



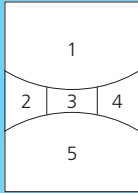
中國中鐵股份有限公司 CHINA RAILWAY GROUP LIMITED

(a joint stock limited company incorporated in the People's Republic of China with limited liability)

Stock Code : 390

ANNUAL REPORT 2021





Cover Legend

- 1. Taipingchuan Service Area of Shuangliao-Taonan Expressway
- 2. Liming Village Super Bridge of Zhangjihuai Hi-Speed Railway
- 3. China-Laos Railway Yuanjiang Bridge
- 4. Yunnan Qijing Deze Reservoir
- 5. Beijing Fengtai Railway Station



Jiangyou Liangchahe Super Bridge

China Railway Kunming Building

Luohe Bridge

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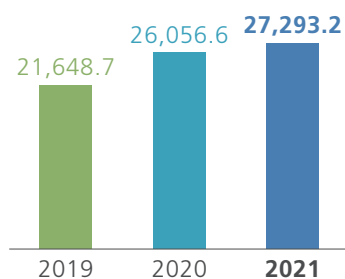
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SNAPSHOT OF ANNUAL REPORT



New contracts

RMB100 million



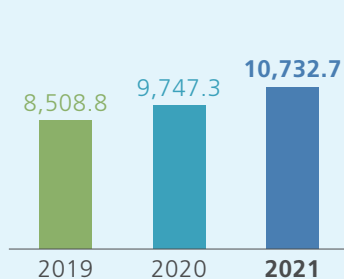
Year-on-year increase

4.7% ↑



Revenue

RMB100 million



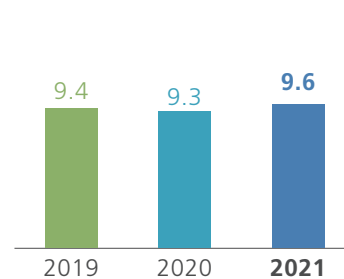
Year-on-year increase

10.1% ↑



Gross profit margin

%



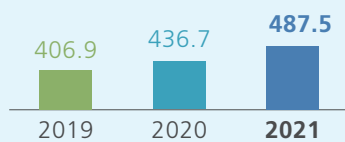
Year-on-year increase

0.3% ↑



EBITDA

RMB100 million



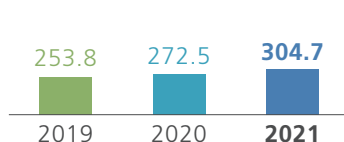
Year-on-year increase

11.6% ↑



Profit for the year

RMB100 million



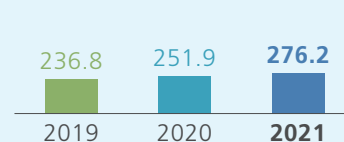
Year-on-year increase

11.8% ↑



Profit attributable to owners of the company

RMB100 million



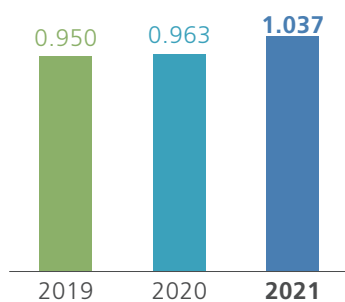
Year-on-year increase

9.6% ↑



Basic earnings per share

RMB



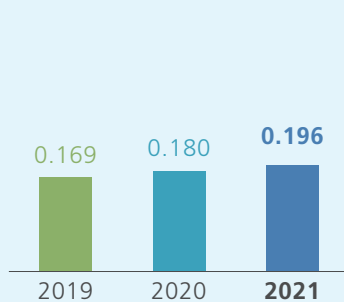
Year-on-year increase

7.7% ↑



Dividend per share (tax inclusive)

RMB



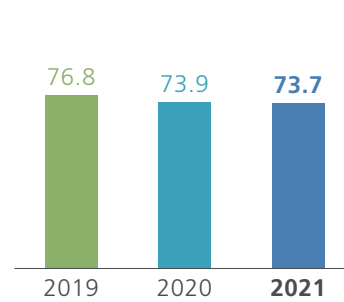
Year-on-year increase

8.9% ↑



Gearing ratio

%



Decrease by **0.2** percent point ↓ from the beginning of the year

COMPANY PROFILE

The Company was established as a joint stock company with limited liability in the People's Republic of China (the "PRC") under the Company Law of the PRC on 12 September 2007. The A shares and H shares issued by the Company were listed on the Shanghai Stock Exchange and the main board of The Stock Exchange of Hong Kong Limited (the "Hong Kong Stock Exchange") on 3 December 2007 and 7 December 2007 respectively.

We are one of the largest multi-functional integrated construction group in the PRC and Asia in terms of the total revenue of the engineering contract, and rank 35th on the 2021 Fortune Global 500 list. We offer a full range of construction-related services, including infrastructure construction, survey, design and consulting services and engineering equipment and component manufacturing, and also expand to property development and other businesses such as mining.

We have outstanding advantages in the construction of infrastructure facilities such as railways, highways, municipal works and urban rails. In particular, we hold leading positions in the design and construction of bridges, tunnels and electrified railways, and the design and manufacturing of bridge steel structures and turnouts in the PRC, which has achieved advanced international standards. While we operate in every province across the PRC, we have also explored extensive global markets.

Adhering to the motto of "strive to challenge limits and achieve excellence", the Company is committed to continuous development of the Company to create a brighter and better future.



Qingdao Jiaodong International Airport

FINANCIAL SUMMARY

Summary of Consolidated Income Statement

	For the year ended 31 December					Change 2021 vs 2020 (%)
	2021	2020	2019	2018	2017	
	<i>RMB million</i>					
Revenue						
Infrastructure Construction	953,038	876,310	762,084	646,914	611,095	8.8
Survey, Design and Consulting Services	18,607	17,321	17,031	15,095	13,761	7.4
Engineering Equipment and Component Manufacturing	33,176	29,793	24,322	20,787	18,521	11.4
Property Development	51,300	49,763	43,662	43,991	30,951	3.1
Other Businesses	101,942	74,183	70,402	67,730	53,074	37.4
Inter-segment Eliminations and Adjustments	(84,791)	(72,638)	(66,658)	(54,134)	(38,629)	
Total	1,073,272	974,732	850,843	740,383	688,773	10.1
Gross Profit	103,386	90,189	79,864	71,658	62,729	14.6
Profit before Income Tax	39,636	35,612	33,187	24,945	20,828	11.3
Profit for the Year	30,470	27,250	25,379	17,436	14,204	11.8
Profit for the Year attributable to Owners of the Company	27,618	25,188	23,678	17,198	16,067	9.6
Basic Earnings per Share (RMB)	1.037	0.963	0.950	0.718	0.669	7.7

FINANCIAL SUMMARY

Summary of Consolidated Balance Sheet

	As at 31 December					Change 2021 vs 2020 (%)
	2021	2020	2019	2018	2017	
	<i>RMB million</i>					
Assets						
Current Assets	801,058	742,107	709,770	652,040	641,668	7.9
Non-current Assets	560,522	457,870	346,271	290,473	202,254	22.4
Total Assets	1,361,580	1,199,977	1,056,041	942,513	843,992	13.5
Liabilities						
Current Liabilities	787,860	705,145	676,034	622,475	579,303	11.7
Non-current Liabilities	215,526	181,786	134,679	98,057	95,061	18.6
Total Liabilities	1,003,386	886,931	810,713	720,532	674,364	13.1
Total Equity	358,194	313,046	245,328	221,981	169,558	14.4
Total Equity and Liabilities	1,361,580	1,199,977	1,056,041	942,513	843,992	13.5

CHAIRMAN'S REPORT

Lhasa-Nyingchi Railway



CHEN Yun

Chairman, Executive Director and Secretary to the CPC Committee

Dear shareholders and investors,

The year 2021 was a milestone year in the history of both the Party and the country, and the first year that China Railway Group had embarked on a new journey based on the 14th Five-Year Plan. Over the past year, faced with challenges brought by great changes and a pandemic unseen in a century, we, guided by General Secretary Xi Jinping's Thought on Socialism with Chinese Characteristics for a New Era, took the initiative to implement the decisions and plans of the CPC Central Committee and The State Council as well as the work assignments of the State-owned Assets Supervision and Administration Commission. As a "frontier", we focused on high-quality development, strengthened strategic guidance, adhered to the "123456" work strategy, and vigorously promoted efficiency improvement and value creation, with all economic indicators hitting a record high. Our revenue exceeded RMB1 trillion for the first time, and our ranking among the world's top 500 companies rose to 35th, making a good start to the 14th Five-year Plan, and delivering excellent results for the Party, the country and the capital market.

In 2021, we, cherishing the greatness of our country, demonstrated our responsibility as a "frontier" by serving the national strategy with our practical implementations and achievements. Based on the national strategy of developing China into a transport powerhouse, coordinating regional development, and revitalizing rural areas, we successfully completed key projects such as the Larin Railway, Facilities for the Beijing Winter Olympic Games, Qingdao Jiaodong International Airport, and the Chibi Yangtze River Bridge, as well as a number of high-speed railways linking Beijing with Harbin, Zhangjiajie-Jishou-Huaihua and Mudanjiang-Jiamusi. We made great progress with high standards and quality in the construction of the Sichuan-Tibet Railway, a major project of the century; deeply implemented the Belt and Road Initiative by making steady progress in the construction of major

CHAIRMAN'S REPORT

Tunnel underneath North Taxiway of Chengdu Tianfu International Airport



Belt and Road projects such as the Jakarta-Bandung High-speed Railway in Indonesia and the Padma Bridge in Bangladesh, as well as the China-Laos Railway, which was put into service officiated by leaders of China and Laos; implemented ecological and environmental protection measures, and actively participated in the Yangtze and Yellow River basin ecological protection. We also deeply involved in the comprehensive poverty alleviation and rural vitalization efforts and engaged in epidemic prevention and control and earthquake and flood relief in many regions, demonstrating our responsibility as a state-owned enterprise.

This year, we inspired the source of vitality and deepened the enterprise reform as a “frontier” to demonstrate the contemporary spirit of the new era. We developed action plans for management improvement based on world-class standards and fulfilled more than 70% of the targets set out in the three-year SoE reform action plan as scheduled while following the “measurable, assessable, testable, and practical” principles. We established three major systems of “functional management, production and operation management, supervision and security” for the Company headquarters, optimized the operation system and mechanism, promoted the specialized, differentiated and substantive development of investment companies, and introduced a series of major measures to strengthen the building of boards of directors, improve the governance of parent-subsidary companies and deepen reform of the three systems, in order to build a mature modern enterprise system with Chinese characteristics, further improve the efficiency of enterprise operation and achieve vigorous development of the Company.

This year, we, persisting in self-reliance and self-improvement, demonstrated our pioneering spirit as a “frontier” with fruitful achievements in scientific and technological innovation. Guided by the important instructions of “Three Transformations” made by General Secretary Xi Jinping during his inspection of China Railway

CHAIRMAN'S REPORT

Engineering Equipment Group, we, focusing on the "Four Facing" strategic deployment (facing the forefront of science and technology, the main battlefield of the economy, the major needs of the country, and the people's lives and health), formulated the 14th Five-Year Plan for the development of scientific and technological innovation, strove to create a source of original technologies, and made breakthroughs in key technologies for a number of "high-tech, major, difficult and new" projects. World-leading achievements were attained in three special tasks. CRHEEC was listed on the Science and Technology Innovation Board. Five products, including the full-section tunneling excavator, were selected as national "Manufacturing Champion". We made great progress in promoting the digital transformation and green construction of enterprises and won 7 National Science and Technology Progress and Invention Awards, 9 China Patent Awards and 12 Zhan Tianyou Awards. One of our engineers was elected as academician of the Chinese Academy of Engineering and two were elected National Survey and Design Masters.

This year, we strengthened our enterprise risk control and effectively demonstrated the corporate governance philosophy of a "frontier" with legal and compliant management. We balanced development and security. Remaining mindful of danger in security and chaos in governance, we took the initiative in proactively identifying and minimizing risk factors, comprehensively examined the subsidiaries' risk elements, successfully resolved the risks of the "Bandar Malaysia Project" and constantly improved our risk prevention and control capabilities. We strengthened the building of China Railway under the rule of law, in compliance with regulations and fostered a rule of law culture in which the law is always top of mind – the law must be acted upon, the law must be consulted in decision-making, and the law must be relied on in governance. We established a comprehensive risk management system, embedding risk management in all links of enterprise production and operation, focusing on preventing and defusing potential systemic risks, and built a firewall for safe development, thus ensuring the sound, steady and orderly development of the Company.

This year, we strengthened party leadership and demonstrated our political character as a "frontier" through the guidance and guarantee of high-quality Party building. Under the theme of "studying the history of the Party" and "celebrating the centenary", we carried out the theme activities of "love the Party, love the country and love enterprises with ideals and beliefs" extensively, inheriting the red gene, carrying on the red blood, and arming our mind with the Party's innovative theory and guiding practice. Following the "two adherence" (Upholding the Party's leadership over state-owned enterprises is a major political principle, which must be adhered to. The establishment of a modern enterprise system is the direction of state-owned enterprise reform, which must be adhered to.), we integrated the Party's leadership into all aspects of corporate governance. In the "Year of Innovation and Expansion of Party Building", we promoted the in-depth integration of Party building, production and management. To meet the needs of high-quality development of enterprises, we created a high-quality professional cadre team. We continued to improve our work style, vigorously promoted the great spirit of Party building, built cultural exhibition halls and spiritual education bases for frontiers with high standards, and created a fresh and righteous atmosphere for people to work and start their own businesses with the spirit of "forever frontier".

CHAIRMAN'S REPORT

We aim to achieve success amid strong headwinds shouldering great responsibilities. The year 2022 is an important year for China Railway to implement the 14th Five-Year Plan. Beginning at the new starting point of "trillion scale development", we will, guided by General Secretary Xi Jinping's Thought on Socialism with Chinese Characteristics for a New Era, stay true to our mission, enhance the "four awareness", strengthen the "four confidence", achieve the "two safeguards", advance vigorously with courage and determination, promote the spirit of "frontier", and speed up the construction of a world-class enterprise with "outstanding products, outstanding brands, leading innovation and modern governance", in order to serve the country, contribute to society, and reward the shareholders and employees with high-quality development.

Here, I would like to express my sincere appreciation to the shareholders who have supported the Company's reform and all walks of life who have shown care to the Company's development, as well as all the staff who have a shared future with the Company!

Let's work together to embrace the future!

Chen Yun

Chairman

Beijing, China
30 March 2022

CHANGES IN SHARE CAPITAL AND INFORMATION ON SHAREHOLDERS

I. Changes in Share Capital

1. Changes in shares

During the Reporting Period, there have been no changes in respect of the total number of shares and the share equity structure of the Company.

2. Explanation on changes in shares

Not applicable

3. Impacts of changes in share on the financial indicators of earnings per share, net assets per share for the most recent year and the most recent period

Not applicable

4. Other contents that the Company deems necessary or required by the securities regulatory authority to be disclosed

Not applicable

II. Changes in Shares with Selling Restrictions

Not applicable

III. Issuance and Listing of Securities

1. Issuance of securities as at the reporting period

Not applicable

2. Changes in respect of the total number of shares and the share equity structure of the Company and changes in respect of the asset and liability structure of the Company

Not applicable

3. Existing internal employee shares

Not applicable

IV. Information of Shareholders and Ultimate Controller

1. Number of Shareholders

Total number of shareholders of ordinary shares as at the end of the reporting period	545,307
Total number of shareholders of ordinary shares at the end of the month preceding the date of this announcement	510,464
Total number of shareholders of preference shares with reinstated voting rights as at the end of the reporting period	0
Total number of shareholders of preference shares with reinstated voting rights at the end of the month preceding the date of this announcement	0

CHANGES IN SHARE CAPITAL AND INFORMATION ON SHAREHOLDERS

2. Shareholdings of the Top Ten Shareholders and Top Ten Shareholders of Tradable Shares (or Shareholders without Selling Restrictions) as at the End of the Reporting Period

Unit: Shares

Shareholdings of the top ten shareholders

No.	Name of shareholder	Increase/ decrease during the reporting report	Total number of shares held at the end of the period	Shareholding percentage (%)	Number of shares with selling restriction	Number of pledged or frozen shares		Nature of shareholder
						Conditions of shares	Number	
1	CREC (Note 1)	0	11,598,764,390	47.21	0	Nil	0	State-owned legal person
2	HKSCC Nominees Limited (Note 2)	369,831	4,009,162,630	16.32	0	Nil	0	Other
3	China Securities Finance Corporation Limited	-64,351,353	619,264,325	2.52	0	Nil	0	State-owned legal person
4	China Reform Holdings Corporation Ltd.	0	387,050,131	1.58	0	Nil	0	State-owned legal person
5	China Great Wall Asset Management Co., Ltd	0	372,192,507	1.51	0	Nil	0	State-owned legal person
6	Hong Kong Securities Clearing Company Limited	49,515,012	355,150,928	1.45	0	Nil	0	Other
7	Central Huijin Asset Management Ltd.	-5,019,600	230,435,700	0.94	0	Nil	0	State-owned legal person
8	China Orient Asset Management Co., Ltd.	0	223,271,744	0.91	0	Nil	0	State-owned legal person
9	China Structural Reform Fund Corporation Limited	-49,227,500	172,396,399	0.70	0	Nil	0	State-owned legal person
10	Boshi Fund – Agricultural Bank of China – Boshi China Securities Financial Asset Management Plan	0	131,135,600	0.53	0	Nil	0	Other
	Yifangda Fund – Agricultural Bank of China – Yifangda China Securities Financial Asset Management Plan	0	131,135,600	0.53	0	Nil	0	Other
	Dacheng Fund – Agricultural Bank of China – Dacheng China Securities Financial Asset Management Plan	0	131,135,600	0.53	0	Nil	0	Other
	Jiashi Fund – Agricultural Bank of China – Jiashi China Securities Financial Asset Management Plan	0	131,135,600	0.53	0	Nil	0	Other

CHANGES IN SHARE CAPITAL AND INFORMATION ON SHAREHOLDERS

No.	Name of shareholder	Increase/ decrease during the reporting report	Total number of shares held at the end of the period	Shareholding percentage (%)	Number of shares with selling restriction	Number of pledged or frozen shares		Nature of shareholder
						Conditions of shares	Number	
	Guangfa Fund – Agricultural Bank of China – Guangfa China Securities Financial Asset Management Plan	0	131,135,600	0.53	0	Nil	0	Other
	Central European Fund – Agricultural Bank of China – Central European China Securities Financial Asset Management Plan	0	131,135,600	0.53	0	Nil	0	Other
	Huaxia Fund – Agricultural Bank of China – Huaxia China Securities Financial Asset Management Plan	0	131,135,600	0.53	0	Nil	0	Other
	Yinhua Fund – Agricultural Bank of China – Yinhua China Securities Financial Asset Management Plan	0	131,135,600	0.53	0	Nil	0	Other
	Southern Fund – Agricultural Bank of China – Southern China Securities Financial Asset Management Plan	0	131,135,600	0.53	0	Nil	0	Other

Statement on the related relations and concerted actions between the shareholders above

CREC, the controlling shareholder, does not have related relations or perform concerted actions with the above other shareholders. The Company is not aware of any related relationships or concerted action relationships between the above shareholders.

CHANGES IN SHARE CAPITAL AND INFORMATION ON SHAREHOLDERS

Shareholdings of the top ten shareholders without selling restrictions

No.	Name of shareholder	Number of shares held without selling restrictions	Type and number of shares	
			Type	Number
1	CREC (Note 1)	11,434,370,390	RMB-denominated ordinary shares	11,434,370,390
		164,394,000	Overseas listed foreign shares	164,394,000
2	HKSCC Nominees Limited (Note 2)	4,009,162,630	Overseas listed foreign shares	4,009,162,630
3	China Securities Finance Corporation Limited	619,264,325	RMB-denominated ordinary shares	619,264,325
4	China Reform Holdings Corporation Ltd.	387,050,131	RMB-denominated ordinary shares	387,050,131
5	China Great Wall Asset Management Co., Ltd.	372,192,507	RMB-denominated ordinary shares	372,192,507
6	Hong Kong Securities Clearing Company Limited	355,150,928	RMB-denominated ordinary shares	355,150,928
7	Central Huijin Asset Management Ltd.	230,435,700	RMB-denominated ordinary shares	230,435,700
8	China Orient Asset Management Co., Ltd.	223,271,744	RMB-denominated ordinary shares	223,271,744
9	China Structural Reform Fund Corporation Limited	172,396,399	RMB-denominated ordinary shares	172,396,399
10	Boshi Fund – Agricultural Bank of China – Boshi China Securities Financial Asset Management Plan	131,135,600	RMB-denominated ordinary shares	131,135,600
	Yifangda Fund – Agricultural Bank of China – Yifangda China Securities Financial Asset Management Plan	131,135,600	RMB-denominated ordinary shares	131,135,600
	Dacheng Fund – Agricultural Bank of China – Dacheng China Securities Financial Asset Management Plan	131,135,600	RMB-denominated ordinary shares	131,135,600

CHANGES IN SHARE CAPITAL AND INFORMATION ON SHAREHOLDERS

No.	Name of shareholder	Number of shares held without selling restrictions	Type and number of shares	
			Type	Number
	Jiashi Fund – Agricultural Bank of China – Jiashi China Securities Financial Asset Management Plan	131,135,600	RMB-denominated ordinary shares	131,135,600
	Guangfa Fund – Agricultural Bank of China – Guangfa China Securities Financial Asset Management Plan	131,135,600	RMB-denominated ordinary shares	131,135,600
	Central European Fund – Agricultural Bank of China – Central European China Securities Financial Asset Management Plan	131,135,600	RMB-denominated ordinary shares	131,135,600
	Huaxia Fund – Agricultural Bank of China – Huaxia China Securities Financial Asset Management Plan	131,135,600	RMB-denominated ordinary shares	131,135,600
	Yinhua Fund – Agricultural Bank of China – Yinhua China Securities Financial Asset Management Plan	131,135,600	RMB-denominated ordinary shares	131,135,600
	Southern Fund – Agricultural Bank of China – Southern China Securities Financial Asset Management Plan	131,135,600	RMB-denominated ordinary shares	131,135,600
	Statement on the special account for repurchase of the top ten shareholders			Nil
	Statement on entrustment of voting right, voting right by proxy and abstaining from voting of the shareholders above			Nil
	Statement on the related relations and concerted actions between the shareholders above		CREC, the controlling shareholder, does not have related relations or perform concerted actions with the above other shareholders. The Company is not aware of any related relationships or concerted action relationships between the above shareholders.	
	Statement on shareholders of preference shares with reinstated voting rights and the number of shares held			Nil

CHANGES IN SHARE CAPITAL AND INFORMATION ON SHAREHOLDERS

Note 1: CREC held 11,598,764,390 shares of the Company (including 11,434,370,390 A shares and 164,394,000 H shares).

Note 2: H shares held by HKSCC Nominees Limited are held on behalf of its various clients, and the number of H shares held by CREC is already deducted.

Note 3: A shares held by Hong Kong Securities Clearing Company Limited are held on behalf of its various clients.

Note 4: The data shown in the table is based on the register of members of the Company as at 31 December 2021.

