concentration risk (Note 5).

(Amounts expressed in thousands of RMB, unless otherwise stated)

34. FINANCIAL RISK MANAGEMENT *(Continued)*

34.2 Financial risk factors *(Continued)*

(b) Credit risk and impairment assessment *(Continued)*

Notes receivable, restricted bank deposits and cash and cash equivalents

The credit risks on notes receivable, restricted bank deposits and cash equivalents are limited because the counterparties are banks with high credit ratings assigned by international credit-rating agencies. The Group performs impairment assessment under 12m ECL model on notes receivable, restricted bank deposits and cash and cash equivalents. The Directors does not expect any losses from non-performance by these counterparties.

Most of the Group's restricted bank deposits and cash and cash equivalents were placed with state-owned banks in the PRC and Hong Kong, the relevant credit risk is relatively low.

The tables below detail the credit risk exposures of the Group's financial assets (including trade receivables from goods and services, notes receivable, other receivables, restricted bank deposits and cash and cash equivalents), and other items (lease receivables and contract assets) which are subject to ECL assessment:

2020	Notes	External credit rating	Internal credit rating	12m or lifetime ECL	Gross carrying amount
Financial assets at amortised cost					
Trade receivables – goods and services	11	N/A	Note (i)	Lifetime ECL (provision matrix)	**610,166**
				Lifetime ECL (individually, not credit-impaired)	**1,135,898**
				Lifetime ECL (individually, credit-impaired)	**325,845**
Other receivables	12	N/A	Note (ii)	12m ECL	**309,974**
				Lifetime ECL (credit-impaired)	**45,631**
Restricted bank deposits	13	A1	N/A	12m ECL	**454,169**
Cash and cash equivalents	13	A1	N/A	12m ECL	**879,085**
Financial assets at FVTOCI					
Notes receivable	11	A1	N/A	12m ECL	**281,083**
Other items					
Contract assets – goods and services	22(ii)(a)	N/A	Note (i)	Lifetime ECL (individually, not credit-impaired)	**30,618**
Lease receivables – operating leases	11	N/A	Note (i)	Lifetime ECL (individually, not credit-impaired)	**49,287**

(Amounts expressed in thousands of RMB, unless otherwise stated)

34. FINANCIAL RISK MANAGEMENT *(Continued)*

34.2 Financial risk factors *(Continued)*

(b) Credit risk and impairment assessment *(Continued)*

Notes receivable, restricted bank deposits and cash and cash equivalents *(Continued)*

2019	Notes	External credit rating	Internal credit rating	12m or lifetime ECL	Gross carrying amount
Financial assets at amortised cost					
Trade receivables – goods and services	11	N/A	Note (i)	Lifetime ECL (provision matrix)	669,758
				Lifetime ECL (individually, not credit-impaired)	1,386,775
				Lifetime ECL (individually, credit-impaired)	72,881
Other receivables	12	N/A	Note (ii)	12m ECL	276,339
				Lifetime ECL (not credit-impaired)	75,273
				Lifetime ECL (credit-impaired)	41,907
Notes receivable	11	A1	N/A	12m ECL	180,215
Restricted bank deposits	13	A1	N/A	12m ECL	368,730
Cash and cash equivalents	13	A1	N/A	12m ECL	2,422,874
Other items					
Contract assets – goods and services	22(ii)(a)	N/A	Note (i)	Lifetime ECL (individually, not credit-impaired)	75,519
Lease receivables – operating leases	11	N/A	Note (i)	Lifetime ECL (individually, not credit-impaired)	75,671

Notes:

(i) Trade receivables and contract assets from goods and services and lease receivables

For trade receivables and contract assets from goods and services and lease receivables, the Group has applied the simplified approach in IFRS 9 to measure the loss allowance at lifetime ECL. Except for debtors with significant outstanding balances or credit-impaired, the Group determines the expected credit losses on these items by using a provision matrix, grouped by past due status.