3. Shareholdings of top ten shareholders of shares with selling restrictions and terms of selling restrictions

Not applicable

4. Strategic Investors or General Legal Persons Becoming the Top Ten Shareholders by Placing New Shares

Not applicable

V. Information on Controlling Shareholder and Ultimate Controller

1. Details of Controlling Shareholder

(1) Legal person

Name of controlling shareholder	China Railway Engineering Group Company Limited
Legal representative	CHEN Yun
Date of establishment	7 March 1990
Principal business	Construction works, related engineering technological research, survey, design, services, manufacturing of specialized equipment and development and operation of real estates.
Details of controlling interests and investments in other domestic and overseas-listed companies during the reporting period	Nil
Other information	Nil

(2) Natural person

Not applicable

(3) Special explanation that the Company does not have any controlling shareholder

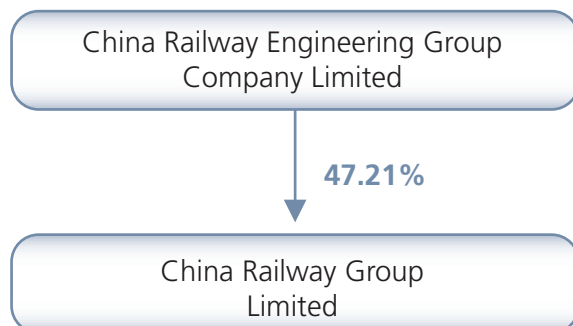
Not applicable

(4) Details of changes of the controlling shareholder during the reporting period

Not applicable

CHANGES IN SHARE CAPITAL AND INFORMATION ON SHAREHOLDERS

2. The diagram of the interests and controlling relationships between the Company and the ultimate controller



Note: The registration of the first grant of the Company's 2021 restricted shares incentive scheme was completed on 23 March 2022, and the Company's total issued share capital increased from 24,570,929,283 shares to 24,741,653,683 shares. After the completion of such grant, the controlling shareholder of the company remains China Railway Engineering Group Company Limited, and its shareholding ratio has changed to 46.88%.

3. Details of Ultimate Controller

(1) Legal person

Ultimate controller of the Company – State-owned Assets Supervision and Administration Commission of the State Council ("**SASAC**"), which is the ministry level institution directly under the State Council, and was set up in accordance with the institutional reform plan of the State Council and the Notice of the State Council on Establishment of Institutions passed at the First Session of the 10th National People's Congress. The State-owned Assets Supervision and Administration Commission is authorised by the State Council to perform its duties as an investor on behalf of the State. The scope of supervision of the State-owned Assets Supervision and Administration Commission extends to the state-owned assets of central government owned enterprises (excluding financial enterprises). Currently, the State-owned Assets Supervision and Administration Commission holds 90% equity interests in CREC and National Social Security Fund holds 10% equity interests in CREC.

(2) Natural person

Not applicable

(3) Special explanation that the Company does not have any controlling shareholder

Not applicable

(4) Details of changes of the controlling shareholder during the reporting period

Not applicable

CHANGES IN SHARE CAPITAL AND INFORMATION ON SHAREHOLDERS

4. The diagram of the interests and controlling relationships between the Company and the ultimate controller



Note: The registration of the first grant of the Company's 2021 restricted shares incentive scheme was completed on 23 March 2022, and the Company's total issued share capital increased from 24,570,929,283 shares to 24,741,653,683 shares. After the completion of such grant, the controlling shareholder of the company remains China Railway Engineering Group Company Limited, and its shareholding ratio has changed to 46.88%.

5. Ultimate controller control the Company through trust or other asset management methods Not applicable

VI. The Company's Controlling Shareholder and the Party Acting in Concert thereof holding Cumulative Pledged Shares accounting for over 80% of the Company's Shares

Not applicable

VII. Other Legal Person Shareholders with Shareholding of over 10%

As of the end of the reporting period, except for HKSCC Nominees Limited, the Company has no other legal person shareholders with shareholding over 10%.

VIII. Information on the Restrictions on Reduction of Shareholdings

Not applicable

IX. Details of Repurchase of Shares during the Reporting Period

Not applicable

BUSINESS OVERVIEW

The Group is one of the largest multi-functional integrated construction groups in the world, which enables us to offer a full range of construction and industrial products and related services to our customers. The Group holds an industrial leading position in fields such as engineering construction, design consulting, and equipment manufacturing. The Group also diversifies its business and expands its value-added services by exploiting into other businesses such as featured real estate, financial and merchandise trading, resource utilization, asset operation, water conservancy and hydropower, ecological and environmental protection and construction technology innovation and application. After years of practice and development, the Group's businesses have established a close upstream-downstream relationship among themselves, and have gradually formed a vertically integrated construction industry chain with outstanding principal business supplemented by diversified relevant business horizontally.

I. Industry Development Overview

1. Infrastructure construction

On the domestic front, in 2021, the pandemic prevention and control was generally stable, the national economy continued to recover, and China's economic development maintained its global leadership. From the data released by the National Bureau of Statistics, the national fixed asset investment grew by 4.9% year-on-year for the whole year. Although the scale remained high, it was substantially lower than the GDP growth rate of 8.1% in the same period, especially showing an insufficient effective investment demand under multiple factors such as the deferred special debt issuance, hidden debt risk prevention and resolution, real estate regulation tightening, repeated pandemics, double controls over energy consumption, impact of upstream prices and upward supply, downstream domestic demand contraction, and weakening market expectations. For the whole year, investments in fixed assets of national transportation were RMB3.6 trillion, an increase of about 4% year-on-year, a slight slowdown in growth but still maintaining high. In terms of railways, investments in fixed assets of railways were RMB748.9 billion, down 4.2% year-on-year. New lines of 4,208 kilometers were put into operation, including 2,168 kilometers of high-speed railways. The length of railways in operation nationwide reached over 150,000 kilometers (among which, the length of high-speed railways reached 40,000 kilometers) as of the end of 2021. In terms of urban rail transit, the annual investment in urban rail transit continued to grow and the construction speed steadily increased, continuing to maintain the mode as subways taking the lead, with a variety of lines growing together. Throughout the year, a total length of 1,222.92 kilometers of 39 new lines was put into operation. As of the end of 2021, a total of 9,192.62 kilometers of urban rail lines was in operation in 50 cities in mainland China, including 7,253.73 kilometers of subways, accounting for 78.9%. In terms of water conservancy construction, investments in water conservancy construction nationwide reached RMB757.6 billion, 67 of the 150 major water conservancy projects have been approved and 62 projects have been started. In terms of old urban communities renovation and subsidized housing construction, in 2021, the renovation actually started on 55,600 old urban communities nationwide, raising 942,000 sets of new subsidized rental housing in 40 cities nationwide, starting construction on 880,000 sets of public rental housing, and starting renovation on 1.65 million sets of various shantytowns. In the field of clean energy construction, the new installed capacity of wind power and photovoltaic power generation nationwide throughout the year reached 101 million kilowatts, including 47.57 million kilowatts of wind power and 52.97 million kilowatts of photovoltaic power generation (new distributed photovoltaic installed capacity of 29.20 million kilowatts throughout the year, accounting for about 55% of the new photovoltaic installed capacity).

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On the international front, in 2021, the COVID-19 pandemic continued to impact the global industrial and supply chain, which seriously affected the development of overseas contracted engineering projects and labor cooperation business. The cross-border flow of personnel was seriously impeded, and the difficulty of returning to the country causes physical and mental pressure on front-line labor and management personnel, and also increases the difficulty for domestic personnel to be sent out; sharp increases in prices of shipping, logistics and raw materials and the RMB appreciation led to the rising of project performance costs and reduced profit margins; the security environment in some areas deteriorated, and various types of overseas security incidents occurred frequently; changes in tax policies of some countries increased the overseas operation cost of Chinese enterprises, all of which have brought many difficulties and challenges to the industry development and business operation. According to the statistical information of foreign economic cooperation issued by the Ministry of Commerce, in 2021, China's overseas contracted engineering projects achieved a turnover of RMB999.62 billion, a year-on-year decrease of 7.1% (equivalent to US\$154.94 billion, a year-on-year decrease of 0.6%), and newly signed contracts amounted to RMB1,667.68 billion, a year-on-year decrease of 5.4% (equivalent to US\$258.49 billion, a year-on-year increase of 1.2%). Among them, Chinese enterprises signed 6,257 new contracts for overseas contracted engineering projects in 60 countries along the Belt and Road Initiative, with a new contract value of RMB864.76 billion, a year-on-year decrease of 11.4% (equivalent to US\$134.04 billion, a year-on-year decrease of 5.2%), accounting for 51.9% of the amount of China's new contracts for overseas contracted engineering projects in the same period. The turnover achieved RMB578.57 billion, a year-on-year decrease of 7.9% (equivalent to US\$89.68 billion, a year-on-year decrease of 1.6%), accounting for 57.9% of the total amount in the same period. In view of the industry data and development opportunities, the business of countries along the Belt and Road Initiative continues to occupy half of the market, and will remain an important component in promoting the steady development of China's overseas contracted engineering projects in the future.

2. Survey, design and consulting services business

Being a technology- and intelligence-intensive production-based service industry, the survey, design and consulting services business not only stays in the forefront of engineering construction projects in the construction, transportation, electric power, water conservancy and other industries, but also runs through the entire life cycle of the engineering construction project, providing whole-process technical and management services for project decision-making and implementation, playing an important supporting role in improving the investment and social benefits of engineering projects, and serving as a key link in engineering construction. At present, China actively promotes the construction of high-speed railways, urban rail transit, water conservancy and hydropower, underground pipelines and sponge cities. The construction of new economic belt will continue to warm up especially with the further mutual promotion and intercommunication among the major strategies of One Belt and One Road Initiative, co-development of Beijing-Tianjin-Hebei, Yangtze River Economic Belt, construction of Guangdong-Hong Kong-Macao Greater Bay Area, integrated development of Yangtze River Delta, Yellow River Basin ecological protection and high-quality development. The next few years will still be the key period for infrastructure construction and development in China, providing more market opportunities for enterprises. While as the soul and forerunner of engineering construction, the survey, design and consulting service has a potential for growth both in China and overseas. However, in view of the current development pattern of survey, design and consulting services industry, development of most subsectors is closely related to the national investment-stimulating policy. With China's economic transformation and industrial restructuring, the corresponding adjustment of fixed asset investment will lead to more intense and complex competition in the industry; the intensive introduction of various regional development plans will also make the industry pattern more prominent with the changing characteristics of regional demand. In the future, the development of the survey, design and consulting services industry will maintain a pattern of continuous growth and intensified competition, market demand-driven and endogenous enterprise change-driven, and deepening evolution of the competitive landscape and accelerated business model innovation.

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Yangjiang Wind Power Project



3. Engineering equipment and component manufacturing business

In 2021, the 14th Five-Year Plan for National Economic and Social Development of the People's Republic of China and Vision Outline for 2035 was officially released, clearly proposing to accelerate the construction of a new development pattern with domestic large cycle oriented and domestic and international double cycles mutually promoted, insisting on placing the economic development focus on the real economy, deeply implementing the strategy of making a powerful country by manufacturing, promoting the optimization and upgrading of manufacturing industry, comprehensively facilitating the construction of traditional infrastructure and new infrastructure, accelerating the construction of a transportation power country, and creating a modern infrastructure system with maturity, high efficiency, practicality, intelligence, green, safety and reliability. This year, China's traditional infrastructure construction areas such as the railway, highway, urban rail, water conservancy, and underground space development remained relatively high-level operation. New infrastructure construction market showed vigorous development, providing wide applications for high-end infrastructure equipment, and broad market opportunities for engineering equipment and component manufacturing enterprises. In 2021, the added value of large-scale industries recorded a year-on-year increase of 9.6%, in which the added value of equipment manufacturing industry increased by 9.8% year on year. With the issuance of Opinions on Accelerating the High Quality Development of Manufacturing Service Industry, Guidance on Accelerating the Cultivation and Development of High-quality Enterprises in Manufacturing Industry, 14th Five-Year Plan for Intelligent Manufacturing Development and other policy documents, it will promote the intergrowth and mutual development of manufacturing industry and manufacturing service industry; guide the high-end intelligent and green development of high-quality enterprises; promote the digitalized transformation, networking coordination and intelligent transformation of manufacturing industry; facilitate intelligent, digitalized, networked and lightweight transformations to constantly empower the equipment manufacturing industry to expand its application fields, so as to continuously promote the high-quality development of equipment manufacturing industry in China. During the "14th Five-Year Plan" period, the equipment manufacturing industry still has a bright future, with equal emphasis on stock renewal and new demand. However, the intensified industry competition and the fixed asset investment orientation adjustment will make changes in the market environment, which, on the one hand, will promote the equipment manufacturing industry to seize opportunities in the environmental protection industry and new energy equipment and, on the other hand, will have an uncertain impact on the future demand for tunnel construction equipment, turnout products for urban rail transit and electrical equipment products in the future.

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4. Property development

In 2021, the real estate industry policy was tight at first but afterwards loose. In the first three quarters, supervision on real estate financing, housing loans, and land transfer helped to limit excessive expansion of the real estate industry, leading to a concentrated release of credit risk for real estate companies; after September, the regulators intensively released the stability maintenance signal, and the real estate industry ushered in the regulatory policy relaxation period, but it was still not enough to curb the risk exposure of real estate companies in the short term, and the risk clearance of some real estate companies was still ongoing. With respect to land market transaction, along with the policy of centralized land supply and continuous standardization of land market transactions, the market gradually returned to rationality in the second half of the year, the turnover of the national land market remained stable, and the transaction amount increased reasonably. According to the National Bureau of Statistics, the land purchased by real estate developers totaled 215.90 million square meters in 2021, representing a year-on-year decrease of 15.5%. The land transaction price was RMB1,775.6 billion, representing a year-on-year increase of 2.8%. With respect to the turnover of commodity housing market, the overall turnover of the year remained stable, the residential, office and commercial housing transaction area was close to that of the previous year, with slight fluctuations. China's investment in real estate development totaled RMB14.7602 trillion in the year, representing a year-on-year increase of 4.4%, of which the investment in residential housing was RMB11.1173 trillion. The sales area of commodity housing was 1,794.33 million square meters, representing a year-on-year increase of 1.9%, of which the sales area of residential housing increased by 1.1%, the sales area of office buildings increased by 1.2% and the sales area of commercial housing decreased by 2.6%. The sales amount of commodity housing throughout the year was RMB18.1930 trillion, representing a year-on-year increase of 4.8%. For the whole year, renovation on 1.65 million sets of various types of shantytowns was started, and 2.05 million sets were basically completed; 940,000 sets of national guaranteed rental housing were started and raised. As to the competitive landscape of real estate enterprises, the data showed that the sales performance of real estate enterprises nationwide witnessed rapid growth in the first half of the year and a gradual decline in the second half of the year, maintaining a modest growth in sales scale throughout the year. Influenced by the policy, the main real estate enterprises slowed down the increase of investment intensity during the year, and the investment growth was concentrated in the central China region and eastern China region.

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5. Other businesses

Mining development business

The commodity prices in 2021 were generally high. Affected by favorable macro-factors such as the large-scale economic stimulus plan implemented by the United States, the acceleration of vaccination against the global COVID-19 and the strong recovery of the global economy, together with the supply-end disturbance caused by occasional strikes in the major mineral products producing countries such as Chile and Peru, the commodity prices rose generally. However, according to the future market trend, while the accumulation of many favorable factors continuously pushed up commodity prices, the fundamentals of supply and demand relations deviated greatly. In particular, due to the increased tightening on relevant regulation and control policies of the state to restrain the excessive price rise of non-ferrous metals and other bulk raw materials, the commodity prices were corrected, resulting in the overall high-level fluctuation operation throughout the year.

Financial business

In 2021, the global pandemic resurged, commodity prices rose sharply, inflation in developed economies climbed, monetary policy turns in major developed economies accelerated, and international financial market shocks increased. China's economy continued to recover steadily, the prudent monetary policy was flexible and precise, reasonably moderate, and the financial market as a whole operated smoothly throughout the year. Money market interest rates were stable, money and credit and social financing scale grew reasonably, credit structure was constantly optimized, and the comprehensive social financing cost was steadily reduced; securities market reform and system construction were improved, and the multi-level capital market system was further improved; market-oriented and rule-of-law-based disposal of risks were adhered to, financial risks were generally reduced, and the prevention and resolution of hidden debt risks of local governments achieved certain results, the transition period of the new regulations on capital management ended, the scale of capital management products increased steadily, the structure was constantly optimized, and the bottom line of no systemic financial risks was maintained, creating a good economic and financial environment for the overall building of a moderately prosperous society.

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Merchandise trading business

With the rapid development of world economic integration and the comprehensive application of information technology, the global cooperation of merchandise trade has been deepened. Influenced by many kinds of products, frequent price fluctuation, high degree of homogenization, relatively low entry threshold, fierce market competition and other factors, the overall profit margin of the merchandise trading industry is low. The trade spread space of traditional merchandise traders gradually narrows, together with the reducing profit space, showing an urgent demand for cost saving through supply chain management. More and more merchandise traders have begun to integrate the industrial chain and extend to the upstream and downstream. While obtaining the upstream and downstream resources, they gradually penetrate each link of the industrial chain, expand the profit space, create value-added opportunities, and gradually began to play the role of the manager of the industrial chain. By integrating the upstream and downstream customers in the trade channel, the merchandise trade enterprises gradually transform to supply chain management, and improve the profit margin by providing multi-variety, full-chain and one-stop supply chain management service for end users.

Infrastructure asset operation

In 2021, the development of Public-Private-Partnership (PPP) mode gradually stabilized, and more and more projects in database of the Ministry of Finance completed the signing, commenced construction and entered into operation period. PPP mode plays an important role in assisting the implementation of major national strategies by guiding the investment of social capital and stimulating the vitality of private investment. As of 31 December 2021, there were 13,810 projects in database in the PPP comprehensive information platform of the Ministry of Finance, with a total investment of RMB20.56 trillion, including 10,204 projects in the management library with an investment of RMB16.39 trillion; 3,606 projects on the reserve list, with an investment of RMB4.17 trillion. From a regional perspective, the PPP projects of the Ministry of Finance had a large scale in East China and Southwest China, especially in Guizhou, Henan, and Shandong. According to different industries, PPP projects of the Ministry of Finance in the fields of transportation and municipal engineering were still the largest in scale, and the scale-leading ones include ecological construction and environmental protection, comprehensive urban development, water conservancy construction, etc. From the perspective of long-term development, the future incremental projects in the field of urbanization with centralized infrastructure and public services will mainly focus on the construction of urban agglomeration, metropolitan circle, regional sub-center, infrastructure encryption or making up for the shortcomings, and the creation of new urbanization, while the stock projects will pay more attention to urban renewal and stock asset revitalization. With reference to the statistics of BRI data, 1,019 PPP projects were concluded throughout the year, with a total investment of RMB2.32 trillion. Seen from the number of deals, PPP projects of municipal engineering had the largest number, followed by the deals in transportation, water conservancy construction, ecological construction and environmental protection, and education industries.

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II. Business Development Overview

Proactively integrated into national strategies and served to build a new development pattern. The Group made active efforts around the construction of national comprehensive three-dimensional transportation network and completed a large number of key projects at a high level; comprehensively dovetailed with national regional coordinated development strategies such as city clusters and metropolitan areas, continued to deepen cooperation with local enterprises, won tenders with a total of RMB2,147.4 billion in Beijing-Tianjin-Hebei, Guangdong-Hong Kong-Macao Greater Bay Area, Sichuan-Chongqing Economic Circle, Yangtze River Delta Region and Yangtze River Economic Belt, and made positive progress in such landmark projects as Beijing Fengtai Station, Shenzhen-Zhongshan Passage and Beijing-Xiongan Expressway, which drove the regional development. The Group actively fulfilled its social responsibilities, stepped forward to major tests such as fighting against pandemics in Hebei and Shanxi, fighting against floods in Henan and Shanxi, as well as rescue and relief for typhoons along the southeast coast, strengthened targeted assistance and helped rural revitalization, fully demonstrating the Company's responsibility and commitment in giving back to society.

Adhered to the leading position of operation, and continuously enhanced the market competitiveness. The Group's business segment structure was continuously optimized, the regional operation effectiveness continued to be synergistic, and the quality and efficiency of investment was steadily improved. The Group continued to maintain its leading position in the traditional infrastructure market, including the railway market, and the housing construction, municipal and urban rail markets saw steady development. New progress was made in emerging areas such as water conservancy and hydropower, clean energy, port channel, offshore wind power, pumped storage and water transfer projects, including the contracting of 5G projects, wind power and photovoltaic projects, ecological management projects, etc., which amounted to approximately RMB44 billion. New orders in the markets of port channel, and airport engineering increased by 76.9% and 54.6%, respectively, which laid the foundation for the Group to advance the "second curve" of operation.

Focused on the source to strengthen the foundation, with the effectiveness of operational control increasingly visible. In 2021, the Group focused on the theme of project management improvement, cost reduction and efficiency enhancement, paying close attention to project performance management, holding project management improvement meetings, conducting special studies on efficiency improvement, exploring the implementation of big business management, strengthening the emphasis on projects, focusing on projects and project-oriented management, and fundamentally improving the efficiency of basic management at the grassroots level. Focusing on the assessment index of "total profit and net profit, asset-liability ratio, operating profit margin, total labor productivity and R&D investment intensity", the Group strengthened process management and control. The general requirements of high quality development ran through the whole process of production and operation, reform and development, quality improvement and efficiency enhancement through a series of measures such as improving the quality of operation scale, reshaping the performance assessment system, perfecting the system and business process, strengthening the risk compliance management and implementing the early warning of economic operation.

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Promoted the reform of the three-year action, and took solid steps in the market-oriented reform.

In 2021, the Group took the opportunity of the three-year action of state-owned enterprise reform, focused on key issues for in-depth reform, continuously improved the modern enterprise system with Chinese characteristics, continuously deepened the reform of mixed ownership system, and constantly improved the market-oriented operation mechanism. Throughout the year, 193 annual key tasks were completed, accounting for 87% of all the tasks; the spin-off of CRHEEC to the STAR Market was completed, realizing a useful exploration of mixed ownership reform; the management improvement action of benchmarking with the world class was carried out in depth, three subsidiaries were selected as benchmark enterprises for management improvement by SASAC, and the cash flow self-balancing management of engineering projects was selected as a benchmark project. The Group has comprehensively and deeply implemented the tenure and contract management, reshaped the assessment and allocation system of secondary units and engineering projects, strengthened the guidance of determining the salary by performance contribution, and launched the restricted stock incentive plan for the first time. Job bonus incentive was implemented among 13 technology-based enterprises, and the market-oriented reform begun to show increasing remarkable results.

Vigorously promoted scientific and technological innovation, and significantly enhanced the enterprise development momentum.

In 2021, the Group comprehensively deployed the “14th Five-Year Plan” science and technology innovation, carried out the first practical technology innovation competition, strengthened the promotion of practical technology achievements, and achieved world-leading results in the implementation of three special tasks. Innovation achievements won a number of awards, including the China Patent Gold Award for two consecutive years. 5 kinds of products including shield machines, and electrified railway contact networks were awarded the “manufacturing single champion” by the Ministry of Industry and Information Technology. The experimental test of high-temperature superconducting magnetic levitation engineering system with a speed of over 600 km/h was completed, and the “Chisha (赤沙號)” building component assembly robot filled the gap in the field of assembly building construction equipment in China. The leading position in the industry was further stabilized, and the scientific research ability was further improved.

We are committed to “One Belt, One Road” construction and overseas development to achieve a counter trend.

In the face of unfavourable factors such as repeated global epidemics and volatile security situation, the growth rate of new contracts signed overseas was the highest among construction central enterprises; the momentum of overseas production was good, and significant progress was made in the construction of key projects along the “Belt and Road”, with the opening for operation of the whole line of China-Laos Railway, the basic completion of the control project of Yavan High-speed Railway, and the laying of foundation stone for the Hungarian section of Hungarian-Serbian Railway. The export of industrial products has reached a new high, especially the Group’s high-speed turnout manufacturing technology has been exported for the first time with system integration, the contact network equipment has been exported for the first time, and the export of shield structure and tunnelling equipment has been the first in global sales for five consecutive years; the development and sales of overseas mineral resources have remained stable in general, and the output of copper and cobalt metal has reached a record high. The development and sales of overseas mineral resources remained stable in general, and the output of copper and cobalt metal reached a record high.

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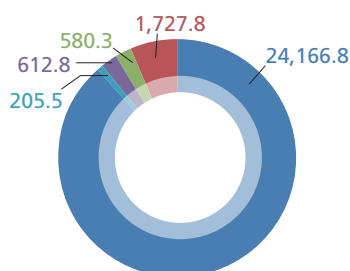
The amount of new contracts by business segment as of the end of the year is set out as below:

Unit: 100 million Currency: RMB

Amount of New Contracts			
Business segment	2021	2020	Year-on-year increase/decrease
Infrastructure construction	24,166.8	21,829.2	10.7%
Including Railway	4,335.7	3,553.8	22.0%
Highway	2,952.6	4,097.6	-27.9%
Municipal works and others	16,878.5	14,177.8	19.0%
Survey, design and consulting services	205.5	258.6	-20.5%
Industrial equipment and component manufacturing	612.8	542.8	12.9%
Property development	580.3	685.6	-15.4%
Other businesses	1,727.8	2,740.4	-37.0%
Total	27,293.2	26,056.6	4.7%
Including Domestic	25,776.1	24,694.0	4.4%
Overseas	1,517.1	1,362.6	11.3%

New Contracts by Business Segment

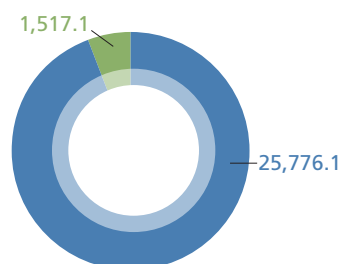
RMB 100 million



- Infrastructure construction
- Survey, design and consulting services
- Industrial equipment and component manufacturing
- Property development
- Other businesses

New Contracts by Geographical Location

RMB 100 million



- Domestic
- Overseas

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(1) Infrastructure construction

Engineering construction is the core of China Railway, the foundation for consolidating the leading position of China Railway in the infrastructure construction industry and enhancing brand strength, an important pillar for enlarging the market scale and improving the market influence, and a key field for improving the economic benefits and promoting the high-quality development of the Company. The engineering construction business of the Group involves railway, highway, municipal works, housing construction, urban rail transit, water conservancy and hydropower, port channel, airport wharf and other engineering fields, covering more than 90 countries and regions in the world. The Group has special-grade qualification for general contracting of construction of railways, highways, municipal public engineering, building engineering, etc. The basic operation mode is to obtain orders through market competition at home and abroad, complete the tasks of survey, design, procurement, construction and operation of projects by means of general engineering contracting, general construction contracting, BOT or PPP according to the contract, and be responsible for the quality, safety and construction period of the contracted project. Infrastructure investment business is an extension of the core business industry chain of traditional infrastructure construction. The infrastructure investment business of the Group sticks to the principle of centering on the main business, serving the main business, driving the main business and promoting the main business, adheres to the investment philosophy of "multiple sectors benefit from the operation of one sector", constantly innovates the investment and construction mode in railway, highway, urban rail transit, underground pipe gallery and other infrastructure fields, forms a more mature industrial chain, and promotes the transformation and upgrading of the Group into a comprehensive enterprise group of "investor + contractor + operator" while maintaining the advantages of construction contractors in the field of engineering construction.

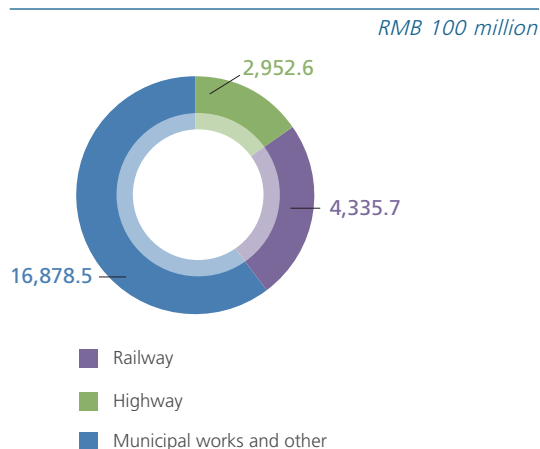
The Group has always been a leader in China's infrastructure construction industry and one of the largest construction contractors in the world. As of the end of the reporting period, the Group has 18 general contracting projects for railway construction at special grade, accounting for over 50% of the total number of general contracting projects for railway construction at special grade in China; 27 general contracting projects for highway construction at special grade; and 19 general contracting projects for engineering construction at special grade, 10 general contracting projects for municipal public engineering at special grade and 1 general contracting projects for port and waterway construction at special grade. The Group is the largest construction group in the fields of railway infrastructure and urban rail transit infrastructure in China. It has the only National Key Laboratory of High Speed Railway Construction Technology, National Key Laboratory of Bridge Structural Stability and Safety and National Key Laboratory of Shield Tunneling and Drilling Technology in China, representing the most advanced technological level in terms of railway, bridges, tunnels and rail transit construction in China. At the same time, the Company is one of the major infrastructure construction forces in the construction of the Belt and Road Initiative. It is the main contractor of the representative projects along the "One Belt, One Road" including China-Laos Railway that has opened to traffic, the Indonesian Jakarta-Bandung High-speed Railway and the Budapest-Belgrade Railway that were under construction. In the domestic market, the Group's share in the railway's large and medium-sized infrastructure market has remained above 45%, its share in the urban rail transit infrastructure market has remained over 35%, and its share in the expressway infrastructure market has remained over 10%.

During the reporting period, the amount of the Group's new contracts of infrastructure construction business was RMB2.41668 trillion, representing a year-on-year increase of 10.7%. As of the end of the reporting period, the amount of the Group's contract backlog of infrastructure construction business was RMB4.21120 trillion, representing a year-on-year increase of 20.5%. **From a business segment perspective:** ① **In respect of railway construction business**, benefiting from the completion in the tendering for domestic large and medium-sized railway projects such as the Sichuan-Tibet Railway, the amount of new contracts in the Group's railway business maintained a high growth and amounted to RMB433.57 billion, representing a year-on-year increase of 22.0%; the amount of contract backlog amounted to RMB724.61 billion, representing a year-on-year increase of 13.8%. The Group's market

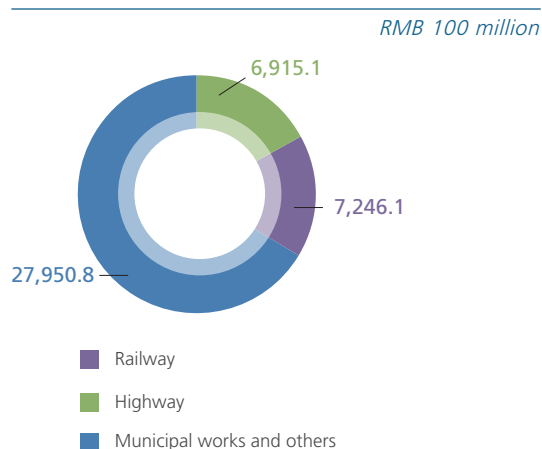
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share in domestic large and medium-sized railway construction reached 46.6% in 2021, maintaining the first place in China. ② **In respect of the highway construction business**, the amount of new contracts in the Group's highway business amounted to RMB295.26 billion, representing a year-on-year decrease of 27.9%; the amount of contract backlog amounted to RMB691.51 billion as of the end of the reporting period, representing a year-on-year increase of 0.5%. ③ **In respect of municipal works and other businesses**, with the promotion of urban clusters, urban circles and new urbanization in China as well as the intensified development of the Group's urban construction market, the amount of new contracts in municipal works and other businesses in the year amounted to RMB1.68785 trillion, representing a year-on-year increase of 19.0%; the amount of contract backlog amounted to RMB2,795.08 billion as of the end of the reporting period, representing a year-on-year increase of 28.8%.

New Contracts of Infrastructure Construction Business



Contract Backlog of Infrastructure Construction Business



(2) Survey, design and consulting services

Design consulting is the core of China Railway, an important engine for leading the upgrading of technology and industry of China Railway and driving the development of other businesses, an important basis for enhancing the brand influence of China Railway, and an important support for promoting industrial coordination and improving the innovation ability of the whole industrial chain. Our design consulting business covers the whole process of capital construction services such as research, planning, consulting, cost, survey and design, supervision, general engineering contracting, and product industrialization, mainly involving industries such as railways, urban rail transit, highways, municipal works, housing construction, water conservancy and hydropower, water transport survey and design. The Group constantly expands into new industries and new fields such as modern tramcars, medium and low speed maglev, intelligent transportation, civil airports, ports and wharfs, power, energy conservation and environmental protection. The basic operation mode is to obtain survey and design orders through market competition at home and abroad, and complete the tasks such as survey and design and relevant services of engineering projects as agreed in the contract. At the same time, the Group constantly innovates the operation mode of design consulting business, makes full use of the advantages of urban transport infrastructure planning, strives to obtain design projects and general contracting projects, and promotes the development of the entire industrial chain. As a backbone enterprise in China's survey, design and consulting industry, the Group has played an important leading role in the field of engineering construction, especially in assisting in the formulation of construction codes and quality acceptance standards of the railway industry. On the list of ENR 2021 Top 150 Global Design Firms and on the list of ENR 2021 Top 225 International Design Firms, the Group ranked 15th and 84th respectively. In 2021, the amount of new contracts of the Group's survey, design and consulting services business was RMB20.55 billion, representing a year-on-year decrease of 20.5%. As of the end of the reporting period, the value of the Group's contract backlog of survey, design and consulting services business was RMB49.80 billion, representing a decrease of 10.9% from the end of 2020.

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(3) Engineering equipment and component manufacturing

Equipment manufacturing is the core segment of China Railway, an important carrier for practicing the “three transformations” and promoting the high-end brand of China Railway, an important force to boost the transformation and upgrading of the Company, and an important support for making up the shortcomings and reinforcing the advantages as well as improving the core competitiveness. The Group’s equipment manufacturing business mainly serves the infrastructure construction at home and abroad, and its products cover turnouts, tunnel construction equipment, bridge construction steel structure, engineering construction machinery, fabricated building components and rail transit electrification equipment, etc. The basic operation mode is mainly to obtain orders through market competition at home and abroad, and provide relevant products and services with guaranteed quality and quantity on schedule according to the contract. **In terms of turnout products**, the Group has the core competitive advantages of the whole industry chain from design, research and development to manufacturing, and has the annual production capacity of 20,000 turnouts of various types. The products are widely used in railways, subways, tramcars and other fields. **In terms of steel structure manufacturing and installation**, the manufacturing and installation business of the Group’s bridge steel structure mainly focuses on manufacturing and installing various large-scale bridge steel structures, which has obvious advantages in the steel structure market of bridges crossing rivers. The bridge steel structures and steel-pylons manufactured have reached the international advanced standard. **In terms of tunnel construction equipment and services**, the Group provides relevant products and supporting services covering various series of tunnel boring machines such as the composite shield machine, hard rock TBM and supporting equipment, and tunnel construction machinery, and has established the whole industrial chain layout of design, R&D, manufacturing and supporting services of spare parts and supporting equipment. **In terms of construction machinery**, the Group is a large-sized scientific and technological enterprise specialized in manufacturing and R&D of special construction machinery for railways, highways, urban rail transits, etc. in China and even in the world. Its products include railway construction equipment such as the rail laying machine, bridge erecting machine, girder carrier and handling machine, and other large-scale engineering machinery such as the lifting machinery. **In terms of electrification equipment for railways and urban rail transits**, the Group’s rail transit electrification equipment mainly includes complete set of catenary equipment for the regular railway, acceleration railway, and high-speed railway, and complete set of power supply equipment of all power supply forms of urban rail transit. Among them, the catenary equipment for railway passenger lines and high-speed railways are at the international advanced level. **In terms of prefabricated buildings**, the Group is a supplier with rich product structures and a complete set of solutions for prefabricated buildings in the domestic prefabricated building component industry, devoting itself to creating a high-tech and innovative prefabricated building business platform.

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The Group has a leading position in the field of high-end equipment manufacturing related to transportation infrastructure such as railways, highways, urban rail transit and underground engineering in the country and even the world. It has outstanding competitiveness in scientific and technological innovation strength, core technology advantages, production and manufacturing level, brand awareness and other aspects. The Group is the world's largest shield/TBM R&D manufacturer in terms of sales volume, the world's largest steel structure manufacturer of turnouts and bridges, the largest railway construction equipment manufacturer in China, and the world's leading manufacturer of infrastructure construction service equipment. For the domestic market, the Group maintained an approximate market share of 55% in the high-speed turnout market that requires high technical requirements (speed over 250km/h), a market share of more than 50% in the heavy-haul turnout market, a market share of more than 45% in the regular turnout market, a market share of more than 70% in the turnout market of urban rail transit business, a market share of more than 60% in the large steel structure bridge market, a market share of approximate 60% in the catenary product market of high-speed railway, and a market share of approximate 50% in the power supply equipment market of urban rail transit business. CRHIC (stock code: 600528.SH), a controlling subsidiary of the Company, has the most complete products in the field of railway infrastructure equipment in our country and is the only industrial enterprise in A share market that mainly engages in high-end equipment for rail transit and underground excavation. CRHEEC (stock code: 688285.SH) is a supplier engaging in the R&D, design, production and system integration products of domestic electrified railway catenary products and power supply equipment for urban rail transit. China Railway Prefabricated Construction (stock code: 300374.SZ) is the only high-tech innovative prefabricated building business platform under China Railway, and is a leading supplier and integrator of prefabricated building components in China.

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As a leading manufacturer of high-end equipment for engineering construction, the Group develops and manufactures tunnel boring machines, special equipment for tunnel mechanization, engineering construction machinery, turnouts, steel bridges, etc. with abundant and stable market demand. In 2021, the amount of new contracts for the engineering equipment and component manufacturing business of the Group was RMB61.28 billion, representing a year-on-year increase of 12.9%, of which the amount of new contracts of domestic business was RMB59.10 billion and that of new contracts of overseas business was RMB2.18 billion. As of the end of the reporting period, the value of the Group's contract backlog of engineering equipment and component manufacturing business was RMB97.61 billion, representing an increase of 36.8% from the end of 2020.

(4) Property development

Featured real estate is the development priority of China Railway, an important carrier for diversified brands of China Railway, an important platform for the transformation from the urban construction market to urban comprehensive development operators, and the transformation to "real estate + infrastructure" and "real estate + industry" relying on its main business advantages, and an important support for optimizing the business layout and expanding market coverage. In 2021, the Group's real estate development business conformed to the national policy guidance, adhered to the new development concept, gave play to the advantages of industrial chain integration to meet the market demand. The Group focused on urban clusters and metropolitan areas, sought for projects and development around the main business of infrastructure construction, steadily expanded to the fields of culture, tourism, health care, TOD, convention and exhibition, accelerated the transformation from traditional commercial real estate development to the comprehensive multi-industry and multi-function development mode, so as to continuously enhance the core competitiveness of China Railway's featured real estate development. In combination with macro-environment changes, the Group continuously strengthened the system construction of risk management and control and enhanced the risk prevention and control ability. The Group improved the capital turnover rate, sped up destocking, reduced financing costs, activated deposited assets, prudently carried out investment under the premise of controllable risks, and controlled and improved the asset quality of real estate sector.

The Group's featured real estate business includes primary land development and secondary real estate development. The operation mode of primary land development refers to that the local government or its authorized department and platform company entrust the Company to legally expropriate the land in a certain area, construct urban infrastructures and social public facilities according to the planning requirements by means of competition, so as to make the land within the area meet the specified supply conditions, and the government or its authorized department obtains the land transfer income by transferring the land with compensation, and pays the Company's investment and income according to the agreement. The secondary development is to obtain the authorization of real estate development through market competition at home and abroad and sell or lease the newly built commercial housing. In 2021, the real estate sales volume of the Group amounted to RMB58.03 billion, achieving the annual plan target.

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(5) Other businesses

Mining development

Resource utilization is a characteristic segment of China Railway, a platform to promote its diversified development and create economic benefits, and a reliance to maintain the characteristic brand of mineral resources of China Railway and the linkage development of resource business and engineering projects. In the process of infrastructure construction at home and abroad, the Group has obtained a number of mineral resources projects through acquisitions and mergers based on “fiscalization of resources” and “exchange of resources for projects”. China Railway Resources Group Co., Ltd., the Company’s wholly-owned subsidiary, is responsible for the development business of mineral resources. The Group’s resource utilization business is mainly based on the management and development of mining entities. Currently, it wholly owns, controls or holds shares to invest in construction of 5 modern mines at home and abroad, including Luming Molybdenum Mine, Heilongjiang; Luishia Copper-Cobalt Mine, Comagnie Minière de Luisha S.A.S, Congo; MKM Copper-Cobalt Mine; SICOMINES Copper-Cobalt Mine; and Wulan Lead and Zinc Mine, Mongolia. The main mineral products produced and sold include concentrate of varieties involving copper, cobalt, molybdenum, lead, zinc and others, copper cathode and cobalt hydroxide. In 2021, the prices of the Group’s main mineral products including copper, cobalt, molybdenum, lead and zinc were in an overall historically high oscillating range, with a significant increase over the annual average price in 2020. As of the end of the reporting period, the above mines’ retained resources/reserves mainly include copper of approximately 8,195,000 tons, cobalt of approximately 609,000 tons, and molybdenum of approximately 655,000 tons. In particular, the retained reserves of copper, cobalt and molybdenum are in the leading position in the same industry in China, and the mines’ production capacity for copper and molybdenum has been at the forefront in the same industry in China.

In 2021, the Group firmly grasped the core task of high-quality development of resource utilization business, and actively resolved the risk of large fluctuations in mineral prices. The overall development and sales of mineral resources remained stable. Among which, the Group produced 242,300 tons of copper (year-on-year increase of 14.43%), 3,222.93 tons of cobalt (year-on-year increase of 25.57%), 14,955.15 tons of molybdenum (year-on-year increase of 87.82%), 10,900 tons of lead (year-on-year decrease of 23.35%), 21,400 tons of zinc (remained the same as last year), 38.7 tons of silver (year-on-year decrease of 10.66%).

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No.	Project name	Mineral resources		Resource/ Reserve (Ton)	Equity ratio (%)	Total planned investment of the project (RMB100 million)	Accumulated investment of the project (RMB100 million)	Investment by the Company in the reporting period (RMB100 million)	Production quantity in the reporting period (Ton)	Planned completion date	Project progress
		Type	Grade								
1	Luming Molybdenum Mine, Yichun City of Heilongjiang	Molybdenum	0.09%	655,257	83	60.17	60.26	0	14,955.15	Completed	In normal production
		Copper	/	/					1,052.50		
2	SICOMINES Copper- Cobalt Mine, La Sino- congolaise Des Mines S.A., Congo	Copper	3.20%	7,656,558	41.72	45.86	32.86	5.34	194,801.63	September 2021	Phase 1 in normal production, phase 2 completed construction in the year
		Cobalt	0.25%	589,223					1,316.41		
3	Luishia Copper-Cobalt Mine, Comagnie Minière de Luisha S.A.S, Congo	Copper	2.24%	507,348	72	21.38	21.6	0	26,438.78	Completed	In normal production
		Cobalt	0.07%	16,843					701.43		
4	MKM Copper-Cobalt Mine, La Minière De Kalumbwe Myunga sprl, Congo	Copper	2.08%	31,049	80.20	11.95	12.35	0	20,011.17	Completed	In normal production
		Cobalt	0.21%	3,159					1,205.59		
5	Wulan Lead and Zinc Mine, Xinxin Company, Mongolia	Lead	1.13%	197,042	100	15.4	15.4	0	10,940.04	Completed	In normal production
		Zinc	2.67%	465,752					21,443.78		
		Silver	53.18g/t	929					38.7		
6	Muhaer Lead and Zinc Mine, Xinxin Company, Mongolia	Lead	0.63%	41,141	100	/	/	0	/	/	Not yet exploited
		Zinc	2.37%	154,709					/		
		Silver	118.17g/t	770					/		
7	Gold mine, Guoxin Eerdesi Company, Mongolia	Gold	3g/t	3	100	/	/	0	/	/	Not yet exploited
8	Silver-Lead-Zinc Polymetallic Mine, Chafu, Xianglong Mineral Co., Ltd., Mongolia	Lead	7%	89,693	100	3.3	3.3	0	/	/	Ceased production

Note: Copper in Luming Molybdenum Mine is associated ore with very small amount, so there is no statistics on copper grade or resource amount.

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Financial and merchandise trading

Financial and merchandise trading secures the service of China Railway, as an important link serving the development of main business, ensuring the supply chain security, and preventing and resolving risks, and an important support for realizing the combination of industry and finance, expanding the value space, and promoting industrial coordination, as well as an important guarantee for improving capital liquidity and optimizing resource allocation.

① **Financial business.** When carrying out financial business, the Group has always strictly implemented the regulatory policies of the “Financial Stability and Development Commission of the State Council, the People’s Bank of China, the CSRC and the CBIRC” and adhered to the overall guidelines of integration of industry and finance. Centering on the target of serving internal financial needs, promoting the development of principal construction business and creating value and adhering to the principle of giving priority to benefits in the allocation of financial resources, the Group’s financial business segment has effectively promoted the flow of financial resources to efficient assets, while firmly holding the bottom line of avoiding financial risks. The Group holds the financial licenses for trust, finance company, and public fund, and is approved to engage in financial businesses such as assets management, private equity fund, insurance brokerage, finance lease, and commercial factoring, which are the financial businesses that SASAC allows to be conducted in a prudent and regulated manner. We have built a multi-level, wide-covered and differentiated “finance, quasi-finance” institutional service system represented by China Railway Trust Co., Ltd., China Railway Finance Co., Ltd., and China Railway Capital Co., Ltd.. The three companies actively explore new ways for integrating industry and finance to serve internal financial needs. China Railway Trust Co., Ltd. has enhanced the initiative of serving principal businesses through the service trust, project equity investment, asset securitization and the “three-in-one” mode of industry, finance and investment. It has established a regular risk monitoring, early warning and quick response mechanism for counterparties and projects, and issued the “Guidelines on Normalized Risk Investigation”, in order to minimize the potential risks and achieve the process management of “early discovery, early warning and early handling”. China Railway Finance Co., Ltd. is responsible for strengthening internal capital concentration, establishing capital pool and controlling financing scale. It has played an important role in reducing financing costs, “deleveraging and controlling liabilities” by utilizing its own financial resources and talent resources and giving full play to the advantages of the platform of financial integration. China Railway Capital Co., Ltd. has developed diversified businesses such as industrial fund, asset securitization, supply chain finance, commercial factoring, financial leasing, insurance brokerage, innovative venture and international investment and financing, and enhanced the efforts for obtaining equity financing for investment projects.