As part of the Group's credit risk management, the Group uses debtors' ageing to assess the impairment for part of its customers in relation to its oilfield technology services, oilfield related operation and maintenance services and sales of oilfield-related goods operation because these customers consist of a large number of small customers with common risk characteristics that are representative of the customers' abilities to pay all amounts due in accordance with the contractual terms. The following table provides information about the exposure to credit risk for trade receivables from goods and services from private and relatively small customers which are assessed based on provision matrix as at 31 December 2020 within lifetime ECL (not credit impaired). Trade receivables from goods and services with significant outstanding balances from large multinational and state-owned oil companies and credit impaired with gross carrying amounts of RMB1,135,898,000 (2019: RMB1,386,775,000) and RMB325,845,000 (2019: RMB72,881,000) respectively as at 31 December 2020 were assessed individually.

(Amounts expressed in thousands of RMB, unless otherwise stated)

34. FINANCIAL RISK MANAGEMENT *(Continued)*

34.2 Financial risk factors *(Continued)*

(b) Credit risk and impairment assessment *(Continued)*

Notes: *(Continued)*

(i) Trade receivables and contract assets from goods and services and lease receivables *(Continued)*

Trade receivables from goods and services from private and relatively small customers

31/12/2020

	Average loss rate	**Gross carrying amount**	**Impairment loss allowance**
Current (not past due)	**3.49%**	**355,025**	**12,389**
Within 1 year past due	**22.80%**	**172,689**	**39,372**
1-2 years past due	**67.20%**	**82,452**	**55,407**
		610,166	**107,168**

31/12/2019

	Average loss rate	Gross carrying amount	Impairment loss allowance
Current (not past due)	4.18%	461,256	19,286
Within 1 year past due	22.04%	138,892	30,615
1-2 years past due	85.61%	69,610	59,595
		669,758	109,496

The estimated loss rates are estimated based on historical observed default rates over the expected life of the debtors and are adjusted for forward-looking information that is available without undue cost or effort. The grouping is regularly reviewed by management to ensure relevant information about specific debtors is updated.

During the year ended 31 December 2020, the Group provided RMB27,942,000 (2019: RMB62,105,000) impairment allowance for trade receivables from goods and services from private and relatively small customers based on the provision matrix. Impairment reversal of RMB1,069,000 (2019: allowance of RMB828,000) were made on trade receivables from goods and services with significant balances from large multinational and state-owned oil companies. Impairment allowance of RMB56,564,000 were made on credit impaired debtors.

For contract assets (the retention money receivables) and lease receivables which are arising from large multinational and state-owned oil companies, the Group performed impairment assessment and conclude that the probability of defaults of the counterparties are insignificant and accordingly, no allowance for credit losses is provided.

(Amounts expressed in thousands of RMB, unless otherwise stated)

34. FINANCIAL RISK MANAGEMENT *(Continued)*

34.2 Financial risk factors *(Continued)*

(b) Credit risk and impairment assessment *(Continued)*

Notes: *(Continued)*

(i) Trade receivables and contract assets from goods and services and lease receivables *(Continued)*

The following table shows the movements in lifetime ECL that has been recognised for trade receivables from goods and services under the simplified approach:

	Lifetime ECL (not credit-impaired)	Lifetime ECL (credit-impaired)	Total
As at 1 January 2019	65,645	56,475	122,120
Changes due to financial instruments recognised as at 1 January 2019:			
– Impairment losses recognised, net of reversal	42,483	–	42,483
– Transfer to credit-impaired	(16,406)	16,406	–
New originated or purchased	20,450	–	20,450
As at 31 December 2019	112,172	72,881	185,053
Changes due to financial instruments recognised as at 1 January 2020:			
– Impairment losses recognised, net of reversal	**14,484**	**56,564**	**71,048**
– Transfer to credit-impaired	**(31,293)**	**31,293**	**-**
New originated or purchased	**12,389**	**-**	**12,389**
As at 31 December 2020	**107,752**	**160,738**	**268,490**

Changes in the loss allowance for trade receivables from goods and services are mainly due to trade debtors with a gross carrying amount of RMB222,694,000 (2019: RMB16,406,000) defaulted and transferred to credit-impaired.

The Group writes off a trade receivable when there is information indicating that the debtor is in severe financial difficulty and there is no realistic prospect of recovery, for example, when the debtor has been placed under liquidation or has entered into bankruptcy proceedings.