② **Merchandise trading business.** The merchandise trading business of the Group represents the trading business carried out by the trading enterprises at all levels of the Group relying on the demand advantage, product advantage and resource channel advantage and centralized purchase and supply based on the main businesses of the Group. It mainly serves the internal trading demand of the Group and provides external services in an appropriate manner. China Railway Material Trade Co., Ltd, a wholly-owned subsidiary of the Company, has established a national-wide operation and service network, and maintained good cooperative relationship with domestic large-scale production enterprises of steel, cement, petrochemical, components for communications engineering, signal engineering, electrical engineering and electrification engineering, building decoration materials and other products. It carries out centralized procurement and supply of major materials at the Company level, and supplies materials to other domestic construction enterprises, significantly improving the Group’s resources acquisition ability, supply security, procurement and bargaining power. During the period of rising commodity prices, it provided reliable material supply guarantee for the Group’s production and operation and effectively addressed the risk of rising commodity prices by making appropriate reserve and locking price in good time.

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Infrastructure asset operation

Asset operation is the development priority of China Railway, an important carrier for optimizing industrial layout and strengthening the brand of the whole industry chain, and a key link for strengthening operational asset management, guaranteeing investment income and enhancing capital circulation capacity. As a leading domestic construction enterprise, the Group has a complete industrial chain, extensive investment business layout, sound investment and operation management and control system, and strong development capability integrating investment, construction and operation. The business scope of PPP (BOT) of the Group mainly covers operation, maintenance and management of infrastructure investment projects and asset operation, covering three modes of independent operation, joint operation and entrusted operation. At present, the Group operates such infrastructure projects as rail transit, expressway, water and environmental protection, municipal roads, industrial parks, underground pipe corridors, etc., with the operation period ranging from 8 to 40 years. As the infrastructure investment projects undertaken by the Group have been successively completed and entered into the operation period, the Group's infrastructure operation revenue and profit generally show a rising trend. As of the end of the reporting period, the Group had 36 projects under operation. Among which, there were 2 rail transit projects with operating mileages of about 45 kilometers; 2 expressway projects with operating mileages of about 74 kilometers; one underground pipeline project with operating mileage of about 32 kilometers; 12 water and environmental protection; 19 municipal and other projects.

III. Scientific Research Investment and Technological Achievements

As one of the country's first "innovation-oriented enterprises" awarded by the Ministry of Science and Technology, the SASAC and the All-china Federation of Trade Unions, the Group has 3 national laboratories (the National Engineering Laboratory of High Speed Railway Construction Technology, National Key Laboratory of Shield Tunneling and Drilling Technology, and National Key Laboratory of Bridge Structural Stability and Safety), 10 postdoctoral workstations, 1 national local joint research center (national and local joint engineering research center for the research and application of digital rail transit technologies), 44 provincial and ministerial research and development centers (laboratories), 19 nationally recognized technology centers, and 120 technical centers recognized at the ministerial or provincial level. It has also set up 20 professional R&D centers and invested in the national technology innovation center for the Sichuan-Tibet railway.

In 2021, the Group made scientific and technological breakthroughs in major projects, and implemented research projects focusing on Sichuan-Tibet railway construction technology, high-speed railway construction technology, long bridge construction, operation and maintenance and disaster prevention technology, tunnel and underground project construction technology, communications engineering, signal engineering, electrical engineering and electrification engineering technology, construction equipment and industrial product manufacturing technology, building technology, energy conservation and emissions reduction, intelligent manufacturing and information technology and other key areas. Based on the actual needs for the operation and engineering construction and relying on such key and difficult bridge projects as Changtai Yangtze River Bridge, Ma'anshan Yangtze River Bridge, Huangmaohai Sea-crossing Channel Project, River Channels of Zhanggao, Shiziyang, Haitai, Chengdu-Chongqing Middle Line High-speed Railway Bridge, Hangzhou Bay Extra Large Bridge over the Tongzhou-Suzhou-Jiaxing-Ningbo Railway, the Ningbo-Zhoushan Railway Xihoumen Highway-Railway Dual-use Bridge, the Qiongzhou Strait Sea-crossing Project, and the Fourth Sea-crossing Bridge of Aoshen, the Group conducted technical research on bridge survey and design theories and methods, new bridge structures and materials, and bridge intelligent construction technologies and equipment. Based on a number of Sichuan-Tibet railway projects such as the Dadu River Bridge on the Sichuan-Tibet Railway, the

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Group carried out research on key technologies for railway suspension bridges spanning plateau canyons for a kilometer or above, drilling and blasting construction technology for high-altitude and deep-buried complex geological and environmental tunnels. Based on projects such as Sichuan-Tibet Railway, Chengdu-Chongqing Middle Line Ultra-High-speed Railway, Chengdu-Nanchong-Dazhou-Wanzhou Railway, Tongzhou-Suzhou-Jiaxing-Ningbo Railway, Yichang-Fuling Railway, East of Guangdong Intercity Railway, Shenzhou-Huizhou Intercity Railway and major equipment such as “Caiyun” and “Longyan”, TBM mud-water balance shields machine “Chunfeng”, and “Xueyu Xianfeng” hard rock roadheader, the Group conducts research on key technologies for intelligent monitoring and maintenance in operating tunnel structures, quality improvement and intelligent construction of tunnel engineering. Based on Zhengzhou-Jinan High-speed Railway, Bazhun Railway of China Energy, Beijing-Shanghai High-speed Railway, Beijing-Zhangjiakou Railway and other projects, the Group carried out research on intelligent construction technology of communications engineering, signal engineering, electrical engineering and electrification engineering. During the period, the Group won 6 National Prizes for Progress in Science and Technology, 1 Technical Invention Award, 15 Zhan Tianyou Civil Engineering Prizes, 835 provincial and ministerial engineering methods, 7,170 authorized patents, including 1,176 invention patents and 110 PCT patents. The Anti-Ultra-High Stress Fatigue and Wear Resistance of High Manganese Steel for Railway Tracks Technology and its Application, which was completed by the affiliated units of the Company, won the second prize of the National Prizes for Progress in Science and Technology in 2021 and the Deepwater Large Section Shield Tunnel Structure/Functional Materials Preparation and Engineering Application Complete Technology completed by the affiliated units of the Company, and other 6 achievements won the second prize of the National Prizes for Progress in Science and Technology in 2020.

IV. Establishment and Implementation of Safety and Quality System

In terms of the establishment of the system, the Group has set up the Production Safety (Quality) Committee, which is responsible for all aspects of the production safety of the Company. The Committee has 2 directors, who are the secretary of the party committee, chairman, and president of the Company, 1 deputy director, who is the vice president in charge of safety and quality, and several members, including other members of the leadership team and senior management, director for safety production (executives), senior experts, and heads of relevant departments of the headquarters of the Company. From the headquarters to the project department of the Company, departments at all levels have safety production directors and safety production supervision departments.

In terms of the improvement of systems, in order to further strengthen the implementation of the main responsibilities, improve the management system and consolidate the management foundation, the Group has issued the notice on Further Implementing the Responsibilities for “Management” and “Supervision” of Safety Production and Establishing a Long-term Mechanism for Double Prevention of Risks and Hidden Dangers (《進一步落實安全生產「管」「監」責任暨構建風險和隱患雙重預防長效機制》); the Implementation Plan of the Three-Year Action Plan for Special Rectification of Safety Production (《安全生產專項整治三年行動計劃實施方案》) and the “2468” Main Points on Management of Safety Production of CREC in the New Era (《中國中鐵新時期安全生產「2468」管理要點》) supplemented by a Q&A manual with 100 questions and propaganda posters of the “2468” Main Points on Management; released the CREC Headquarters Safety Production Responsibility System (《中國中鐵總部安全生產責任制》), Notice on Further Clarifying the Responsibilities of the Main Persons in Charge of the Safety Production of the Company (《關於進一步明確企業主要負責人安全生產責任的通知》),

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Measures for Responsibility Investigation on CREC's Market Access Due to Quality Safety, Environmental Protection and Occupational Health Incidents 《中國中鐵因質量安全、環境保護與職業健康事件被限制市場准入責任追究辦法》 and other normative documents; revised the Rigid Requirements for Inertia Accident Prevention and Strengthening Technology and Management Disclosure of CREC 《中國中鐵防範慣性事故強化技術及管理交底剛性要求》 and Safety Quality, Ecological Environment Accident (Event) Emergency Plan 《安全質量、生態環境事故(事件)應急預案》; and issued more than 50 business management documents, telegrams and operation instruction manuals such as annual main work arrangements, documents for special rectification of lifting and hoisting, safety inspection during key time periods, "safety month" and "quality month", and employee safety card control for 50 job posts.

In terms of monitoring the implementation of the system, the Group continued to implement the Notice on Establishing a Safety Production Debriefing Mechanism 《關於建立安全生產述職機制的通知》, further improved the safety production assessment and evaluation system of the Company, and urged the first person and other people in charge of safety production to perform their duties with due diligence. At the same time, the Group has carried out a three-year activity for the implementation of safety production responsibility, and carried out five major themed activities, including publicity and training activities for the "management" and "supervision" responsibilities for safety production, special inspection activities for the implementation of "management" and "supervision" responsibilities for safety production, special actions to strengthen the foundation of safety production management, and production safety inertial accident prevention and control special action, the action to improve the intrinsic safety assurance capability, so as to further promote the implementation of "management" and "supervision" responsibilities for safety production system, and continuously improve the intrinsic safety assurance capabilities of the Company and its projects.

In terms of the continuous improvement of the system, the Group has continuously strengthened the establishment of safety production system, increased investment in safety production and management and control, and proposed and established a series of management and control measures to strengthen safety production work, including building the "Regional Production Safety Inspection Team (片區安全生產稽查隊)", achieving continuous growth in operating income and overall stable production safety status. After the "7.15" flooding accident in Shijingshan Tunnel, the Group carried out a special action for safety production in four aspects including "reflection, investigation, rectification and improvement" in the whole system, and continued to require all units to formulate and improve the safety production responsibility systems, detailed safety risk responsibilities, continue to promote the implementation of "management" and "supervision" responsibilities for safety production system, and build a dual prevention mechanism for risk-level management and control and hidden danger investigation and governance. At present, each unit has set up an inspection team and a regional inspection team, and established a regular reporting system for supervision. Each secondary unit further strengthened management, improved the mechanism, gave full play to the role of the regional inspection team, promptly eliminated various hidden dangers with regards to on-site safety, quality and environmental protection, and actively carried out emergency drills to improve their emergency response capabilities.

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V. Implementation of Environmental Protection Measures

The details are set out in the “Environmental Information” under the “Environmental and Social Responsibility” on page 334 to page 337 of this annual report.

VI. Compliance with Laws and Regulations

As a company dually listed on Shanghai Stock Exchange and the main board of the Hong Kong Stock Exchange, during the reporting period, the Group strictly complied with laws and regulations including the Company Law, the Securities Law, the Code of Corporate Governance for Listed Companies, and the various rules of the Shanghai Stock Exchange and the Hong Kong Stock Exchange, continuously enhanced the corporate governance structure and brought forth new ideas to the operational mechanism of corporate governance, thereby continuously enhancing the rationality and effectiveness of corporate governance. During the reporting period, there was no material breach of laws and regulations by the Group.

VII. Maintenance of Relationship with Stakeholders

The Group always maintains a cooperation relationship of harmony, mutual trust and mutual benefit with its stakeholders, insists on putting itself in the shoes of the stakeholders to consider issues and proactively responds to the important issues of the stakeholders’ concern. The Group has in place a smooth, standardized and distinctive communication system with the stakeholders, and strives to achieve mutual, harmonious and win-win development with the stakeholders.

VIII. Outlook

As the global impact of the COVID-19 persists, the world economy is lack of power in recovery, the commodity price fluctuates at high level, and the external environment for China’s economic development is becoming more complex, challenging and uncertain, facing the triple pressures of shrinking demand, supply shock and weakening expectations. The infrastructure investment, as the main force of stabilizing the economy by “counter-cycle adjustment + cross-cycle adjustment”, will play a more dominant role in stabilizing growth; however, the evolution of industry competition pattern will be accelerated. **First, from the perspective of planning and development opportunities.** The successive release of a series of important planning documents including the 14th Five-Year Plan for the National Economic and Social Development of the People’s Republic of China and the Long-Range Objectives through the Year 2035, the 14th Five-year Plan for Public Services, the Planning Outline of National Integrated Three-dimensional Transportation Network, the 14th Five-year Plan for New Infrastructure Construction, and the 14th Five-Year Plan for the Development of Modern Integrated Transportation System, and the thorough implementation of regional major strategies and regional coordinated development strategies including the coordinated development of the Beijing-Tianjin-Hebei region, the development of the Yangtze River Economic Belt, the construction of Guangdong-Hong Kong-Macao Greater Bay Area, the integrated development of the Yangtze River Delta, and the ecological protection and high-quality development of the Yellow River basin have laid a solid foundation for the steady and sound development of the infrastructure industry in the future. According to the plan, during the “14th Five-Year

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Plan” period, the length of railways in operation is planned to be increased by 19,000 kilometers (Among them, the length of high-speed railways in operation is planned to be increased by 12,000 kilometers), the length of highway traffic in operation is planned to be increased by 302,000 kilometers (Among them, the length of expressway completed is planned to be increased by 29,000 kilometers), the length of urban rail transit in operation is planned to be increased by 3,400 kilometers, and the civil transportation airport is planned to be increased by at least 29; besides, a number of major water diversion projects and key water source projects are planned to be completed, with an additional water supply capacity of 29 billion cubic meters. By 2035, the total length of the national integrated three-dimensional transportation network is estimated to achieve approximately 700,000 kilometers (excluding the length of overseas sections of international land routes, air and sea routes and mail routes), including about 200,000 kilometers of railways, 460,000 kilometers of roads, and 25,000 kilometers of high-grade waterways. There are 27 major coastal ports, 36 major inland ports, about 400 civil transport airports, and about 80 postal and express delivery hubs. In addition, with the development of the national economy and society, China’s construction industry has entered a stage of high-quality development, and new fields and new forms of industries including green environmental protection have accelerated their development. Besides, new infrastructure, clean energy development and utilization, environmental protection projects and other markets have also witnessed vigorous development opportunities. **Second, from the perspective of changes in policy orientation.** Since 2021Q4, when the executive meeting of the State Council deployed special bonds, it emphasized strengthening the cross-cycle adjustment, coordinating the management policies of two-year special bonds, and striving to create more physical work by early 2022. At the Central Economic Working Conference in December, the central government made positive statements on “ensuring the intensity of government expenditure and accelerating the pace of expenditure” and “appropriately investing in infrastructure ahead of schedule”. In March 2022, the Report on the Work of the Government made during the two sessions of the state pointed out that proactive fiscal policies shall be more effective, targeted and sustainable; prudent monetary policies shall be flexible and appropriate, with adequate liquidity maintained; and effective investment shall be actively expanded, centering on China’s major strategic plans and the “14th Five-Year Plan”, appropriately investing in infrastructure ahead of schedule, developing key water conservancy projects, integrated three-dimensional transportation networks, and important energy bases and facilities, speeding up the upgrading of city gas pipelines and other pipelines, perfecting flood control and drainage facilities, and pushing forward continuous construction of integrated underground utility tunnels. It is planned to allocate special bonds of RMB3.65 trillion for local governments to expand the use of the scope appropriately, and start work on a number of major projects, new infrastructure projects, and the renovation projects of old public facilities where conditions permit, which will give an overall boost to infrastructure, and further consolidate the construction industry’s role as a pillar of the national economy. In addition, on the basis of the 2020 public REITs pilot program, in 2021, the National Development and Reform Commission set up a national infrastructure REITs pilot project library covering pilot regions and industries in accordance with unified standards and rules. Support will be given to the use of real estate investment trusts (REITs) and public-private partnerships (PPP) to revitalize national stock assets, and use the net recovered funds mainly for new investment. Key support will be given to industries that are difficult to revitalize stocks and are highly demonstrative for the forming a virtuous cycle of investment, such as transportation, municipal administration, environmental protection, water conservancy, storage and logistics, as well as new infrastructure projects, which will further promote the healthy and sound development of these industries. **Third, from the perspective of industry innovation and upgrading.** In the outline of the

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development plan of the “14th Five-Year Plan” for national economy, technological innovation has been placed in the first place, the dominant position of enterprise innovation has been highlighted, and enterprise technological innovation has ushered in a new round of policy opportunities. At the same time, along with the accelerated development of a new generation of information technology, a new round of technological revolution, represented by cloud computing, big data, Internet of Things, mobile Internet and artificial intelligence, is reshaping the global competitive and economic landscape, and systematically restructuring the industry chain, the innovation chain, the supply chain and the value chain of all industries in an inexorable manner, which will further stimulate the development potential and growth of enterprises. The construction industry will gradually shift from investment-, labor – and other factors-driven development to innovation-driven development. The integration of construction industry with advanced manufacturing technology, information technology and energy saving technology will be further deepened. The acceleration of industrialization, digitalization and intellectualization upgrading of constructions will further promote the intensive and high-quality development of the construction industry. **Fourth, from the perspective of the evolution of business structure.** During the “14th Five-year Plan” period, the reform of project investment and construction mode and project production organization mode will be accelerated, and investment diversification and integration of investment, construction and operation will become the mainstream. PPP will continue to play an important role in the supply of public goods, and project modes such as engineering general contracting (EPC) and engineering consulting in the whole process will be accelerated. At the same time, along with the continuous deepening of business model reform, the evolution of competition pattern in construction enterprises will be accelerated and industry barriers will be gradually be broken down. Industry competition will increasingly tilt towards talents, resources, brands, capital and other elements. Speeding up of technological and managerial innovation, better implementation of the combination of industry and finance, and all-round improvement of enterprises’ capacity for high-quality development will become the key to success.

During the “14th Five-Year Plan period”, China Railway will focus on its historical mission and main responsibilities and business, take promoting high-quality development as the theme, promote transformation and upgrading as the main task, follow the “six must-haves” as the strategic guidance, promoted the implementation of the “123456” development strategy, and adhere to the economic line of “two transformations”. It is committed to becoming an enterprise with five characteristics in the new era: a national pillar with strong sense of responsibility, a pioneer with leading infrastructure, a leader in the industrial chain focusing on green development, a transnational company with brand influence and a modern enterprise with social respect. China Railway will continue to enhance its capacities of competitiveness, innovation, control, influence and risk resistance, and initially build itself into a world-class comprehensive construction industry group with global core competitiveness.

During the “14th Five-Year Plan” period, China Railway will focus on improving its primacy ratio in the industry, in China, and in the world, and on enhancing the synergy among various businesses in the industry chain, the value chain, the supply chain and the innovation chain. It is committed to strengthening the three core businesses of design consulting, engineering construction and equipment manufacturing to catch up with the world-class level; optimizing the two key businesses of characteristic real estate and asset operation to build a first-class brand in China; specializing the two major supporting businesses of resources utilization and financial and merchandise trading to build a first-class platform in the industry; and expanding relevant emerging businesses to open up the second growth curve, so as to comprehensively enhance its core competitiveness, and lay a solid foundation for its transformation and upgrading.

BUSINESS OVERVIEW

IX. Operating Plan

In 2022, the Group will make every effort to seize market opportunities and become the main force for steady growth; organize production with high quality and efficiency, and constantly improve project performance ability; deepen the concept of value creation, and improve the profitability and efficiency of enterprises; take real action in the three-years reform plan, and effectively boost the vitality of enterprise development; strengthen the support of scientific and technological innovation, and constantly stimulate the growth momentum of enterprises; resolutely implement the “Double Priorities Strategy”, and promote the steady development of overseas undertakings; enhance professional development ability, and accelerate the transformation and upgrading of investment business; strengthen the construction of talent team, and build a highland for the talents in the industry; and continue to strengthen the foundation for management and forestall and defuse major risks.

In 2022, the Group plans to achieve total revenue of approximately RMB1,120 billion, costs of operation (including interest expense) of approximately RMB1,005.8 billion, four expenses of approximately RMB62.4 billion. It is estimated that the new contracts to be entered into will amount to approximately RMB2,930 billion. The Group will promptly adjust its operation plan to suit market conditions and to reflect the actual implementation of the plan.

MANAGEMENT DISCUSSION AND ANALYSIS

Kunming-Chuxiong-Dali Railway



CHEN Wenjian

Executive Director, President and
Deputy Secretary to the CPC Committee

I. Overview

The Group's principal business activities are infrastructure construction, survey, design and consulting services, engineering equipment and component manufacturing, property development and other businesses.

In the year of 2021, the Group achieved revenue of RMB1,073.272 billion, representing a year-on-year increase of 10.1%. Profit for the year increased by 11.8% year-on-year to RMB30.470 billion while profit for the year attributable to owners of the Company increased by 9.6% year-on-year to RMB27.618 billion.

A comparison of the financial results for 2021 and 2020 is set forth below.

II. Consolidated Results of Operations

Revenue

In 2021, the Group's revenue increased year-on-year by 10.1% to RMB1,073.272 billion. It was mainly due to the increase in revenue from the Group's infrastructure construction business. Among which, revenue from overseas was RMB54.787 billion, representing a year-on-year increase of 16.4%.

MANAGEMENT DISCUSSION AND ANALYSIS

Qingdao China Railway Expo City Exhibition Center



Cost of sales and services and gross profit

The Group's cost of sales and services primarily includes cost of raw materials and consumables, subcontracting cost, equipment usage cost (consisting of maintenance, rental and fuel), employee compensation and benefits and depreciation and amortization expenses. In 2021, the Group's cost of sales and services recorded a year-on-year increase of 9.6% to RMB969.886 billion while gross profit of the Group increased year-on-year by 14.6% to RMB103.386 billion. The overall gross profit margin for 2021 was 9.6%, representing an increase of 0.3 percentage point as compared to 9.3% in 2020. It was mainly due to the increase in gross profit margin of infrastructure construction business.

Other income

The Group's other income primarily consists of dividend income and subsidies from government. In 2021, the Group's other income was RMB2.736 billion, increased by 23.3% from RMB2.219 billion of last year. Such increase of other income was primarily due to the increase in subsidies from government and dividend income.

Other expenses

The Group's other expenses primarily includes expenditures on research and development. In 2021, other expenses increased by 13.4% from RMB21.838 billion of last year to RMB24.756 billion, mainly due to the Group's continuous advancement on scientific research and technological innovation and further increase input in research and development.

MANAGEMENT DISCUSSION AND ANALYSIS

Net impairment losses on financial assets and contract assets

The Group's net impairment losses on financial assets and contract assets mainly includes impairment losses on trade and other receivables, other financial assets at amortised cost and contract assets. In 2021, the Group's net impairment losses on financial assets and contract assets increased year-on-year by 114.3% to RMB5.478 billion, mainly attributable to the increase in impairment losses on trade and other receivables and contract assets.

Other gains/losses, net

The Group's other gains and losses mainly include gains and losses on disposal/write-off of property, plant and equipment, lease prepayment, associates and subsidiaries, foreign exchange gains/losses, impairment losses on property, plant and equipment and other assets and changes in the fair value of financial assets/liabilities through profit and loss. The Group's other losses recorded RMB82 million in 2021, primarily due to losses of RMB515 million from the changes in the fair value of financial assets/liabilities through profit and loss.