(Amounts expressed in thousands of RMB, unless otherwise stated)

34. FINANCIAL RISK MANAGEMENT *(Continued)*

34.2 Financial risk factors *(Continued)*

(b) Credit risk and impairment assessment *(Continued)*

Notes: *(Continued)*

(ii) Other receivables

For the purposes of internal credit risk management, the Group uses past due information to assess whether credit risk has increased significantly since initial recognition.

	Past due	Not past due/ No fixed repayment terms	Total
31/12/2020			
Other receivables	**45,631**	**309,974**	**355,605**
31/12/2019			
Other receivables	41,907	351,612	393,519

The following tables show reconciliation of loss allowances that has been recognised for other receivables:

	12m ECL	Lifetime ECL (not credit-impaired)	Lifetime ECL (credit-impaired)	Total
As at 1 January 2019	–	6,481	14,390	20,871
Changes due to financial instruments recognised as at 1 January 2019:				
– Impairment losses recognised	–	–	24,760	24,760
– Transfer to credit-impaired	–	(2,757)	2,757	–
New originated or purchased	–	–	–	–
As at 31 December 2019	–	3,724	41,907	45,631
Changes due to financial instruments recognised as at 1 January 2020:				
– Impairment losses recognised	**–**	**–**	**–**	**–**
– Transfer to credit-impaired	**–**	**(3,724)**	**3,724**	**–**
New originated or purchased	**–**	**–**	**–**	**–**
As at 31 December 2020	**–**	**–**	**45,631**	**45,631**

Changes in the loss allowance for other receivables are mainly due to debtors with a gross carrying amount of RMB Nil (2019: RMB24,760,000) defaulted and being credit-impaired under lifetime ECL.

(iii) Notes receivable, restricted bank deposits and cash and cash equivalents

At the end of the reporting period, the Directors have performed impairment assessment under 12m ECL model for notes receivable, restricted bank deposit, and cash and cash equivalents, and concluded that there has been no significant increase in credit risk since initial recognition. Since the counterparties are banks with high credit ratings assigned by international credit-rating agencies, the probability of defaults of the counterparties are insignificant and accordingly, no allowance for credit losses is provided for these financial assets.

(Amounts expressed in thousands of RMB, unless otherwise stated)

34. FINANCIAL RISK MANAGEMENT *(Continued)*

34.2 Financial risk factors *(Continued)*

(c) Liquidity risk

The liquidity risk of the Group is controlled by maintaining sufficient cash and cash equivalents, which is generated primarily from operating and financing activities.

The table below analyses the Group's financial liabilities that will be settled into relevant maturity groupings based on the remaining period at the end of the financial period to the contractual maturity date. The amounts disclosed in the table are the contractual undiscounted cash flows.

31/12/2020

	Weighted average interest rate	**On demand or less than 1 year**	**1-5 years**	**Total undiscounted cash flows**	**Carrying amount**
Non-derivative financial liabilities					
Trade and notes payables	**-**	**1,403,295**	**-**	**1,403,295**	**1,403,295**
Included in accruals and other payables	**-**	**515,543**	**-**	**515,543**	**515,543**
Lease liabilities	**8.738%**	**59,172**	**28,262**	**87,434**	**66,155**
Short-term borrowings	**5.116%**	**782,206**	**-**	**782,206**	**763,953**
Long-term borrowings	**7.001%**	**171,594**	**135,454**	**307,048**	**295,027**
Long-term bonds	**8.907%**	**174,010**	**2,104,280**	**2,278,290**	**1,866,659**
		3,105,820	**2,267,996**	**5,373,816**	**4,910,632**

31/12/2019

	Weighted average interest rate	On demand or less than 1 year	1-5 years	Total undiscounted cash flows	Carrying amount
Non-derivative financial liabilities					
Trade and notes payables	–	957,406	–	957,406	957,406
Included in accruals and other payables	–	381,331	–	381,331	381,331
Lease liabilities	8.700%	48,964	71,753	120,717	115,093
Short-term borrowings	5.825%	511,740	–	511,740	497,749
Long-term borrowings	8.609%	112,090	211,745	323,835	294,600
Long-term bonds	9.288%	2,481,078	2,406,789	4,887,867	4,144,868
		4,492,609	2,690,287	7,182,896	6,391,047

(Amounts expressed in thousands of RMB, unless otherwise stated)

34. FINANCIAL RISK MANAGEMENT *(Continued)*

34.3 Capital risk management

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

The Group monitors capital on the basis of the gearing ratio. This ratio is calculated as total borrowings divided by total capital. Total borrowings include borrowings, bonds, lease liabilities and trade and notes payables, as shown in the consolidated statement of financial position. Total capital is calculated as equity, as shown in the consolidated statement of financial position, plus total borrowings.

The gearing ratios at 31 December 2020 and 2019 were as follows:

	As at 31 December	
	2020	2019
Total borrowings	**4,395,089**	6,009,716
Total equity	**2,763,721**	2,957,663
Total capital	**7,158,810**	8,967,379
Gearing ratio	**61%**	67%

34.4 Fair value estimation

During the current year, in order to more effectively manage the overall cashflows under COVID-19, the Group further endorsed certain notes for settlement of trade payables and a new business model was adopted by the management whose objective is achieved by both selling and collecting contractual cash flows; therefore, notes receivable was subsequently measured at fair value through other comprehensive income from 1 July 2020 (31 December 2019: amortised cost).

The fair value of notes receivable is determined (in particular, the valuation technique and inputs used), as well as the level of the fair value hierarchy into which the fair value measurements are categorised (Level 3) based on the degree to which the inputs to the fair value measurements is observable.

– Level 3 fair value measurements are those derived from valuation techniques that include inputs for the asset that are not based on observable market data (unobservable inputs).

(Amounts expressed in thousands of RMB, unless otherwise stated)

34. FINANCIAL RISK MANAGEMENT *(Continued)*

34.4 Fair value estimation *(Continued)*

The Group measures its following financial instruments at fair value at the end of the reporting period:

Financial asset	Fair value as at 31 December 2020	Fair value hierarchy	Valuation technique and key input	Significant unobservable input
Notes receivable	**281,083,000**	Level 3	Fair value is estimated based on the present value of the contracted cash inflow at the discount rate that reflects the market credit risk.	Discount rate: 5.12%

Reconciliation of Level 3 fair value measurements of notes receivable

	Notes receivable
At 1 January 2020	**-**
Addition	**480,030**
Disposals	**(191,435)**
Fair value change recognised in other comprehensive income	**(7,512)**
At 31 December 2020	**281,083**

Included in other comprehensive income is an amount of RMB7,512,000 loss related to notes receivable at FVTOCI held at the end of current reporting period (Year ended 31 December 2019: Nil).

Fair value of the financial assets and liabilities that are not measured at fair value on a recurring basis

The carrying amounts of long-term borrowings and long-term bonds approximated their fair values as the fluctuation of comparable interest rates with similar terms is relatively low.

(Amounts expressed in thousands of RMB, unless otherwise stated)

34. FINANCIAL RISK MANAGEMENT *(Continued)*

34.4 Fair value estimation *(Continued)*

Financial liabilities

As at 31 December 2020	**Carrying value**	**Fair value**
Long-term borrowings (non-current)	**96,184**	93,281
Long-term bonds (non-current)	**1,855,625**	1,879,291
	1,951,809	1,972,572

As at 31 December 2019	Carrying value	Fair value
Long-term borrowings (non-current)	99,217	96,143
Long-term bonds (non-current)	2,028,423	2,041,349
	2,127,640	2,137,492

35. RELATED PARTY TRANSACTIONS

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

(a) The following party is related party of the Group during the year ended 31 December 2020:

Name of related party	**Nature of relationship**
Mr. Luo Lin	The ultimate controlling shareholder of the Company

(Amounts expressed in thousands of RMB, unless otherwise stated)

35. RELATED PARTY TRANSACTIONS *(Continued)*

(b) Short-term bank borrowings guaranteed by related party

	As at 31 December	
	2020	2019
Short-term borrowings		
Mr. Luo Lin (Note 17(b))	**213,474**	138,318