Losses from derecognition of financial assets at amortised cost

The Group's losses from derecognition of financial assets at amortised cost mainly include the losses arising on derecognition of trade receivables and bills receivables which were transferred in accordance with asset-backed medium-term notes ("ABN") and asset-backed securities ("ABS") issuance, non-recourse factoring agreements and bills receivables discounting arrangements. In 2021, the Group's losses from derecognition of financial assets at amortised cost was RMB4.595 billion, representing an increase of 39.2% from the same period of last year. In 2021, the Group transferred trade receivables of RMB85.945 billion and RMB14.971 billion under the issuance of ABN and ABS, and non-recourse factoring agreements, respectively (2020: RMB55.142 billion and RMB16.854 billion, respectively).

Selling and marketing expenses

The Group's selling and marketing expenses primarily consist of employee compensation and benefits, and advertising costs. In 2021, the Group's selling and marketing expenses amounted to RMB5.948 billion, representing a year-on-year increase of 22.5%. Such increase was mainly due to the strengthened construction of the operating system and increased investment in sales and marketing. The selling and marketing expenses as a percentage of the total revenue for 2021 was 0.6%, representing a year-on-year increase of 0.1 percentage point.

MANAGEMENT DISCUSSION AND ANALYSIS

Administrative expenses

The Group's administrative expenses mainly consist of employee compensation and benefits and depreciation and amortization of its assets related to administration. In 2021, the Group's administrative expenses increased year-on-year by 11.1% to RMB27.418 billion. Such increase was mainly due to the normal increase in staff salary resulted from the growth in business scale, increase in business activities and profitability. Administrative expenses as a percentage of revenue for 2021 was 2.6%, representing a year-on-year increase of 0.1 percentage point.

Finance costs, net

In 2021, the Group's net finance costs (finance costs less finance income) was RMB1.511 billion, representing a decrease of 37.9% from last year. It was mainly due to the increase in interest income from the growth in scale of infrastructure construction investment projects using financial asset mode.

Profit before tax

As a result of the foregoing factors, the profit before income tax for 2021 increased by RMB4.024 billion, or 11.3% to RMB39.636 billion from RMB35.612 billion for 2020.

Income tax expense

In 2021, the Group's income tax expense increased year-on-year by 9.6% to RMB9.166 billion. By excluding the impact of land appreciation tax, the effective income tax rate of the Group increased by 0.8 percentage point from 17.2% for 2020 to 18.0% for 2021.

Profit for the year attributable to owners of the Company

In 2021, profit for the year attributable to owners of the Company increased by 9.6% to RMB27.618 billion from RMB25.188 billion for 2020.

MANAGEMENT DISCUSSION AND ANALYSIS

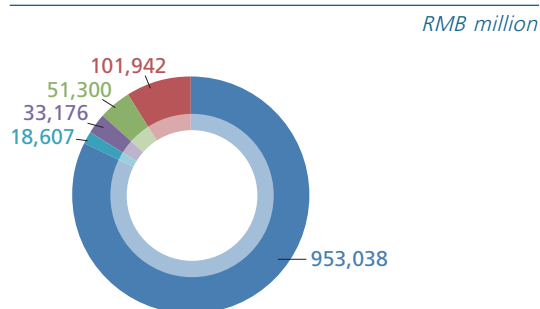
III. Segment Results

The revenue and results of each segment of the Group's business for 2021 are set forth in the table below.

Business Segment	Revenue <i>RMB million</i>	Growth Rate <i>(%)</i>	Profit Before Income Tax <i>RMB million</i>	Growth Rate <i>(%)</i>	Profit Before Income Tax Margin ¹ <i>(%)</i>	Revenue as a Percentage of Total <i>(%)</i>	Profit Before Income Tax as a Percentage of Total <i>(%)</i>
Infrastructure Construction	953,038	8.8	34,204	-7.3	3.6	82.3	75.5
Survey, Design and Consulting	18,607	7.4	1,615	-27.9	8.7	1.6	3.5
Engineering Equipment and Component Manufacturing	33,176	11.4	2,029	-4.8	6.1	2.9	4.5
Property Development	51,300	3.1	1,622	Loss turned into profit	3.2	4.4	3.6
Other Businesses	101,942	37.4	5,830	16.2	5.7	8.8	12.9
Inter-segment Elimination and Adjustments	(84,791)		(5,664)				
Total	1,073,272	10.1	39,636	11.3	3.5	100.0	100.0

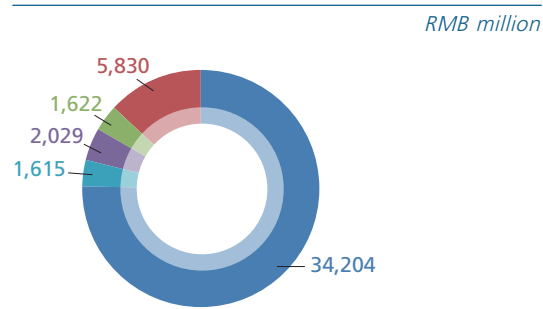
¹ Profit before income tax margin is the profit before income tax divided by the revenue.

Revenue



- Infrastructure construction
- Survey, design and consulting
- Engineering equipment and component manufacturing
- Property development
- Other businesses

Profit Before Income Tax



- Infrastructure construction
- Survey, design and consulting
- Engineering equipment and component manufacturing
- Property development
- Other businesses

MANAGEMENT DISCUSSION AND ANALYSIS

Infrastructure construction business

Revenue from the Group's infrastructure construction business is mainly derived from construction of railway, highway and municipal works. Revenue from the infrastructure construction business continues to account for a high percentage of total revenue of the Group. In 2021, the revenue from the infrastructure construction business accounted for 82.3% of the total revenue of the Group (2020: 83.7%). In 2021, the Group coordinated and promoted various tasks of production and operation, accelerated the progress of production and operation, and progressed steadily and orderly. In 2021, the Group's revenue of infrastructure construction business increased by 8.8% year-on-year to RMB953.038 billion. Gross profit margin and profit before income tax margin of the infrastructure construction segment for 2021 was 8.1% and 3.6% respectively (2020: 8.0% and 4.2% respectively). The increase in gross profit margin was mainly due to the increase in proportion of revenue from the highway and municipal works business with higher profitability while the decrease in profit before income tax margin was mainly due to the increase in staff remuneration.

Survey, design and consulting services business

Revenue from the operation of the survey, design and consulting services business primarily derives from providing a full range of survey, design and consulting services, research and development, feasibility studies and compliance certification services on infrastructure construction projects. In 2021, the Group's survey, design and consulting services business developed sustainably and steadily, with revenue recorded RMB18.607 billion, representing a year-on-year increase of 7.4%. Gross profit margin and profit before income tax margin for the segment for 2021 was 27.9% and 8.7% respectively (2020: 31.4% and 12.9% respectively). The decrease in gross profit margin and profit before income tax margin was mainly due to the fact that projects with large revenue contribution in the current period have high design difficulty, large cost input and relatively low profitability.

Engineering equipment and component manufacturing business

Revenue from the operation of the engineering equipment and component manufacturing business primarily derives from the design, research and development, manufacture and sale of turnouts and other railway-related equipment, bridge steel structures and construction machinery. In 2021, the Group actively implemented the important instructions of General Secretary Xi Jinping's "Three Transformations", gave full play to its advantages in design and research and development, and actively explored new application scenarios and application fields. At the same time, the Group carried out in-depth sales and marketing for regions and key projects, effectively controlled the quality of orders from the source, and continuously promote high-quality development. In 2021, the Group's revenue of the engineering equipment and component manufacturing business of the Group increased by 11.4% year-on-year to RMB33.176 billion. Gross profit margin and profit before income tax margin was 21.0% and 6.1% respectively for 2020 (2020: 19.4% and 6.7% respectively). The increase in gross profit margin was mainly due to ① the significant increase in profitability of steel structure products resulting from the increase in unit price by continuous improvement in the sales and marketing quality as well as further strengthening in cost control. ② the significant increase in profitability of tunnel construction equipment by further strengthening in cost control. The decrease in profit before income tax margin was mainly attributable to the increase in labour cost and selling expenses.

MANAGEMENT DISCUSSION AND ANALYSIS

Property development business

In 2021, the Group closely followed the guidance of the national real estate policy, closely studied and judged market expectations, and enhanced the value of products. The Group also strengthened the destocking effort, strengthened the full-cycle management and control of real estate projects, and with sales collection and quick fund recovery as the core. In 2021, revenue from property development business recorded RMB51.300 billion, increased by 3.1% year-on-year. Gross profit margin and profit before income tax margin was 17.0% and 3.2% (2020: 11.5% and -8.2% respectively). The increase in gross profit margin and the turnaround in profit before income tax was mainly due to the decrease in impairment losses accrued for property development projects.

Other businesses

In 2021, the Group strived to progressively implementing the “limited and interrelated” diversification strategy, revenue from other businesses increased year-on-year by 37.4% to RMB101.942 billion in 2021. Gross profit margin for 2021 was 17.8%, representing a decrease from 18.3% for 2020. Profit before income tax for 2021 was RMB5.830 billion (2020: RMB5.016 billion). Among which, (1) revenue from infrastructure operation business was RMB2.469 billion, a year-on-year increase of 69.2% while gross profit margin was 12.1%, a decrease of 7.6 percentage points from last year. (2) Revenue from mining was RMB6.312 billion, a year-on-year increase of 53.8% while gross profit margin was 54.6%, an increase of 16.8 percentage points from last year. (3) Revenue from merchandise trading was RMB74.620 billion, a year-on-year increase of 43.0% while gross profit margin was 3.1%, a decrease of 3.2 percentage points from last year and (4) Revenue from financial business was RMB4.183 billion, a year-on-year decrease of 8.0% while gross profit margin was 89.7%, an increase of 13.8 percentage points from last year.

IV. Cash Flow

In 2021, the net cash inflow from operating activities of the Group amounted to RMB13.069 billion, representing a decrease in net cash inflow of RMB17.925 billion from RMB30.994 billion for 2020, which was mainly due to the growth in scale of investment in infrastructure investment projects under the financial asset model as well as the moderate increase in the land reserve of the property development business.

In 2021, the net cash outflow from investing activities of the Group amounted to RMB77.457 billion, representing an increase in net cash outflow of RMB14.316 billion from RMB63.141 billion for 2020, which was mainly due to the increase of investment in infrastructure investment projects.

In 2021, the net cash inflow from financing activities of the Group amounted to RMB67.365 billion, an increase in net cash inflow of RMB27.164 billion from RMB40.201 billion for 2020, which was mainly due to the increase in external financing and contribution from minority interests.

MANAGEMENT DISCUSSION AND ANALYSIS

Capital expenditure

The capital expenditure of the Group primarily comprises expenditure on purchases of equipment and upgrading of the Group's production facilities. The Group's total capital expenditure for 2021 was RMB65.542 billion (2020: RMB56.753 billion), which was mainly due to the increase in service concession arrangements from BOT/PPP projects.

The following table sets forth the Group's capital expenditure by business segment in 2021.

	Infrastructure construction <i>RMB million</i>	Survey, design and consulting services <i>RMB million</i>	Engineering equipment and component manufacturing <i>RMB million</i>	Property development <i>RMB million</i>	Other businesses <i>RMB million</i>	Total <i>RMB million</i>
Property, plant and equipment	8,977	378	1,648	354	1,663	13,020
Lease prepayments	91	–	138	77	16	322
Investment properties	137	–	–	8	130	275
Intangible assets	569	28	149	3,368	47,229	51,343
Mining assets	–	–	–	–	2	2
Right-of-use assets	397	97	37	7	42	580
Total	10,171	503	1,972	3,814	49,082	65,542

Working capital

	As at 31 December	
	2021	2020
	<i>RMB million</i>	<i>RMB million</i>
Inventories	45,371	40,943
Trade and bills receivables	157,025	139,831
Trade and bills payables	405,520	384,565
Turnover of inventory (days)	16	17
Turnover of trade and bills receivables (days)	50	53
Turnover of trade and bills payables (days)	147	150

At the end of 2021, the balance of the Group's inventories was RMB45.371 billion, representing an increase of 10.8% from the end of 2020. The Group's inventory turnover days was 16 days in 2021, representing a decrease of 1 day from 17 days in 2020.

MANAGEMENT DISCUSSION AND ANALYSIS

Trade and bills receivables

At the end of 2021, the Group's trade and bills receivables increased by 12.3% from the end of 2020 to RMB157.025 billion as at the end of 2021 while the turnover days of trade and bills receivables was 50 days in 2021, decreased by 3 days from 53 days in 2020. According to the ageing analysis of the Group's trade and bills receivables, most of the Group's trade and bills receivables were of less than one year and the trade and bills receivables of more than one year accounted for 24.5% (31 December 2020: 24.7%) of the total receivables, which reflected the sound receivables management capability of the Group.

The following table sets forth the ageing analysis of the Group's trade and bills receivables as at 31 December 2021 and 2020, based on invoice date.

	As at 31 December	
	2021	2020
	<i>RMB million</i>	<i>RMB million</i>
Less than one year	118,517	105,239
One year to two years	14,919	16,642
Two years to three years	10,297	6,238
Three years to four years	4,562	2,815
Four years to five years	1,407	1,695
More than five years	7,323	7,202
Total	157,025	139,831

Trade and bills payables

The Group's trade and bills payables primarily consist of amounts owed to the Group's suppliers of raw materials, machinery and equipment. The Group's trade and bills payables increased by 5.4% from end of 2020 to RMB405.520 billion as at the end of 2021. The turnover days of trade and bills payables was 147 days in 2021, a decrease of 3 days from 150 days in 2020. According to the ageing analysis of the Group's trade and bills payables, most of the Group's trade and bills payables were of less than one year and the trade and bills payables of more than one year accounted for 8.6% (31 December 2020: 7.7%) of the total payables.

MANAGEMENT DISCUSSION AND ANALYSIS

The following table sets forth the ageing analysis of the Group's trade and bills payables as at 31 December 2021 and 2020, based on invoice date.

	As at 31 December	
	2021	2020
	<i>RMB million</i>	<i>RMB million</i>
Less than one year	370,538	354,958
One year to two years	19,622	19,725
Two years to three years	9,274	4,933
More than three years	6,086	4,949
Total	405,520	384,565

V. Borrowings

The following table sets forth the Group's total borrowings as at 31 December 2021 and 2020. As of 31 December 2021, 36.4% of the Group's borrowings were short-term borrowings (31 December 2020: 33.2%). The Group is generally capable of making timely repayments.

	As at 31 December	
	2021	2020
	<i>RMB million</i>	<i>RMB million</i>
Bank borrowings		
Secured	81,976	80,127
Unsecured	152,824	102,340
	234,800	182,467
Long-term debentures, unsecured	55,007	49,443
Other borrowings		
Secured	1,992	262
Unsecured	20,128	17,883
Total	311,927	250,055
Long-term borrowings	198,503	166,997
Short-term borrowings	113,424	83,058
Total	311,927	250,055

MANAGEMENT DISCUSSION AND ANALYSIS

Bank borrowings carry interest rates ranging from 0.75% to 9.50% (31 December 2020: 0.75% to 9.55%) per annum. Long-term debentures carry fixed interest rates ranging from 2.14% to 4.50% per annum (31 December 2020: 2.14% to 4.50%). Other borrowings carry interest rates of 2.35% (31 December 2020: 3.85% to 7.00%) per annum. In 2021, the Group's average cost of financing was 4.11%, representing a year-on-year decrease of 0.16 percentage point.

The following table sets forth the maturity of the Group's borrowings as at 31 December 2021 and 2020.

	As at 31 December	
	2021	2020
	<i>RMB million</i>	<i>RMB million</i>
Less than one year	113,424	83,058
One year to two years	31,351	46,920
Two years to five years	64,552	52,212
More than five years	102,600	67,865
Total	311,927	250,055

As at 31 December 2021 and 2020, the Group's floating-rate borrowings was RMB156.440 billion and RMB129.376 billion respectively.

The following table sets forth the carrying amounts of the Group's borrowings by currencies as at 31 December 2021 and 2020. The Group's borrowings are primarily denominated in Renminbi and the Group's foreign currency borrowings are primarily denominated in U.S. dollars and Euro dollars.

	As at 31 December	
	2021	2020
	<i>RMB million</i>	<i>RMB million</i>
RMB	299,876	239,539
USD	11,682	10,501
Euro	13	2
Others	356	13
Total	311,927	250,055

MANAGEMENT DISCUSSION AND ANALYSIS

The following table sets forth the details of the Group's secured borrowings as at 31 December 2021 and 2020.

	As at 31 December			
	2021		2020	
	Secured borrowings	Carrying amount of pledged assets	Secured borrowings	Carrying amount of pledged assets
	<i>RMB million</i>	<i>RMB million</i>	<i>RMB million</i>	<i>RMB million</i>
Property, plant and equipment	295	1,715	367	1,022
Lease prepayments	–	–	197	309
Intangible assets	45,894	64,728	39,104	50,991
Properties under development for sale	7,699	30,698	11,769	37,371
Trade and bills receivables	221	221	310	310
Trade receivables from fellow subsidiaries of the Group	34	375	119	375
Contract assets	29,825	48,320	28,523	48,339
Total	83,968	146,057	80,389	138,717

As at 31 December 2021, the Group's unused credit line facility from banks was RMB1,201.491 billion (31 December 2020: RMB1,192.430 billion).

As at 31 December 2021, the Group's gearing ratio (total liabilities/total assets) was 73.7%, representing a decrease of 0.2 percentage point as compared with 73.9% as at 31 December 2020.

MANAGEMENT DISCUSSION AND ANALYSIS

VI. Contingent Liabilities

The contingent liabilities related to legal claims in the Group's ordinary course of business are set forth in the table below:

	As at 31 December	
	2021	2020
	RMB million	RMB million
Pending lawsuits		
– arising in the ordinary course of business (Note 1)	5,256	3,073

Note 1: The Group has been involved in a number of lawsuits arising in the ordinary course of business. Provision has been made for the probable losses to the Group on those claims when the management can reasonably estimate the outcome of the lawsuits taking into account of the legal advice. No provision has been made for those pending lawsuits where the management considered that the outcome of the lawsuits cannot be reasonably estimated or management believes the outflow of resources is not probable. The aggregate sum of those unprovided claims is disclosed in the table above.

VII. Business Risks

The risks faced by the Group include investment and operation risks, international operation risks, cash flow risks, health, safety and environmental protection risks, and major pandemic prevention and control risks in the ordinary course of business.

- (1) **Investment and operation risk:** It refers to the risk that due to the uncertainty of investment results arising from uncontrollable external factors, insufficient research and feasibility studies prior to project investment, inappropriate project implementation and management, significant changes in external macro environment and policies and other factors, which may lead to an investment return lower than expected or an investment failure of the Group; among which, the overseas investment risk refers to the risk that overseas investment is affected by factors including local society, politics, economy, culture, policies and regulations, as well as relevant domestic policies and the corporate internationalization talent pool, which may lead to investment failure, lower-than-expected investment return, lower personnel security, damage to the reputation of the enterprise, etc.
- (2) **International operation risk:** It refers to the risk that due to the influence of international political situation, foreign policy changes, administrative intervention from government, economic, social, environmental or technological changes and other factors, which may lead to the failure to normally carry out the Group's overseas construction projects.
- (3) **Cash flow risk:** It refers to the possibility that the Group may incur economic losses or damage of reputation in the event of failure to meet the requirements of timely payment, investment expenses or timely repayment of the Group's debts in its operations due to improper management of cash flow.

MANAGEMENT DISCUSSION AND ANALYSIS

- (4) **Health, safety and environmental protection risk:** The health, safety and environmental protection risks faced by the Group are mainly concentrated in the construction safety risks of construction projects, which mainly refer to the risk that due to the lack of effective management in management system implementation, measure implementation, technical management, subcontract management, equipment management and accident management of the Group, which may lead to major production safety accidents and safety hazards in the enterprise.
- (5) **Major pandemic prevention and control risk:** Due to the impact of a major uncontrollable pandemic, some national and local governments have issued policies that regard the major pandemic as safety accidents and adopted strict control and punishment measures. Consequently, the Group cannot proceed with normal construction of projects under construction or even suffers from suspension of work, which brings great risk of contract performance and severe loss of economic benefits to the Group.

To prevent the occurrence of various types of risks, the Company carries out monitoring and early warning of relevant major risks, makes various types of risks correspond to the various business processes through the establishment and operation of the risk management and internal control systems, pursuant to which the Group can decompose and identify the critical control point of business processes, develop specific control measures, establish procedures critical control documents, implement the responsibilities of the various types of risks and critical control point, work closely with the day-to-day management and control, and control risk factors and elements. In addition, the Company strictly supervises the important control aspects of earlier stage of feasibility study, planning, reviewing, auditing, approval and decision-making; enhances process control and post-assessment work, and develops strategies and contingency plans to deal with risks, which guarantees the overall controllability of the Company's various types of risks.

VIII. Material Acquisitions or Disposals

Save as the acquisitions set out in note 47 to the Financial Statements or otherwise disclosed in this Annual Report, the Group did not have any other material acquisitions or disposals of subsidiaries, associates and joint ventures during the reporting period.

IX. Future Plans for Material Investments or Acquisitions of Capital Assets and Expected Source of Funding

Save as disclosed in this Annual Report, the Group did not have any other plans for material investments or acquisition of capital assets as at 31 December 2021.

BIOGRAPHY OF DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT

I. Directors



CHEN Yun

Chairman, Executive Director and Secretary to the CPC Committee

CHEN Yun (陳雲) (no other former name/alias), aged 58, senior economist, currently is the President, an executive director, Secretary to the CPC Committee and Chairman of the Strategy Committee and the Nomination Committee under the Board of the Directors of the Company, and is the Chairman and the Secretary to the CPC Committee of CREC. He served as a Standing Member of the CPC Committee of China Communications Construction Group and a Standing Member of the CPC Committee and the Deputy General Manager of China Communications Construction Company Limited from April 2007 to March 2017; the Deputy Secretary to the CPC Committee of China Communications Construction Group and the Deputy Secretary to the CPC Committee and the Vice President of China Communications Construction Company Limited from March 2017 to September 2017; the Deputy Secretary to the CPC Committee of China Communications Construction Group and the Deputy Secretary to the CPC Committee and an executive director of China Communications Construction Company Limited from September 2017 to November 2017; the Deputy Secretary to the CPC Committee and the Chairman of the Labor Union of China Communications Construction Group and the Deputy Secretary to the CPC Committee, an executive director and the Chairman of the Labor Union of China Communications Construction Company Limited from November 2017 to June 2019. He served as the Deputy Secretary to the CPC Committee of the Company and the Deputy Secretary to the CPC Committee of CREC from June 2019 to August 2019; the President and the Deputy Secretary to the CPC Committee of the Company and the General Manager, a director and the Deputy Secretary to the CPC Committee of CREC from August 2019 to October 2019; the President, an executive director and the Deputy Secretary to the CPC Committee of the Company and the General Manager, a director and the Deputy Secretary to the CPC Committee of CREC from October 2019 to November 2020. He served as the President, an executive director and the Deputy Secretary to the CPC Committee of the Company and the Chairman and the Secretary to the CPC Committee of CREC from November 2020 to December 2020; and served as the Chairman, an executive director and the Secretary to the CPC Committee of the Company and the Chairman and the Secretary to the CPC Committee of CREC since December 2020.

BIOGRAPHY OF DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT

**CHEN Wenjian**

Executive Director, President and Deputy Secretary to the CPC Committee

CHEN Wenjian (陳文健) (no other former name/alias), aged 49, senior engineer, currently is the President, an executive director, the Deputy Secretary to the CPC Committee and Chairman of the Safety, Health and Environmental Protection Committee under the Board of the Directors of the Company, and is concurrently the General Manager, a director and the Deputy Secretary to the CPC Committee of CREC. He served as the General Manager and the Secretary to the CPC Committee of the Algeria branch of CSCEC from January 2007 to September 2014; the General Manager of the Overseas Business Department of China State Construction Engineering Corporation Limited ("CSCEC") from September 2014 to August 2016; the General Manager and the Secretary to the Community Party Working Committee of the Overseas Business Department of CSCEC from August 2016 to December 2017; the General Manager and the Secretary to the Community Party Working Committee of the Overseas Business Department of CSCEC and the General Manager of the Overseas Department of CSCEC from December 2017 to June 2018; the General Manager of the Overseas Department of CSCEC and the Chairman and the Secretary to the CPC Committee of the China State Construction Engineering Corporation International Operations ("CSCEC International Operations") from June 2018 to October 2018; the General Manager of the Overseas Department of CSCEC, the Chairman and the Secretary to the CPC Committee of CSCEC International Operations and the Chairman of China Construction (South Pacific) Development Co., Pte Ltd. from October 2018 to March 2020; the Secretary to the CPC Committee and the Chairman of the China Construction Third Engineering Bureau Co., Ltd. from March 2020 to November 2020. He served as the General Manager, a director and the Deputy Secretary to the CPC Committee of CREC from November 2020 to December 2020. He served as the President and the Deputy Secretary to the CPC Committee of the Company, and the General Manager, a director and the Deputy Secretary to the CPC Committee of CREC from December 2020 to March 2021. He has been serving as the President, an executive director and the Deputy Secretary to the CPC Committee of the Company and the General Manager, a director and the Deputy Secretary to the CPC Committee of CREC since March 2021.

BIOGRAPHY OF DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT



WANG Shiqi

Executive Director, Deputy Secretary to the CPC Committee and Chairman of the Labour Union

WANG Shiqi (王士奇) (no other former name/alias), aged 56, currently is an executive director, the Deputy Secretary to the CPC Committee and Chairman of the Labor Union of the Company, and the employee director, Deputy Secretary to the CPC Committee and Chairman of the Labor Union of CREC. He served as the discipline inspector (deputy bureau director) and supervision commissioner of the Case Hearing Office of the Central Commission for Discipline Inspection of the Communist Party ("CCDI") from February 2009 to April 2014. He served as the Secretary to the Discipline Inspection Committee of the CPC Committee of the Company and the Secretary to the Discipline Inspection Committee of the CPC Committee of CREC from April 2014 to January 2020; and the Secretary to the Discipline Inspection Committee of the CPC Committee of the Company and the Deputy Secretary to the CPC Committee of CREC from January 2020 to February 2020. He served as the Deputy Secretary to the CPC Committee of the Company and the Deputy Secretary to the CPC Committee of CREC from February 2020 to April 2020; and an executive Director and the Deputy Secretary to the CPC Committee of the Company and the Deputy Secretary to the CPC Committee of CREC from April 2020 to January 2021. He has been serving as the executive Director, the Deputy Secretary to the CPC Committee and the Chairman of the Labour Union of the Company and the employee director, the Deputy Secretary to the CPC Committee and the Chairman of the Labour Union of CREC since January 2021.



WEN Limin

Non-executive Director

WEN Limin (文利民) (no other former name/alias), aged 55, senior accountant and certified public accountant, currently is a non-executive Director of the Company and an external director of China Aerospace Science & Technology Corporation and an external director of China First Heavy Industries Group Co. Ltd. He served as the Chief Accountant of Dongfang Electric Corporation from September 2005 to August 2016 with concurrent position as the Chairman of the Supervisory Committee of Dongfang Electric Co., Ltd. from June 2014 to March 2018, the Chief Accountant and a member of the CPC Committee Leadership Group of Dongfang Electric Corporation from August 2016 to January 2018, and the Chief Accountant and a member of the CPC Committee Leadership Group of China Southern Power Grid Company Limited from January 2018 to September 2020. He has been an external director of China Aerospace Science & Technology Corporation and an external director of China First Heavy Industries Group Co. Ltd. since December 2020. He has been a non-executive Director of the Company since March 2021.

BIOGRAPHY OF DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT



CHUNG Shui Ming Timpson

Independent Non-executive Director

CHUNG Shui Ming Timpson (鍾瑞明) (no other former name/alias), aged 70, currently is an independent non-executive director of the Company, a member of the National Committee of the 13th Chinese People's Political Consultative Conference and a Pro-Chancellor of the City University of Hong Kong. He is currently an independent non-executive director of The Miramar Hotel & Investment Co., Limited, China Unicom (Hong Kong) Limited, China Overseas Grand Oceans Group Limited, China Everbright Limited, Orient Overseas (International) Limited and Postal Savings Bank of China Co., Ltd., and an external director of China COSCO Shipping Corporation Limited. He served as a member of the 10th to 12th National Committee of the Chinese People's Political Consultative Conference, a senior audit officer of PricewaterhouseCoopers, an independent non-executive director of China Netcom Group Corporation (Hong Kong) Limited, the chairman of China Business of Jardine Fleming Holdings Limited, deputy chief executive officer of BOC International Limited, director-general of the Democratic Alliance for the Betterment and Progress of Hong Kong, chairman of the Advisory Committee on Art Developments, chairman of the Council of the City University of Hong Kong, chairman of the Hong Kong Housing Society, member of the Executive Council of the Hong Kong Special Administrative Region, vice chairman of the Land Fund Advisory Committee of Hong Kong Special Administrative Region Government, member of the Managing Committee of the Kowloon-Canton Railway Corporation, member of the Hong Kong Housing Authority, member of the Disaster Relief Fund Advisory Committee, independent non-executive director of Henderson Land Development Company Limited and Nine Dragons Paper (Holdings) Limited, and China Construction Bank Corporation, independent director of China Everbright Bank Corporation Limited and China State Construction Engineering Corporation Limited, and external director of China Mobile Communications Corporation. He holds a bachelor of science degree from the University of Hong Kong and a master's degree of business administration from the Chinese University of Hong Kong and obtained a Doctor of Social Sciences honoris causa from the City University of Hong Kong. He was appointed as a Justice of the Peace and received the Gold Bauhinia Star from the Government of Hong Kong Special Administrative Region. He has been an independent non-executive director of the Company since June 2017.

BIOGRAPHY OF DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT



ZHANG Cheng

Independent Non-executive Director

ZHANG Cheng (張誠) (with the former name of ZHANG Xuedong), aged 64, senior engineer, currently is an independent non-executive director of the Company and an external director of Dongfang Electric Corporation. He served as the General Manager and the Secretary to the CPC Committee of China Yangtze Power Co., Ltd. from January 2006 to March 2010, a member of the CPC Committee Leadership Group and a Deputy General Manager of China Three Gorges Corporation with concurrent position as the General Manager and a director of China Yangtze Power Co., Ltd. from March 2010 to April 2015, and concurrently a director of China National Nuclear Power Co., Ltd. from May 2013 to December 2018, as well as a member of the CPC Committee Leadership Group and a Deputy General Manager of China Three Gorges Corporation with concurrent position as Vice Chairman of China Yangtze Power Co., Ltd. from May 2015 to December 2017. He has been an external director of Dongfang Electric Corporation since June 2020. He has been an independent non-executive director of the Company since March 2021.



XIU Long

Independent Non-executive Director

XIU Long (修龍) (no other former name/alias), aged 64, senior engineer, researcher and an expert with special State Council allowances, currently is an independent non-executive director of the Company, an external director of China Green Development and Investment Group Co., Ltd. and concurrently the Chairman of the Architectural Society of China. He served as the President and the Deputy Secretary to the CPC Committee of China Architecture Design & Research Group from January 2007 to December 2017 with concurrent position as the Chairman of China Construction Technology Consulting Co., Ltd in 2014, and the Secretary to the CPC Committee and the Chairman of China Construction Technology Co., Ltd. from January 2018 to July 2020 with concurrent position as the Secretary to the CPC Committee and the Chairman of China Construction Technology Consulting Co., Ltd. He has been the Chairman of the Architectural Society of China since 2016 and an external director of China Green Development and Investment Group Co., Ltd. since November 2020. He has been an independent non-executive director of the Company since March 2021.

BIOGRAPHY OF DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT

II. Supervisors



JIA Huiping

*Chairman of Supervisory
Committee and Shareholder
Representative Supervisor*

JIA Huiping (賈惠平) (no other former name/alias), aged 56, senior economist and senior political work professional, currently is the Chairman of the Supervisory Committee and Shareholder Representative Supervisor of the Company. He served as the Deputy Secretary to the CPC Committee and the Secretary to the Disciplinary Committee of China Railway No.7 Engineering Group Co., Ltd. from March 2008 to November 2010; the Deputy Secretary to the CPC Committee, the Secretary to the Discipline Inspection Committee, and the Chairman of the Supervisory Committee of China Railway Airport Construction Co., Ltd. from November 2010 to December 2011; the Deputy Secretary to the CPC Committee, the Secretary to the Discipline Inspection Committee and the Chairman of the Supervisory Committee of China Railway Airport Construction Co., Ltd., and head of the South China Center of China Railway Airport Construction Co., Ltd. from December 2011 to August 2014; the Chairman and the Secretary to the CPC Committee of Wuhan Railway Electrification Bureau Group Co., Ltd. from August 2014 to June 2017, as well as head of the cadre department of the Company and head of the cadre department of the CPC Committee of CREC from June 2017 to February 2020. He served as the Vice Chairman of the Labour Union of the Company and the Vice Chairman of the Labour Union of CREC from February 2020 to March 2021. He has been the Chairman of the Supervisory Committee and Shareholder Representative Supervisor of the Company since March 2021.

BIOGRAPHY OF DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT



YUAN Baoyin

Employee Representative Supervisor

YUAN Baoying (苑寶印) (no other former name/alias), aged 58, senior engineer, currently is an employee representative supervisor and the Deputy Secretary to the Discipline Inspection Committee of the Company and concurrently the Deputy Secretary to the Discipline Inspection Committee of CREC. He served as the Deputy Secretary to the CPC Committee and Secretary to the Discipline Inspection Committee of China Railway No.9 Group Co., Ltd. from March 2008 to March 2011; the Deputy Secretary to the Discipline Inspection Committee of the Company and concurrently the Deputy Secretary to the Discipline Inspection Committee of CREC from March 2011 to January 2013; the Chairman and the Secretary to the CPC Committee of China Railway No.9 Group Co., Ltd. from January 2013 to March 2014. He has served as the Deputy Secretary to the Discipline Inspection Committee of the Company and the Deputy Secretary to the Discipline Inspection Committee of CREC from March 2014 to September 2019. He has been an employee representative supervisor and the Deputy Secretary to the Discipline Inspection Committee of the Company, and the Deputy Secretary to the Discipline Inspection Committee of CREC since September 2019.



LI Xiaosheng

Employee Representative Supervisor

LI Xiaosheng (李曉聲) (no other former name/alias), aged 49, senior political work professional, currently is an employee representative supervisor and Vice Chairman of the Labour Union of the Company, and concurrently the Vice Chairman of the Labour Union of CREC. He served as the Deputy Secretary to the CP Committee of China Railway No.5 Engineering Group Co., Ltd. from January 2008 to August 2011 and concurrently the external director and vice-chairman of China Railway No.5 Mechanized Engineering Co., Ltd. from April 2009, and the Commanding Officer of China Railway No.5 China-Laos Railway Construction Headquarters from December 2010; the Secretary to the CPC Committee, director and vice-chairman of China Railway International Economic Cooperation Co. Ltd. from August 2011 to October 2013. He served as the deputy chief economist and head of the International Business Department of the Company from October 2013 to April 2015; the vice-chairman of the Labour Union of the Company and CREC from April 2015 to March 2021. He has been an employee representative supervisor and the vice-chairman of the Labour Union of the Company and the vice-chairman of the Labour Union of CREC since March 2021.

BIOGRAPHY OF DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT

**WANG Xinhua**

*Employee Representative
Supervisor*

WANG Xinhua (王新華) (no former name/alias), aged 51, senior accountant, currently is an employee representative supervisor and head (supervisor) of the Audit Department (Office of the Supervisory Committee) of the Company. He served as the chief accountant of the Seventh Engineering Branch of China Railway No.4 Engineering Group Co., Ltd. from January 2011 to July 2014; head of the Finance and Accounting Department, deputy chief accountant, Secretary to the Board of Directors, chief accountant and member of the Standing Committee of the CPC Committee of China Railway No.6 Engineering Group Co., Ltd. from August 2014 to January 2020. He served as the deputy head of the Audit Department of the Company from January 2020 to July 2020, and the head (supervisor) of the Audit Department (Office of Supervisory Committee) of the Company from July 2020 to March 2021. He has been an employee representative supervisor and the head (supervisor) of the Audit Department (Office of Supervisory Committee) of the Company since March 2021.

**WANG Ming**

*Employee Representative
Supervisor*

WANG Ming (萬明) (no other former name/alias), aged 51, senior economist, currently is an employee representative supervisor, and head of the Legal and Compliance Department of the Company. He served as the Chief Legal Advisor of the 8th Engineering Co., Ltd. of CTCE Group from December 2006 to April 2008; the director of the General Office of the Office of the Board of Directors of the Company from April 2008 to March 2011; the deputy director of the Office of the Board of Directors (Office of Supervisory Committee) from March 2011 to September 2015; the director of the Office of Discipline Inspection Committee and director of the Inspection Office of the Company from September 2015 to March 2018; a Standing Member of the CPC Committee, Deputy Secretary to the CPC Committee and the Secretary to the Discipline Inspection Committee of the CPC (kept original rank) of the Company from March 2018 to May 2021; head of the Legal and Compliance Department of the Company from May 2021 to September 2021. He has been an employee representative supervisor, and head of the Legal and Compliance Department of the Company since September 2021.

BIOGRAPHY OF DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT

III. Senior Management



SUN Cui
Chief Accountant

SUN Cui (孫璿) (no other former name/alias), aged 55, senior accountant, currently is a Standing Member of the CPC Committee and Chief Accountant of the Company and is also a Standing Member of the CPC Committee of CREC. He served as a member of Preparatory Group and a temporary Standing Member of the CPC Committee of Power Construction Corporation of China, and a Standing Member of the CPC Committee of Sinohydro Corporation and Chief Accountant and Standing Member of the CPC Committee of Sinohydro Group Ltd. from March 2011 to August 2011; the Chief Accountant of Power Construction Corporation of China, a Standing Member of the CPC Committee of Sinohydro Corporation, and Chief Accountant and Standing Member of the CPC Committee of Sinohydro Group Ltd. from August 2011 to December 2011; the Chief Accountant of Power Construction Corporation of China and a Standing Member of the CPC Committee of Sinohydro Corporation from December 2011 to February 2014; a Standing Member of the CPC Committee of Power Construction Corporation of China and a Standing Member of the CPC Committee and Chief Accountant of Powerchina Limited from February 2014 to January 2020 (from September 2015 to November 2015, studied in the 65th Training Class for bureau-level cadres of the CPC Party School); a Standing Member of the CPC Committee of CREC from January 2020 to March 2020. He has been a Standing Member of the CPC Committee and Chief Accountant of the Company and a Standing Member of the CPC Committee of CREC since March 2020.



YU Tengqun
Vice President and General Legal Advisor

YU Tengqun (于騰群) (no other former name/alias), aged 51, senior economist, currently is a Standing Member of the CPC Committee, the Vice President and General Legal Advisor of the Company, and concurrently a Standing Member of the CPC Committee of CREC. He is the Vice Chairman of the Institute of Securities Law of CLS, Chairman of the Working Committee of Legal Services of China Construction Industry Association, and Vice President of "One Belt One Road" (China) Court of Arbitration ("一帶一路"(中國)仲裁院). He served as the Secretary to the Board of Directors and spokesperson of the Company from September 2007 to March 2014; the Secretary to the Board of Directors, General Legal Advisor and spokesperson of the Company from March 2014 to September 2017 (from March 2016 to January 2017, studied in a one-year middle-aged and youth training course organized by the Central Community Party School); a Standing Member of the CPC Committee, the Secretary to the Board of Directors, General Legal Advisor and spokesperson of the Company and a Standing Member of the CPC Committee of CREC from September 2017 to June 2018; a Standing Member of the CPC Committee, Vice President, the Secretary to the Board of Directors, General Legal Advisor and spokesperson of the Company and a Standing Member of the CPC Committee of CREC from June 2018 to August 2018. He has been a Standing Member of the CPC Committee, Vice President and General Legal Advisor of the Company and a Standing Member of the CPC Committee of CREC since August 2018 (from October 2020 to January 2021, studied in a middle-aged and youth training course 1 organized by the Central Community Party School).

BIOGRAPHY OF DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT



LIU Baolong
Vice President

LIU Baolong (劉寶龍), formerly named as LIU Baolong (劉保龍), aged 57, senior engineer, currently is a Standing Member of the CPC Committee and the Vice President of the Company and a Standing Member of the CPC Committee of CREC. He served as the General Manager, Deputy Secretary to the CPC Committee and Vice Chairman of China Railway No.3 Engineering Group Co., Ltd. and the Commanding Officer of the Construction Headquarters of the Beijing-Shanghai Express Railway undertaken by China Railway No.3 Engineering Group Co., Ltd. from November 2009 to January 2013; a Secretary to the CPC Committee and Vice Chairman of China Railway No.3 Engineering Group Co., Ltd. from January 2013 to March 2014; Secretary to the CPC Committee, Chairman and legal representative of China Railway No.3 Engineering Group Co., Ltd. from March 2014 to August 2018. He was a Vice President of the Company from June 2018 to March 2021. He has been a Standing Member of the CPC Committee and the Vice President of the Company and a Standing Member of the CPC Committee of CREC since March 2021.



REN Hongpeng
Vice President

REN Hongpeng (任鴻鵬) (no other former name/alias), aged 48, senior engineer, currently is a Standing Member of the CPC Committee and the Vice President of the Company and a Standing Member of the CPC Committee of CREC. He served as a Deputy General Manager of China Road and Bridge Corporation from September 2011 to August 2015, a Deputy General Manager and Standing Member of the CPC Committee of China Road and Bridge Corporation from August 2015 to December 2015; a Deputy General Manager and Standing Member of the CPC Committee of China Road and Bridge Corporation and director of CCCG Real Estate Group Co., Ltd. from December 2015 to January 2016; a director of CCCG Real Estate Group Co., Ltd., director, General Manager (legal representative) and temporary Secretary to the CPC Committee of CCCG Overseas Real Estate Pte. Ltd. from January 2016 to February 2017; a director and temporary member of CPC Committee of CCCG Real Estate Group Co., Ltd. and a director, General Manager (legal representative) and temporary Secretary to the CPC Committee of CCCG Overseas Real Estate Pte. Ltd. from February 2017 to June 2018. He served as the Vice President of the Company from June 2018 to March 2021. He has been a Standing Member of the CPC Committee and the Vice President of the Company and a Standing Member of the CPC Committee of CREC since March 2021.

BIOGRAPHY OF DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT



KONG Dun

Vice President and Chief Engineer

KONG Dun (孔遁) (no other former name/alias), aged 56, senior engineer, currently is a Standing Member of the CPC Committee, Vice President, and the Chief Engineer of the Company. He served as a director, General Manager, and Deputy Secretary to the CPC Committee of Shanghai Civil Engineering Co., Ltd. of CREC from November 2010 to June 2018. He was the Chief Engineer of the Company from June 2018 to April 2021. He has been a Standing Member of the CPC Committee, Vice President, and Chief Engineer of the Company since April 2021.



MA Jiangqian

Vice President and Chief Economist

MA Jiangqian (馬江黔) (no other former name/alias), aged 53, senior economist, currently is a Standing Member of the CPC Committee, Vice President and Chief Economist of the Company. He served as the Secretary to the CPC Committee and director of China Railway No.5 Engineering Group Co., Ltd. from November 2010 to August 2011; the Chairman and Secretary to the CPC Committee of China Railway No.5 Engineering Group Co., Ltd. from August 2011 to January 2013; the General Manager, Deputy Secretary to the CPC Committee and director of China Railway No.6 Engineering Group Co., Ltd. from January 2013 to June 2014; the General Manager, Deputy Secretary to the CPC Committee and Vice Chairman of China Railway No.6 Engineering Group Co., Ltd. from June 2014 to June 2018. He served as the Chief Economist of the Company from June 2018 to April 2021. He has been a Standing Member of the CPC Committee, Vice President and Chief Economist of the Company since April 2021.

BIOGRAPHY OF DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT



LI Xinsheng
Vice President

LI Xinsheng (李新生) (no other former name/alias), aged 42, senior political work professional and senior economist, currently is a Standing member of the CPC Committee and Vice President of the Company. He served as a member of the CPC Committee and the Secretary of the Youth League Committee of the Company from January 2008 to April 2014; the Deputy Secretary to the CPC Committee, the Secretary to the Discipline Inspection Committee of the CPC Committee, Chairman of the Labor Union, and Chairman of Supervisory of Committee of China Railway Resources Group Co., Ltd. from April 2014 to November 2015; the Secretary to the CPC Committee, Executive Director and legal representative of China Railway Material Trade Co., Ltd. from November 2015 to June 2017; the Director of the Party Committee Office (Confidentiality Office) of the Company from June 2017 to October 2017; a member of the CPC Committee, and the Director of the Party Committee Office (Confidentiality Office) of the Company from October 2017 to January 2020; and the Secretary of the CPC Committee, Chairman, and legal representative of China Railway No.5 Engineering Group Co., Ltd. from January 2020 to April 2021. He has been a Standing Member of the CPC Committee and Vice President of the Company since April 2021.



HE Wen
*Secretary to the Board of Directors
and Joint Company Secretary*

HE Wen (何文) (no other former name/alias), aged 57, senior accountant, currently is the Secretary to the Board of Directors and Joint Company Secretary of the Company, and concurrently the head of the Appraisal and Distribution Department of the Company. He served as a director and Chief Accountant of China Railway No.4 Engineering Group Co., Ltd. from April 2007 to November 2013, and the Secretary to the CPC Committee, Chairman of the Board of Supervisors and Secretary to the Discipline Inspection Committee of China Railway Trust Co., Ltd. from November 2013 to March 2014. He served as the Deputy Chief Accountant and head of the Finance Department of the Company from March 2014 to June 2017; the head of the Finance Department of the Company from June 2017 to August 2018; the Secretary to the Board of Directors, Joint Company Secretary of the Company, and the head of the Finance and Financial Management Department of the Company from August 2018 to May 2021. He has been the Secretary to the Board of Directors, Joint Company Secretary of the Company, and the head of Appraisal and Distribution Department of the Company since May 2021.

BIOGRAPHY OF DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT



TAM Chun Chung

*Joint Company Secretary and
Qualified Accountant*

TAM Chun Chung (譚振忠), aged 49, currently is the Joint Company Secretary and Qualified Accountant of the Company and also an independent non-executive director of Lap Kei Engineering (Holdings) Limited. Mr. TAM joined the Company in November 2007. Prior to joining the Company, He served as a Qualified Accountant and Joint Company Secretary of an H-share listed company in Hong Kong. He had also held various senior positions including senior manager of internal audit and senior manager of finance department in another Hong Kong listed company previously. From 1994 to 2000, Mr. TAM worked for a large international accounting firm as an assistant manager. Mr. TAM has over 27 years of experience in the accounting and auditing field. He has been a member of the Hong Kong Institute of Certified Public Accountants since December 1997 and a fellow of the Chartered Association of Certified Accountants since November 2002.