(c) Notes payable guaranteed by related party

	As at 31 December	
	2020	2019
Notes payable		
Mr. Luo Lin	**-**	50,000

(d) Key management compensation

	Year ended 31 December	
	2020	2019
Salaries and other short-term employee benefits	**10,456**	13,876
Pension scheme	**263**	350
Share-based payments	**5,035**	5,830
	15,754	20,056

(Amounts expressed in thousands of RMB, unless otherwise stated)

36. SUBSIDIARIES

(a) The following is a list of principal subsidiaries in which the Company directly or indirectly holds equity interests as at 31 December 2020 and 2019:

Company name	Place and date of incorporation/ establishment	Registered capital	Equity interest and voting power held by the Group	Principal activities
Directly held:				
Anton Oilfield Services Company Limited	Hong Kong, 17 August 2007	HK$100	100%	Investment holding
Anton Oilfield Services Company International Limited	Hong Kong, 17 July 2008	HK$100	100%	Investment holding
Indirectly held:				
Anton Oilfield Services (Group) Ltd. (安東石油技術(集團) 有限公司)	Beijing, the PRC, 28 January 2002	US$151,000,000	100%	Oilfield services and sales of equipment
Xinjiang Tong'ao Oilfield Services Co., Ltd. (新疆通奧油田技術服務有限公司, "Xinjiang Tong'ao")	Xinjiang Uygur Autonomous Region, the PRC, 21 February 2002	RMB51,000,000	100%	Oilfield services
Anton Tong'ao Technological Products Co., Limited (安東通奧科技產業股份有限公司, "Anton Tong'ao")	Xinjiang Uygur Autonomous Region, the PRC, 15 December 2005	RMB90,000,000	90%	Manufacturing of rod casing
Shandong Precede	Shandong Province, the PRC, 2 September 2008	RMB55,000,000	100%	Oilfield services and sales of equipment
Anton International FZE ("Anton Dubai")	The United Arab Emirates, 12 April 2009	US$7,300,000	100%	Oilfield services

(Amounts expressed in thousands of RMB, unless otherwise stated)

36. SUBSIDIARIES *(Continued)*

(a) The following is a list of principal subsidiaries in which the Company directly or indirectly holds equity interests as at 31 December 2020 and 2019: *(Continued)*

Company name	Place and date of incorporation/ establishment	Registered capital	Equity interest and voting power held by the Group	Principal activities
Sichuan Anton Oil Gas Engineering and Technology Services Co., Ltd. (四川安東油氣工程技術服務有限公司,"Sichuan Anton")	Sichuan Province, the PRC, 14 July 2009	RMB400,000,000	100%	Oilfield services and sales of equipment
Anton Oilfield Services DMCC	The United Arab Emirates, 28 March 2011	US$54,462,150	100%	Oilfield services
Sichuan Tongsheng Drilling Technology Co., Ltd. (四川通盛鑽探工程有限公司, "Sichuan Tongsheng")	Sichuan Province, the PRC, 13 February 2012	RMB100,000,000	100%	Construction and drilling services, sales of drilling product
Xinjiang Anton Oilfield Services Co., Ltd. (新疆安東石油技術服務有限責任公司, "Xinjiang Anton")	Xinjiang Uygur Autonomous Region, the PRC, 24 February 2012	RMB80,000,000	100%	Oilfield services
Sichuan Anxiang Oil Engineering and Technology Co., Ltd. (四川安香石油工程技術有限公司, "Sichuan Anxiang")	Sichuan Province, the PRC, 22 December 2020	US$41,236,000	74%	Oilfield services

The above table lists the subsidiaries of the Company which, in the opinion of the Directors, principally affected the results or assets of the Group. To give details of other subsidiaries would, in the opinion of the Directors, result in particulars of excessive length.

None of the subsidiaries had issued any debt securities at the end of the year.

(Amounts expressed in thousands of RMB, unless otherwise stated)

36. SUBSIDIARIES *(Continued)*

(b) Material non-controlling interests

The total non-controlling interest as at 31 December 2020 was RMB137,609,000 (31 December 2019: RMB55,525,000), of which RMB70,000,000 (31 December 2019: Nil) was attributable to Sichuan Anxiang Oil Engineering and Technology Co., Ltd. ("Sichuan Anxiang") and RMB41,956,000 (31 December 2019: RMB36,725,000) was attributable to Anton Tong'ao. The non-controlling interests in respect of other subsidiaries are not material.