REPORT OF THE DIRECTORS



Business Review

1. Business Review of the Financial Year

We are one of the strongest and largest multifunctional integrated construction groups in the PRC and even in the world. We are primarily engaged in infrastructure construction, survey, design and consulting services, engineering equipment and component manufacturing, property development and other businesses.

In 2021, under the complex situation of repeated outbreaks of COVID-19, increased pressure on economic downturns, and a combination of risks and challenges, the Group has conscientiously implemented the policy decisions and arrangements of the Party Central Committee and the State Council as well as the work requirements of the SASAC and thoroughly implemented the “123456” work strategy. By way of innovation, working hard and making progress, the Group successfully met all annual targets and reached a new level of scale, efficiency and quality in its operations.

REPORT OF THE DIRECTORS

In the year of 2021, the Group achieved revenue of RMB1,073,272 million, representing a year-on-year increase of 10.1%. In the year of 2021, the Group achieved net profit of RMB30,470 million, representing a year-on-year increase of 11.8%. The profit for the year attributable to the owners of the Company was RMB27,618 million, representing a year-on-year increase of 9.6%.

The Group has been one of the top 500 enterprises in the world for 16 consecutive years, ranking 35th in the Fortune Global 500 (15 places higher than the previous year) and 5th in Fortune China 500 (1 place higher than the previous year); ranking No. 2 amongst 250 largest global contractors in the Engineering News Record ENR. It has obtained Grade A in the SASAC Business Performance Appraisal for eight consecutive years, and Class A evaluation result of information disclosure of the Shanghai Stock Exchange for eight consecutive years. Moody's, Fitch and S&P, the three major international rating agencies, rated China Railway as A3/A-/BBB+, with an outlook rating of "stable".

Further details of the Group's business review of the financial year are set out in Parts I to VII of "Business Overview" on pages 16 to 36 and Parts I to VI of "Management Discussion and Analysis" on pages 40 to 52 of this annual report.

2. Principal Risks and Uncertainties

The Group may be exposed to a variety of business risks, including investment and operation risk, international operation risk, cash flow risk, health, safety and environmental protection risk, and major epidemic prevention and control risk in the ordinary course of business.

Further details of the Group's principal risks are set out in Part VII of "Management Discussion and Analysis" on pages 52 to 53 of this annual report.

REPORT OF THE DIRECTORS

3. Future Development of Businesses

During the “14th Five-Year Plan” period, China Railway continued to deepen the changes in quality, efficiency and power, and fully implemented the key measures of “ten projects”, namely strategic leadership, in-depth reform, scientific and technological innovation, management improvement, strengthening enterprises with talents, “double excellence” development overseas, risk prevention and control, digital China Railway, cultural brand, and Party construction, so as to strive to achieve the scale of operation, efficiency, innovation-driven operation, talent development, internationalization, green development, safety and quality and other development goals to achieve the high quality development of China Railway.

Details of the Group’s expectations to and plans of future businesses development are set out in Part VIII to Part IX of “Business Overview” on pages 36 to 39 of this annual report.

Financial Statements

The profits of the Group for the year ended 31 December 2021 and the financial positions of the Group as at such date are set out in the Financial Statements on pages 114 to 286.

Dividends

The Board of Directors recommends the payment of a final dividend in the amount of RMB0.196 per share (including tax), totalling approximately RMB4.849 billion for the financial year ended 31 December 2021 (2020: RMB0.180 per share (including tax), totalling approximately RMB4.423 billion). The distribution plan will be implemented upon approval at the 2021 annual general meeting of the Company and the dividends are expected to be paid in around August 2022 to the shareholders of the Company.

For details of the policies for profit distribution of the Company, please refer to “Specific policies for profit distribution” of “Significant Events” on page 287 of this annual report.

Donations

Donations made by the Group during the financial year amounted to RMB75.58 million (2020: RMB216.875 million).

Property, Plant and Equipment

Changes in property, plant and equipment of the Group during the financial year are set out in note 18 to the Financial Statements.

REPORT OF THE DIRECTORS

Share Capital

Details of the Company's share capital are set out in note 38 to the Financial Statements.

Distributable Reserves

As at 31 December 2021, pursuant to the relevant laws and regulations, the Company's distributable reserves amounted to approximately RMB76.068 billion.

Reserves

Changes in reserves of the Group and the Company during the financial year are set out in the consolidated statement of changes in equity on pages 118 to 119 of this annual report.

Major Customers and Suppliers

The China State Railway Group Co., Ltd. (formerly known as China Railway Corporation), which was founded on 14 March 2013 by the State Council, is the largest customer of the Group. For the year ended 31 December 2021, sales to the China State Railway Group Co., Ltd. accounted for approximately 18.7% of the total revenue of the Group. For the same period, sales to the five largest customers of the Group (including the China State Railway Group Co., Ltd.) in aggregate accounted for approximately 20.5% of the total revenue of the Group. At no time during the financial year have the directors, their associates or any shareholder of the Company (which, to the knowledge of the board of the directors, owns more than 5% of the Company's share capital) had any interest in these five largest customers.

For the year ended 31 December 2021, purchases from the five largest suppliers of the Group in aggregate accounted for approximately 1.6% of the total purchase volume of the Group in 2021.

Subsidiaries and Associates

Particulars of the Company's principal subsidiaries and the Group's principal associates as at 31 December 2021 are set out in note 25 and note 26, respectively, to the Financial Statements.

REPORT OF THE DIRECTORS

Directors, Supervisors and Senior Management of the Company

The directors of the Company during the financial year were as follows:

Name	Position
CHEN Yun (re-elected on 12 March 2021)	Chairman and Executive Director
CHEN Wenjian (elected on 12 March 2021)	Executive Director and President
WANG Shiqi (re-elected on 12 March 2021)	Executive Director
WEN Limin (elected on 12 March 2021)	Non-executive Director
CHUNG Shui Ming Timpson (re-elected on 12 March 2021)	Independent Non-executive Director
ZHANG Cheng (elected on 12 March 2021)	Independent Non-executive Director
XIU Long (elected on 12 March 2021)	Independent Non-executive Director
GUO Peizhang (resigned on 12 March 2021)	Independent Non-executive Director
WEN Baoman (resigned on 12 March 2021)	Independent Non-executive Director
ZHENG Qingzhi (resigned on 12 March 2021)	Independent Non-executive Director

The supervisors of the Company during the financial year were as follows:

Name	Position
JIA Huiping (elected on 12 March 2021)	Chairman of the Supervisory Committee and Shareholder Representative Supervisor
YUAN Baoyin (elected on 10 March 2021)	Employee Representative Supervisor
LI Xiaosheng (elected on 26 January 2021)	Employee Representative Supervisor
WANG Xinhua (elected on 26 January 2021)	Employee Representative Supervisor
WAN Ming (elected on 29 September 2021)	Employee Representative Supervisor
ZHANG Huijia (resigned on 12 March 2021)	Chairman of the Supervisory Committee and Shareholder Representative Supervisor
LIU Jianyuan (resigned on 26 January 2021)	Employee Representative Supervisor
CHEN Wenxin (resigned on 12 March 2021)	Employee Representative Supervisor
FAN Jinghua (resigned on 26 January 2021)	Employee Representative Supervisor

REPORT OF THE DIRECTORS

The senior management of the Company during the financial year were as follows:

Name	Position
CHEN Wenjian (appointed on 12 March 2021)	Executive Director and President
SUN Cui (appointed on 12 March 2021)	Chief Accountant
YU Tengqun (appointed on 12 March 2021)	Vice President and General Legal Advisor
LIU Baolong (appointed on 12 March 2021)	Vice President
REN Hongpeng (appointed on 12 March 2021)	Vice President
KONG Dun (appointed on 12 March 2021 and 30 April 2021)	Vice President and Chief Engineer
MA Jiangqian (appointed on 12 March 2021 and 30 April 2021)	Vice President and Chief Economist
LI Xinsheng (appointed on 30 April 2021)	Vice President
HE Wen (appointed on 12 March 2021)	Secretary to the Board of Directors, Joint Company Secretary
TAM Chun Chung (appointed on 12 March 2021)	Joint Company Secretary and Qualified Accountant
DUAN Yongchuan (resigned on 8 February 2021)	Vice President
LI Fengchao (appointed on 12 March 2021 and resigned on 1 February 2022)	Chief Safety Production Officer

On 26 January 2021, at the Second Meeting of the Third Session of the Employee Representatives General Meeting of the Company, it was resolved that, effective from 26 January 2021, Ms. LIU Jianyuan and Mr. FAN Jinghua ceased to be employee representative supervisors of the Company due to Ms. LIU Jianyuan's retirement and Mr. FAN Jinghua's change of job nature. In addition, Mr. LI Xiaosheng, Mr. HOU Shezhong and Mr. WANG Xinhua were elected as employee representative supervisors to the fifth session of the Supervisory Committee of the Company. The term of office of the three employee representative supervisors commenced from 12 March 2021 until the expiry of the term of the fifth session of the Supervisory Committee of the Company.

On 8 February 2021, the Company received the written resignation report from Mr. DUAN Yongchuan, former vice president, who tendered to the Board his resignation as the vice president in light of his personal reasons and would hold no position at the Company after resignation.

The first joint conference for chief of delegation of the second meeting of the third session of the employee representative general meeting of the Company was held on 10 March 2021, at which Mr. HOU Shezhong was no longer elected to be an employee representative supervisor of the fifth session of the Supervisory Committee of the Company due to his change of job nature and Mr. YUAN Baoyin was elected as an employee representative supervisor to the fifth session of the Supervisory Committee of the Company.

REPORT OF THE DIRECTORS

The first extraordinary general meeting of 2021 of the Company was held on 12 March 2021, at which Mr. CHEN Yun, Mr. CHEN Wenjian and Mr. WANG Shiqi were elected as executive directors of the Company; Mr. WEN Limin was elected as a non-executive director of the Company; and Mr. CHUNG Shui Ming Timpson, Mr. ZHANG Cheng and Mr. XIU Long were elected as independent non-executive directors of the Company. The term of office of such directors commenced from 12 March 2021 until the expiry of the term of the fifth session of the Board. At the same time, Mr. JIA Huiping was elected as a shareholder representative supervisor of the fifth session of the Supervisory Committee of the Company for a term commenced from 12 March 2021 until the expiry of the term of the fifth session of the Supervisory Committee of the Company. In addition, the first meeting of the fifth session of the Supervisory Committee of the Company was held on 12 March 2021, at which Mr. JIA Huiping was elected as the Chairman of the Supervisory Committee.

The first meeting of the fifth session of the Board of the Company was held on 12 March 2021, at which Mr. CHEN Yun was elected as the Chairman of the Board, Mr. CHEN Wenjian was appointed as the President of the Company, Mr. SUN Cui was appointed as the Chief Accountant of the Company, Mr. YU Tengqun was appointed as a vice president and the General Legal Advisor of the Company, Mr. LIU Baolong and Mr. REN Hongpeng were appointed as vice presidents of the Company, Mr. KONG Dun was appointed as the Chief Engineer of the Company, Mr. MA Jiangqian was appointed as the Chief Economist of the Company, Mr. LI Fengchao was appointed as the Chief Safety Production Officer of the Company, Mr. HE Wen was appointed as the Secretary to the Board of Directors and a Joint Company Secretary of the Company, and Mr. TAM Chun Chung was appointed as a Joint Company Secretary of the Company. The term of office of such senior management commenced from the date when the Board approved the appointment until the expiry of the term of the fifth session of the Board.

The fifth meeting of the fifth session of the Board of the Company was held on 30 April 2021, at which Mr. KONG Dun was appointed as a vice president of the Company while serving as the Chief Engineer; Mr. MA Jiangqian was appointed as a vice president of the Company while serving as the Chief Economist; Mr. LI Xincheng was appointed as a vice president of the Company.

The second joint conference for chief of delegation of the second meeting of the third session of the employee representative general meeting of the Company was held on 29 September 2021, at which Mr. WAN Ming was elected to be an employee representative supervisor of the fifth session of the Supervisory Committee of the Company.

On 1 February 2022, LI Fengchao, the Chief Safety Production Officer and the Head (Supervisor) of the safety, quality and environmental protection supervision department (office of emergency management) retired due to age.

The biographical details of the current directors, supervisors and senior management of the Company are set out in "Biography of Directors, Supervisors and Senior Management".

REPORT OF THE DIRECTORS

Directors' and Supervisors' Interests in Contracts

No transaction, arrangement or contract of significance to which the Company, or the Company's holding company or subsidiary or a subsidiary of the Company's holding company was a party and in which a director or supervisor of the Company had a material interest, whether directly or indirectly, subsisted at the end of the financial year or at any time during the financial year.

Emoluments of the Directors, Supervisors and Senior Management of the Company

Details of the emoluments of the directors, supervisors and senior management of the Company in 2021 are set out in notes 17 and 50 to the audited Financial Statements.

Directors' and Supervisors' Rights to Acquire Shares or Debentures

For the year ended 31 December 2021, none of the Company or the Company's holding company or subsidiary or a subsidiary of the Company's holding company was a party to any arrangement to enable the Company's directors, supervisors or their respective spouses or minor children to acquire shares in or debentures of the Company or any other body corporate.

Directors' and Supervisors' Service Contracts

None of the directors and supervisors of the Company has entered into a service contract with the Company or its subsidiary that is not terminable within one year without payment of compensation (in addition to statutory compensation).

Permitted Indemnity Provisions

The Company has not entered into any agreement with permitted indemnity provisions with directors or supervisors of the Company to provide indemnity to a director or a supervisor of the Company against liability incurred by the director or the supervisor to third parties or other types of liabilities.

However, during the financial year, the Company has purchased appropriate liability insurance coverage for the directors, supervisors and senior management of the Company.

Directors' and Supervisors' Interests and Short Positions in Shares, Underlying Shares and Debentures

As at 31 December 2021, none of the directors and supervisors of the Company had any interests or short positions in the shares, underlying shares and debentures of the Company or any of its associated corporations (within the meaning of Part XV of the Securities and Futures Ordinance (Chapter 571 of the Laws of Hong Kong) (the "SFO") which will have to be notified to the Company and the Hong Kong Stock Exchange pursuant to Divisions 7 and 8 of Part XV of the SFO (including interests and short positions which they are taken or deemed to have under such provisions of the SFO), or which will be required, pursuant to section 352 of the SFO, to be entered in the register referred to therein or which will be required to be notified to the Company and the Hong Kong Stock Exchange pursuant to the Model Code for Securities Transactions by Directors of Listed Issuers.

REPORT OF THE DIRECTORS

Substantial Shareholders and Holders of Interests or Short Positions Required to be Disclosed under Divisions 2 and 3 of Part XV of the Securities and Futures Ordinance

As at 31 December 2021, the Company had been informed by the following persons that they had interests or short positions in the shares or underlying shares of the Company as recorded in the register required to be maintained under Section 336 of the SFO:

Holder of A Shares

Name of substantial shareholders	Capacity	Number of A shares held (Shares)	Nature of interest	Approximate percentage of issued A shares (%)	Approximate percentage of total issued shares (%)
CREC	Beneficial owner	11,434,370,390	Long position	56.15	46.54

Holder of H Shares

Name of substantial shareholders	Capacity	Number of H shares held (Shares)	Nature of interest	Approximate percentage of issued H shares (%)	Approximate percentage of total issued shares (%)
BlackRock, Inc.	Interest of controlled corporations	210,681,172	Long position	5.01	0.86
		26,066,000	Short position	0.62	0.11
Deutsche Bank Aktiengesellschaft	(Note 1)	229,803,271	Long position	5.46	0.94
		123,424,962	Short position	2.93	0.50
		10,406,000	Lending Pool	0.25	0.04
Lehman Brothers Holdings Inc.	Interest of controlled corporations	210,186,560	Long position	5.00	0.86
		94,560,550	Short position	2.25	0.38

REPORT OF THE DIRECTORS

Notes:

- 1 According to the Corporate Substantial Shareholder Notice filed by Deutsche Bank Aktiengesellschaft with the Hong Kong Stock Exchange dated 13 January 2014, the interests held by Deutsche Bank Aktiengesellschaft were held in the following capacities:

Capacity	Number of H shares (Long position)	Number of H shares (Short position)
Beneficial owner	139,171,310	123,424,962
Person having a security interest in shares	17,515,361	-
Interest of controlled corporations	54,042,600	-
Custodian corporation	10,406,000	-
Others	8,668,000	-

- 2 The interests or short positions include the underlying shares as follows:

Name of substantial shareholders	Long Position				Short Position			
	Listed equity		Non-listed equity		Listed equity		Non-listed equity	
	derivative	derivatives	equity	equity	derivative	derivatives	equity	equity
	payment	settled	payment	settled	payment	settled	payment	settled
	in kind	in cash	in kind	in cash	in kind	in cash	in kind	in cash
BlackRock, Inc.	-	-	-	5,885,000	-	-	-	1,116,000
Deutsche Bank Aktiengesellschaft	-	-	-	17,624,000	-	-	-	10,166,000
Lehman Brothers Holdings Inc.	-	-	10,000,000	-	-	-	60,000	-

Apart from the foregoing, as at 31 December 2021, no person or corporation had any interest in the share capital of the Company as recorded in the register required to be kept under section 336 of the SFO as having an interest of or any short position in the issued share capital of the Company that would fall to be disclosed to the Company under Divisions 2 and 3 of Part XV of the SFO.

Competing Business

None of the Company's directors held any interest in any business that competes or competed or is or was likely to compete, either directly or indirectly, with the Group.

Connected Transactions

1. Continuing Connected Transactions Defined under the Listing Rules

CREC is the Company's controlling shareholder and is therefore one of the Company's connected persons under the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong (the "Listing Rules"). Transactions between the Company and/or its subsidiaries and CREC and/or its associates constitute connected transactions.

REPORT OF THE DIRECTORS

Financial Services Framework Agreement between China Railway Finance Co, Ltd. (“China Railway Finance”) and CREC

On 29 April 2014, China Railway Finance (a subsidiary of the Company, with 95% of its equity interest being held by the Company and 5% of its equity interest being held by CREC) executed a financial services framework agreement with CREC (the “**Financial Services Framework Agreement**”), which took effect upon the completion of relevant statutory procedures, being 16 March 2014, till 31 December 2015. Subsequently, on 29 December 2015, China Railway Finance and CREC entered into a financial services framework renewal agreement with a term of three years. Pursuant to the Financial Services Framework Agreement, China Railway Finance agreed to provide deposit services, loan services and other financial services to CREC in accordance with the terms and conditions stipulated in the agreement.

On 27 December 2018, China Railway Finance and CREC further entered into a financial services framework renewal agreement, effective from 1 January 2019 to 31 December 2021, to further renew the Financial Services Framework Agreement. The Company has made announcement in respect of this financial services framework renewal agreement on 27 December 2018.

The annual caps for the year of 2019, 2020 and 2021 under this financial services framework renewal agreement are as follows:

	For the financial year ended 31 December		
	2019	2020	2021
	RMB	RMB	RMB
(i) deposit service			
The maximum of daily deposit balance in China Railway Finance by CREC (including interest accrued)	20,000,000,000	20,000,000,000	20,000,000,000
(ii) loan service			
The maximum of daily loan balance from China Railway Finance to CREC (including interest accrued)	3,500,000,000	3,500,000,000	3,500,000,000
(iii) other financial services			
The aggregate annual amount of maximum service fees for financial services provided by China Railway Finance to CREC	80,000,000	80,000,000	80,000,000

REPORT OF THE DIRECTORS

The factors in determining the above proposed annual caps include: (1) historical transaction amount; (2) the strategy of financial management of the Company by taking into account the cash flow and capital needs as required by the business expansion plan of the Group; and (3) the effective and reasonable control of financial risks. The Company has made announcement in respect of this financial services framework renewal agreement on 27 December 2018.

On 30 December 2021, China Railway Finance and CREC further entered into a financial services framework renewal agreement (the “**Financial Services Framework Renewal Agreement 2022**”), effective from 1 January 2022 to 31 December 2024, to further renew the Financial Services Framework Agreement. The Company has made announcement in respect of the Financial Services Framework Renewal Agreement 2022 on 30 December 2021.

The annual caps for the year of 2022, 2023 and 2024 under the Financial Services Framework Renewal Agreement 2022 are as follows:

	For the financial year ending 31 December		
	2022	2023	2024
	<i>RMB</i>	<i>RMB</i>	<i>RMB</i>
(i) deposit service			
The maximum of daily deposit balance in China Railway Finance by CREC (including interest accrued)	20,000,000,000	20,000,000,000	20,000,000,000
(ii) loan service			
The maximum of daily loan balance from China Railway Finance to CREC (including interest accrued)	500,000,000	500,000,000	500,000,000
(iii) other financial services			
The aggregate annual amount of maximum service fees for financial services provided by China Railway Finance to CREC	80,000,000	80,000,000	80,000,000

REPORT OF THE DIRECTORS

The Company confirms that the signing and execution of specific agreements under the continuing connected transactions during the reporting period have complied with the pricing principles of these continuing connected transactions.

The independent non-executive directors of the Company are of the opinion that, during the financial year, the above continuing connected transactions between the Group and the CREC were entered into:

- (i) in the ordinary and usual course of business of the Group;
- (ii) either on normal commercial terms or better; and
- (iii) in accordance with the relevant agreements governing them on terms that are fair and reasonable and in the interests of the shareholders of the Company as a whole.

Pursuant to Rule 14A.56 of the Listing Rules, the Company must engage its auditors to report on the continuing connected transaction every year. The auditors must provide a letter to the Company's Board of Directors confirming whether anything has come to their attention that causes them to believe that the continuing connected transactions:

- (i) have not been approved by the Board of Directors;
- (ii) were not, in all material aspects, in accordance with the pricing policies of the Group if the transactions involve the provision of goods or services by the Group;
- (iii) were not entered into, in all material respects, in accordance with the relevant agreement governing the transactions; and
- (iv) have exceeded the cap.

In order to comply with the above requirements, the Board of Directors engaged the auditor of the Company to report on the Group's continuing connected transactions in accordance with Hong Kong Standard on Assurance Engagements 3000 "Assurance Engagements other than Audits or Reviews of Historical Financial Information" and with reference to Practice Note 740 "Auditor's Letter on Continuing Connected Transactions under the Listing Rules" issued by the Hong Kong Institute of Certified Public Accountants. The auditor has issued its unqualified letter containing the findings and conclusions in respect of the continuing connected transactions disclosed by the Group in pages 76 to 79 of this annual report in accordance with Rule 14A.56 of the Listing Rules. A copy of the auditor's letter has been provided by the Company for submission to the Hong Kong Stock Exchange.

In respect of the above continuing connected transactions, the Company has complied with the disclosure requirements under the Listing Rules in force from time to time.

REPORT OF THE DIRECTORS

2. Significant Related Party Transactions as Defined under PRC Laws and Regulations

Details of the significant related party transactions as defined by PRC laws and regulations during the reporting period are set out on pages 271 to 274 of this annual report. The Company confirms save and except for those continuing connected transactions set out in the section “Continuing Connected Transactions Defined under the Listing Rules” above, the other transactions were not regarded as connected transactions or continuing connected transactions under the Listing Rules or were exempt from reporting, announcement and shareholders’ approval requirements under the Listing Rules.