Set out below are the summarised financial information for Sichuan Anxiang and Anton Tong'ao that have non-controlling interests that are material to the Group.

Summarised statement of financial position

	Sichuan Anxiang As at 31 December	**Anton Tong'ao As at 31 December**	
	2020	**2020**	2019
Current			
Assets	**269,350**	**866,503**	845,650
Liabilities	**-**	**(340,618)**	(689,360)
Total net current assets	**269,350**	**525,885**	156,290
Non-current			
Assets	**-**	**252,781**	274,334
Liabilities	**-**	**(359,106)**	(63,375)
Total net non-current assets	**-**	**(106,325)**	210,959
Net assets	**269,350**	**419,560**	367,249
Net assets attributable to non-controlling interests	**70,000**	**41,956**	36,725

(Amounts expressed in thousands of RMB, unless otherwise stated)

36. SUBSIDIARIES *(Continued)*

(b) Material non-controlling interests *(Continued)*

Summarised statement of profit or loss and other comprehensive income

	Sichuan Anxiang Year ended 31 December 2020	Anton Tong'ao Year ended 31 December 2020	2019
Revenue	**-**	**501,949**	563,457
Profit before income tax	**-**	**64,458**	87,365
Income tax expense	**-**	**(8,557)**	(12,179)
Post-tax profit	**-**	**55,901**	75,186
Other comprehensive expense	**-**	**-**	–
Total comprehensive income	**-**	**55,901**	75,186
Total comprehensive income attributable to non-controlling interests	**-**	**5,590**	7,519
Dividends paid to non-controlling interests	**-**	**-**	7,000

Summarised statement of cash flows

	Sichuan Anxiang Year ended 31 December 2020	Anton Tong'ao Year ended 31 December 2020	2019
Cash flows from operating activities			
Cash (used in)/generated from operations	**-**	**(339,976)**	89,415
Income tax paid	**-**	**(13,444)**	(1,509)
Net cash (used in)/generated from operating activities	**-**	**(353,420)**	87,906
Net cash (used in)/generated from investing activities	**(140,554)**	**(46,141)**	3,207
Net cash generated from/(used in) financing activities	**269,350**	**364,505**	(26,095)
Net increase/(decrease) in cash and cash equivalents	**128,796**	**(35,056)**	65,018
Cash and cash equivalents at beginning of year		**93,644**	28,624
Exchange (loss)/gain on cash and cash equivalents	**-**	**(269)**	2
Cash and cash equivalents at end of year	**128,796**	**58,319**	93,644

The information above is the amount before inter-company eliminations.

(Amounts expressed in thousands of RMB, unless otherwise stated)

37. STATEMENT OF FINANCIAL POSITION AND RESERVES OF THE COMPANY

	As at 31 December	
	2020	2019
Assets		
Non-current assets		
Investments in subsidiaries	**4,979,725**	4,979,725
Current assets		
Trade and notes receivables	**–**	73,192
Prepayments and other receivables	**298,218**	1,821,205
Cash and cash equivalents	**9,173**	234,491
	307,391	2,128,888
Total assets	**5,287,116**	7,108,613
Equity and liabilities		
Equity		
Share capital	**268,179**	276,273
Other reserves (a)	**3,060,304**	2,591,196
Total equity	**3,328,483**	2,867,469
Liabilities		
Non-current liabilities		
Long-term bonds	**1,855,625**	2,028,423
Current liabilities		
Current portion of long-term bonds	**11,034**	2,116,445
Trade and notes payables	**13,247**	–
Accruals and other payables	**78,727**	96,276
	103,008	2,212,721
Total liabilities	**1,958,633**	4,241,144
Total equity and liabilities	**5,287,116**	7,108,613

(Amounts expressed in thousands of RMB, unless otherwise stated)

37. STATEMENT OF FINANCIAL POSITION AND RESERVES OF THE COMPANY *(Continued)*

Note:

(a) Reserve movements of the Company

	Share premium	Capital reserve	Accumulated losses	Total
Balance at 1 January 2019	1,076,529	3,043,455	(1,262,452)	2,857,532
Loss for the year	–	–	(267,083)	(267,083)
Share option scheme	–	29,167	–	29,167
Share option exercised	3,148	(1,461)	–	1,687
Dividends	(30,107)	–	–	(30,107)
At 31 December 2019	1,049,570	3,071,161	(1,529,535)	2,591,196
Balance at 1 January 2020	**1,049,570**	**3,071,161**	**(1,529,535)**	**2,591,196**
Profit for the year	**-**	**-**	**476,245**	**476,245**
Repurchase of ordinary shares	**(24,506)**	**-**	**-**	**(24,506)**
Share option scheme	**-**	**17,369**	**-**	**17,369**
At 31 December 2020	**1,025,064**	**3,088,530**	**(1,053,290)**	**3,060,304**

38. BENEFITS AND INTERESTS OF DIRECTORS

Directors' and chief executive's emoluments

The remuneration of every director and the chief executive is set out below:

For the year ended 31 December 2020:

Name	Fees	Salary	Discretionary bonuses	Housing allowance	Estimated money value of other benefits (i)	Employer's contribution to a retirement benefit scheme	Remunerations paid or receivable in respect of accepting office as director	Emoluments paid or receivable in respect of director's other services in connection with the management of the affairs of the Company or its subsidiary undertaking	Total
Executive Directors									
Mr. Luo Lin	-	1,911	624	-	45	48	-	-	2,628
Mr. Pi Zhifeng (chief executive)	-	1,336	20	-	71	48	-	-	1,475
Mr. Fan Yonghong	-	1,522	200	-	71	48	-	-	1,841
Non-executive Director									
Mr. John William Chisholm (iii)	-	282	-	-	-	-	-	-	282
Mr. Huang Song (iii)	-	-	-	-	-	-	-	-	-
Independent Non-executive Directors									
Mr. Zhang Yongyi (ii)	143	-	-	-	-	-	-	-	143
Mr. Zhu Xiaoping (ii)	287	-	-	-	-	-	-	-	287
Dato Wee Yiaw Hin (ii)	689	-	-	-	-	-	-	-	689

(Amounts expressed in thousands of RMB, unless otherwise stated)

38. BENEFITS AND INTERESTS OF DIRECTORS *(Continued)*

Directors' and chief executive's emoluments *(Continued)*

For the year ended 31 December 2019:

Name	Fees	Salary	Discretionary bonuses	Housing allowance	Estimated money value of other benefits (i)	Employer's contribution to a retirement benefit scheme	Remunerations paid or receivable in respect of accepting office as director	Emoluments paid or receivable in respect of director's other services in connection with the management of the affairs of the Company or its subsidiary undertaking	Total
Executive Directors									
Mr. Luo Lin	-	2,472	-	-	31	50	-	-	2,553
Mr. Pi Zhifeng (chief executive)	-	1,873	-	-	69	50	-	-	1,992
Mr. Fan Yonghong	-	1,829	-	-	69	50	-	-	1,948
Non-executive Director									
Mr. John William Chisholm	-	689	-	-	-	-	-	-	689
Independent Non-executive Directors									
Mr. Zhang Yongyi (ii)	287	-	-	-	-	-	-	-	287
Mr. Zhu Xiaoping (ii)	287	-	-	-	-	-	-	-	287
Dato Wee Yiaw Hin (ii)	689	-	-	-	-	-	-	-	689

Notes:

(i) Other benefits include other insurance premium.

(ii) No share options in aggregate was granted to three independent non-executive directors during the year ended 31 December 2020 (2019: 2,100,000 share options), and the total expense recognised in the consolidated statement of profit or loss for year ended 31 December 2020 amounted to RMB259,000 (31 December 2019: RMB1,019,000), the same amount for each independent non-executive director which are not included in this summary.

(iii) Mr. John William Chisholm resigned in May 2020 and Mr. Huang Song was appointed as the non-executive director in December 2020.