3. Contract of Significance

Save as disclosed in this annual report, there were no contracts of significance between the Company or any of its subsidiaries and a controlling shareholder or any of its subsidiaries or any contracts of significance for the provision of services to the Company or any of its subsidiaries by a controlling shareholder or any of its subsidiaries.

Purchase, Sale or Redemption of the Company’s Listed Securities

During the financial year, neither the Company nor any of its subsidiaries purchased, sold or redeemed any of the Company’s listed securities.

Pre-emptive Rights

There are no provisions for pre-emptive rights pursuant to the Company’s articles of association (the “**Articles of Association**”) and the relevant laws and regulations of the PRC.

Equity-linked Agreements

No equity-linked agreements were entered into by the Company during the financial year, or existed as at 31 December 2021.

Bank and Other Loans

Details of bank and other loans of the Group as at 31 December 2021 are set out in note 42 to the Financial Statements.

Management Contract

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

REPORT OF THE DIRECTORS

Financial Summary

The summary of the audited consolidated statement of profit or loss and of the audited statements of the assets and liabilities of the Group for the last five financial years is set out on pages 2 to 3 of this annual report.

Emolument Policy

The Group has been devoted to continuously promoting the construction of a market-based remuneration distribution mechanism, improving a remuneration management system that is scientific and reasonable, fair and equitable, normative and orderly, in accordance with the requirements of the modern enterprise system, focused on the incentive and constraint functions that remuneration distribution may serve, and aimed to attract and retain the core talents of the Group and maintain the reasonable and orderly growth in remuneration. In respect of remuneration policies, the Group issued the Guidance of China Railway Group Limited on Further Strengthening Market-Based Remuneration Management, the Guidance of China Railway Group Limited on Strengthening Key Talent Remuneration Distribution, the Measures for the Management of Medium – and Long-Term Incentive of China Railway Group Limited, the Regulations of Management of Equity Incentives for Listed Companies of China Railway Group Limited, the Regulations of Management of Sharing of Excess Profit of China Railway Group Limited, the Regulations of the Implementation of Co-investment Management of China Railway Group Limited and other systems, and optimized the long-term incentive mechanism in which production elements such as “technology, knowledge, management” are incorporated in the distribution and, by combining with the employee stock ownership management system and the equity and dividend management system of scientific and technological enterprises previously issued by the Group, built a comprehensive medium – and long-term incentive system to further enrich the remuneration distribution mode.

Employee remuneration of the Group comprises basic salary, performance-based bonus and allowances and subsidies. In accordance with the PRC laws, the Group entered into an employment contract with each of its employees. Such contracts include provisions on wages, vacation, employee benefits, training programs, health and safety, confidentiality obligations and grounds for termination. In accordance with the national policies, the Group makes full contributions to the employee pension contribution plan, medical insurance, unemployment insurance, maternity insurance, workers’ compensation insurance and housing provident fund. In addition to statutory contributions, the Group also provides voluntary benefits to employees. These benefits include the enterprise annuities for employees.

The remuneration of executive directors of the Group is on an annual basis and consists of base salary and performance-based bonus. According to the Salary (Remuneration, Work Subsidy) Management Measures of Directors and Supervisors of China Railway Group Limited, the remuneration of independent non-executive directors shall be determined with reference to provisions on the board of directors’ pilot scheme of remuneration and treatment of external directors of central enterprises issued by the SASAC. For the head of central enterprises who has left the current office and serves as an independent non-executive director, the remuneration shall be determined with reference to the requirements of the SASAC on the relevant matters regarding the payment of work subsidies for the head of central enterprises who has left the current office and serves as an external director.

REPORT OF THE DIRECTORS

In 2021, the Group continued to thoroughly implement the Cadres Education and Training Work Regulations and the National Cadres Education and Training Plan for 2018-2022, by scientifically formulating training plans, coordinating and classifying the education and training of cadres at all levels, strengthening the training of key talents, ensuring that the training is highly consistent with enterprise development and talent training, accelerating the improvement of the quality of staff and promoting the enhancement of enterprise development ability. During the year, the Group overcame the impact of the epidemic, strictly implemented the training, strengthened trainings on political theories, ideals and beliefs, as well as operation and management and business knowledge. The headquarters held 58 training lessons for 7758 persons. In accordance with the “three-in-one” training system for leaders of “calcium supplement, foundation building and energy improvement”, four sessions of leadership training were held and 203 leaders under the management of the company’s Party committee were trained, which strengthened the theoretical armed force of the Party and improved the ability to govern and prosper the enterprise. Based on the characteristics of young cadres and rules for talent training, and the “five forces model” training system, the training course for middle-aged and young cadres and the first training course for young cadres were held. 105 cadres at department level were systematically trained to further strengthen the theoretical belief of the young cadres, improve the level of controlling and managing enterprises, and reserve a pool of outstanding young cadres who will be able to take major roles in enterprise development. A series of special lectures were held for improving the quality of the headquarters staff to continuously improve the performance ability and comprehensive quality of the headquarters staff. In order to strengthen the construction of the highly skilled talent team, improve the theoretical level of the highly skilled talents and promote the spirit of craftsmen, three training courses for highly skilled talents were held to offer “four new” skill training to 224 senior technicians. In order to strengthen the management of the construction site, improve the comprehensive quality of the professionals on the construction site and promote the training of professionals at construction site, 89 training sessions were held and a total of 7051 persons were trained and qualified, so as to promote the improvement of safety production and project quality.

In 2022, the Group will continuously implement the requirements of the Party Central Committee and the SASAC for the training of personnel, take Xi Jinping’s thought on socialism with Chinese characteristics for a new era as the guide and fully implement the spirit of the 19th CPC National Congress and all previous plenary sessions of the 19th CPC National Congress to launch targeted and time-sensitive quality training courses in respect of leadership enhancement, training of outstanding young cadres, market development, investment business, financial management, cost business, international business, party mass, cutting edge technology and professional management, etc. to help cultivate professional talent teams of high quality.

REPORT OF THE DIRECTORS

The personnel expenses of the Company for the year ended 31 December 2021 were RMB51.148 billion. As at 31 December 2021, the number of employees hired by the Group was 294,013. The following table sets forth a breakdown of the Group's employees by professional composition as at 31 December 2021:

Professional Composition	Number of employees as at 31 December 2021
Production staff	76,059
Salesperson	15,722
Technical personnel	72,550
Financial staff	19,010
Administrative staff	101,026
Other personnel	9,647
Total	294,013

Education Level	Number of employees as at 31 December 2021
Doctor degree candidate	302
Master degree candidate	12,341
Undergraduate	149,226
Junior College and below	132,144
Total	294,013

REPORT OF THE DIRECTORS

Employee Retirement Benefits

Particulars of the employee retirement benefits of the Group are set out in note 43 to the Financial Statements.

Public Float

As at the date of this annual report, the Company has maintained sufficient public float, based on the information that is publicly available to the Company and within the knowledge of the directors of the Company.

Compliance with the Corporate Governance Code

For details of the Company's corporate governance practices, please refer to the Report on Corporate Governance Practices on pages 85 to 106 of this annual report.

Auditors

The 2021 financial statements of the Company which were prepared in accordance with the International Financial Reporting Standards were audited by PricewaterhouseCoopers, and the financial statements prepared in accordance with the Chinese Accounting Standards were audited by PricewaterhouseCoopers Zhong Tian LLP.

All references in this part of the annual report (Report of the Directors) to other parts, sections of or notes in the annual report, form part of the Report of the Directors.

By order of the Board of Directors

CHEN Yun

Chairman

Beijing, the PRC

30 March 2022



REPORT ON CORPORATE GOVERNANCE PRACTICES



Overview

During the reporting period, the Company has complied with the laws and regulations of the places where it operates its business as well as the regulations and guidelines prescribed by regulatory authorities such as the CSRC, the Securities and Futures Commission, the Shanghai Stock Exchange and the Hong Kong Stock Exchange. The goals of the Company are to ensure the sustainable long-term development of the Company and generate greater returns for its shareholders. The Board believes that, in order to achieve these goals, the Company must implement and maintain corporate governance principles of and structures consistent with integrity, transparency, openness and effectiveness. For this reason, the Company has taken various measures to achieve an effective Board of Directors, including the establishment of five committees under the Board, i.e. the Strategy Committee, the Audit and Risk Management Committee, the Remuneration Committee, the Nomination Committee and the Safety, Health and Environmental Protection Committee, and setting up relevant functional departments. We have adopted internal working procedures to ensure accurate and timely information disclosure in accordance with the requirements under the Listing Rules as well as the requirements under relevant PRC laws and regulations. The Company will continue to adopt measures to refine its corporate governance structures, improve its corporate governance and enhance practices in corporate governance standards in light of the actual circumstances of the Company.

Corporate Governance Framework

Pursuant to the requirements of the Company Law, the Securities Law, the Listing Rules and other relevant laws and regulations, the Company established a corporate governance framework comprising the Shareholders' General Meeting, the Board of Directors, the Supervisory Committee and senior management.

Compliance with the Code Provisions of the Corporate Governance Code

As a company listed on the main board of the Hong Kong Stock Exchange, the Company is committed to complying with the principles of the Corporate Governance Code set out in Appendix 14 to the Listing Rules. The Company has complied with all provisions of the Corporate Governance Code during the reporting period and the principles as set out in the Corporate Governance Code have been applied in our corporate governance structure.

REPORT ON CORPORATE GOVERNANCE PRACTICES

Shareholders' General Meeting

The Shareholders' General Meeting is an organ of power of the Company. In accordance with the requirements of the Company Law, the Securities Law and other relevant laws and regulations, the Company formulated the Articles of Association and the Procedural Rules for Shareholders' General Meeting to regulate the convening, consideration and voting procedures for shareholders' general meetings.

During the reporting period, the Company convened and held three shareholders' general meeting, being the 2021 first extraordinary general meeting held on 12 March 2021, the 2020 annual general meeting held on 23 June 2021, and the 2021 second extraordinary general meeting and 2021 first A share class meeting held on 30 December 2021. At the 2021 first extraordinary general meeting, eight ordinary resolutions were considered and approved, including the election and re-election of directors and recommendation on the election of shareholder representative supervisors. At the 2020 annual general meeting, a total of 11 ordinary resolutions were considered and approved, including the 2020 report of the Board of Directors, the 2020 report of the Supervisory Committee, the 2020 work report of independent directors of the Company, the 2020 A share annual report and the abstract, H share annual report and results announcement for the year of 2020, the 2020 audited consolidated financial statements, the 2020 profit distribution plan, the appointment of the external auditors for 2021, the appointment of internal control auditors for 2021, the salary (remuneration, work subsidy) of directors and supervisors of the Company for the year of 2020, the purchase of liabilities insurance for directors, supervisors and senior management of the Company for the year of 2021, and the provision of the total amount of external guarantee by the Company for the second half of 2021 to the first half of 2022. At the 2021 second extraordinary general meeting and 2021 first A share class meeting, a total of 4 special resolutions were considered and approved, including the proposed 2021 restricted share incentive scheme of China Railway Group Limited and other relevant proposals, and one ordinary resolution was considered and approved, i.e., the grant of the restricted shares by the 2021 restricted share incentive scheme of China Railway Group Limited to the connected persons of the Company under the listing rules of The Stock Exchange of Hong Kong Limited. The meetings were convened in compliance with relevant legal procedures which safeguarded shareholders' participation and exercise of rights.

REPORT ON CORPORATE GOVERNANCE PRACTICES

The table below sets out the details of general meetings attendance of each director during the reporting period:

Director	Number of meetings requiring attendance	Number of meetings attended in person	Number of meetings attended by proxy
CHEN Yun (re-elected on 12 March 2021)	3	3	0
CHEN Wenjian (elected on 12 March 2021)	3	3	0
WANG Shiqi (re-elected on 12 March 2021)	3	3	0
WEN Limin (elected on 12 March 2021)	3	3	0
CHUNG Shui Ming Timpson (re-elected on 12 March 2021)	3	3	0
ZHANG Cheng (elected on 12 March 2021)	3	3	0
XIU Long (elected on 12 March 2021)	3	3	0
GUO Peizhang (resigned on 12 March 2021)	1	1	0
WEN Baoman (resigned on 12 March 2021)	1	1	0
ZHENG Qingzhi (resigned on 12 March 2021)	1	1	0

The Board of Directors

1. Composition of the Board of Directors

During the reporting period, the members of the Board of the Company were as follows:

Name	Title
CHEN Yun (re-elected on 12 March 2021)	Chairman and Executive Director
CHEN Wenjian (elected on 12 March 2021)	Executive Director and President
WANG Shiqi (re-elected on 12 March 2021)	Executive Director
WEN Limin (elected on 12 March 2021)	Non-executive Director
CHUNG Shui Ming Timpson (re-elected on 12 March 2021)	Independent Non-executive Director
ZHANG Cheng (elected on 12 March 2021)	Independent Non-executive Director
XIU Long (elected on 12 March 2021)	Independent Non-executive Director
GUO Peizhang (resigned on 12 March 2021)	Independent Non-executive Director
WEN Baoman (resigned on 12 March 2021)	Independent Non-executive Director
ZHENG Qingzhi (resigned on 12 March 2021)	Independent Non-executive Director

There was no financial, business, family or other material relationship among the directors of the Company.

REPORT ON CORPORATE GOVERNANCE PRACTICES

During the reporting period, the Company complied with Rules 3.10(1) and 3.10(2) of the Listing Rules which require the Company to maintain at least three independent non-executive directors and have an independent non-executive director with appropriate professional qualifications or accounting or financial management expertise.

Three seventh of the members of the Board of Directors are independent non-executive directors, which is in compliance with Rule 3.10A of the Listing Rules which requires independent non-executive directors of the Company must represent at least one-third of the Board of Directors. The Company has received confirmation of independence from the independent non-executive directors in accordance with Rule 3.13 of the Listing Rules and the Company considered each independent non-executive director as independent.

Pursuant to the Articles of Association, the term of office of each director of the Company (including the non-executive directors and the independent non-executive directors) is three years which is renewable upon re-election and each independent non-executive director shall not serve for more than six consecutive years in order to ensure his independence.

2. Board Meetings

In 2021, the Company held 14 Board meetings, 9 of which were on-site meetings and 5 of which were meetings held by communications. Proposals in relation to the strategic planning, periodical reports, internal control and investment were considered and passed at these Board meetings, and heard briefings regarding research, rule of law and compliance, implementation of resolutions and market capitalisation management.

The table below sets out the details of Board meeting attendance of each director during the reporting period.

Director	Number of meetings requiring attendance	Number of meetings attended in person	Number of meetings held by communications	Number of meetings attended by proxy
CHEN Yun (re-elected on 12 March 2021)	14	9	5	–
CHEN Wenjian (elected on 12 March 2021)	12	7	4	1
WANG Shiqi (re-elected on 12 March 2021)	14	9	5	–
WEN Limin (elected on 12 March 2021)	12	8	4	–
CHUNG Shui Ming Timpson (re-elected on 12 March 2021)	14	9	5	–
ZHANG Cheng (elected on 12 March 2021)	12	8	4	–
XIU Long (elected on 12 March 2021)	12	8	4	–
GUO Peizhang (resigned on 12 March 2021)	2	1	1	–
WEN Baoman (resigned on 12 March 2021)	2	1	1	–
ZHENG Qingzhi (resigned on 12 March 2021)	2	1	1	–

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3. Responsibilities and Operation of the Board

The responsibilities of the Board of Directors are, among other things, convening shareholders' general meetings and reporting its work to shareholders at such meetings, implementing resolutions of the shareholders' general meeting, making decisions on its business strategies, business plans and major investment plans of the Company, formulating proposed annual financial budgets and final accounts, formulating profit distribution plans and (where applicable) plans for making up losses previously incurred, formulating plans relating to the increase or reduction of the Company's registered capital, the issue of corporate bonds or other securities, and (where applicable) the listing of such securities, deciding the Company's internal management scheme, developing and reviewing the Company's policies and practices on corporate governance and making recommendations to the Board of Directors, reviewing and monitoring the training and continuous professional development of the directors and the senior management, reviewing and monitoring the Company's policies and practices on the compliance with law and regulatory requirements, formulating, reviewing and monitoring the code of conduct and compliance manual applicable to the employees and the directors, reviewing the Company's compliance with corporate governance, and the disclosures made in the Corporate Governance Report, and exercising any other powers conferred by the shareholders' general meeting or under the Articles of Association.

There are currently five committees established under the Board of Directors, being the Strategy Committee, the Audit and Risk Management Committee, the Remuneration Committee, the Nomination Committee and the Safety, Health and Environmental Protection Committee. Each committee has its own rules of procedures.

The offices of the Chairman and President of the Company are held by different persons and division of power between the Board of Directors and the senior management strictly complies with the Articles of Association and the relevant regulations. The Board of Directors formulates the overall strategy of the Company and monitors the financial performance of the Company. The management of the Company implements the strategic plans as determined by the Board of Directors and is responsible for the daily operations and management of the Company. The Chairman is responsible for convening and presiding over Board meetings, supervising the implementation of the Board's resolutions and coordinating the operation of the Board of Directors. Pursuant to the Articles of Association, the President is delegated with the authority to, among other things, oversee the operation and management of the Company, implement the decisions of the Board of Directors, carry out investment plans and formulate the basic management policies of the Company.

4. Model Code for Securities Transactions by Directors

The Company has 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 for securities transactions by its directors and supervisors. After specific enquiries to all directors and supervisors, the Company confirms that the directors and supervisors complied with the standards set out in the Model Code during the reporting period.

REPORT ON CORPORATE GOVERNANCE PRACTICES

5. Director's Training

Directors are encouraged to participate in various continuing professional development to develop and refresh their knowledge and skills in order to constantly improve their abilities to perform duties and make their contributions for the Board of Directors. In 2021, the State-owned Assets Supervision and Administration Commission of the State Council, the Shanghai Stock Exchange, the China Association of Listed Companies, and the Beijing Association of Listed Companies successively held "Special Trainings for Listed Companies Controlled by Central Enterprises" for the purpose of improving the quality of listed companies, in order to promote the construction of the board of directors of central enterprises, including seminars and special trainings on capital operations on the topics of infrastructure REITs and the implementation of equity based incentives of listed companies. Directors participated in these trainings, in particular, CHEN Yun and CHEN Wenjian each attended three trainings, WANG Shiqi attended two trainings, Wen Limin attended four trainings, ZHANG Cheng attended three trainings and Xiu Long attended 3 trainings.

6. Committees under the Board

As of the end of 2021, the composition of the committees under the Board of Directors was as follows: Mr. CHEN Yun, Mr. CHEN Wenjian, Mr. WANG Shiqi, Mr. CHUNG Shui Ming Timpson and Mr. XIU Long were members and Mr. CHEN Yun was the Chairman of the Strategy Committee of the Board of Directors, Mr. CHUNG Shui Ming Timpson, Mr. WEN Limin and Mr. ZHANG Cheng were members and Mr. CHUNG Shui Ming Timpson was the Chairman of the Audit and Risk Management Committee of the Board of Directors, Mr. XIU Long, Mr. WEN Limin and Mr. ZHANG Cheng were members and Mr. XIU Long was the Chairman of the Remuneration Committee of the Board of Directors, Mr. CHEN Yun, Mr. CHEN Wenjian, Mr. CHUNG Shui Ming Timpson, Mr. ZHANG Cheng and Mr. XIU Long were members and Mr. CHEN Yun was the Chairman of the Nomination Committee of the Board of Directors, and Mr. CHEN Wenjian, Mr. WANG Shiqi, Mr. WEN Limin, Mr. ZHANG Cheng and Mr. XIU Long members and Mr. CHEN Wenjian was the Chairman of the Safety, Health and Environmental Protection Committee of the Board.

(a) Strategy Committee

The primary responsibilities of the Strategy Committee include, among other things, reviewing proposals and making recommendations to the Board of Directors regarding the Company's strategic development plans, annual budget, capital allocation plan, major mergers and acquisitions, major investment and financing plans and material internal reorganization.

As of the end of 2021, the Strategy Committee comprised Mr. CHEN Yun, Mr. CHEN Wenjian and Mr. WANG Shiqi, who are executive directors, and Mr. CHUNG Shui Ming Timpson and Mr. XIU Long, who are independent non-executive directors, and is chaired by Mr. CHEN Yun.

During the reporting period, the Strategy Committee held two meetings, at which seven reports were heard, including the "Report on the Implementation of the "13th Five-Year Plan", "14th Five-Year Plan" Work Strategy and Key Work Arrangements in 2021", "Report on Market Value Management in the First Half of 2021", and two proposals were considered including "Proposal on China Railway's 14th Five-Year Plan".

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The table below sets out the details of meeting attendance of each member of the Strategy Committee during the reporting period.

Director	Number of meetings requiring attendance	Number of meetings attended in person	Number of meetings attended by proxy
CHEN Yun (served as a member of the Strategy Committee since 30 October 2019 and served as the Chairman of the Strategy Committee since 22 December 2020)	2	2	–
CHEN Wenjian (appointed on 12 March 2021)	2	2	–
WANG Shiqi (served as a member of the Strategy Committee since 29 April 2020)	2	2	–
CHUNG Shui Ming Timpson (appointed on 12 March 2021)	2	2	–
XIU Long (appointed 12 March 2021)	2	2	–
GUO Peizhang (resigned on 12 March 2021)	–	–	–

(b) Audit and Risk Management Committee

The primary responsibilities of the Audit and Risk Management Committee are:

- (1) making recommendations to the Board of Directors on the appointment, reappointment and removal of the external auditors, and approving the remuneration and terms of engagement of the external auditors;
- (2) reviewing and overseeing the external auditors' independence and objectivity and the effectiveness of the audit process;
- (3) overseeing the integrity of the financial statements of the Company and the Company's annual report and accounts, interim report and quarterly reports, and reviewing significant financial reporting judgments contained in such reports;
- (4) overseeing the Company's financial reporting system and risk management and internal control procedures, including but not limited to, reviewing the financial control, risk management and internal control systems, deliberating on actions to be taken in respect of any findings of major investigations of risk management and internal control matters as delegated by the Board of Directors or at its own initiative and management's response thereto, and reviewing the Group's financial and accounting policies and practices; and
- (5) reviewing arrangements that employees of the Company can use, in confidence, to raise concerns about possible improprieties in financial reporting, internal control or other matters.

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The Audit and Risk Management Committee's terms of reference are available on the websites of the Company and the Hong Kong Stock Exchange.

As of the end of 2021, the Audit and Risk Management Committee comprised Mr. CHUNG Shui Ming Timpson, who is an independent non-executive director, Mr. WEN Limin, who is a non-executive director, and Mr. ZHANG Cheng, who is an independent non-executive director, and is chaired by Mr. CHUNG Shui Ming Timpson.

During the reporting period, the Audit and Risk Management Committee held six meetings, at which a total of 29 proposals were considered, including the periodical reports, financial statements, and proposals on internal auditing, internal control assessment and risk management, and heard nine briefings.

The table below sets out the details of meeting attendance of each member of the Audit and Risk Management Committee during the reporting period.

Director	Number of meetings requiring attendance	Number of meetings attended in person	Number of meetings attended by proxy
CHUNG Shui Ming Timpson (served as a member of the Audit and Risk Management Committee since 28 June 2017 and served as the Chairman of the Audit and Risk Management Committee since 12 March 2021)	6	6	–
WEN Limin (appointed on 12 March 2021)	6	6	–
ZHANG Cheng (appointed on 12 March 2021)	6	6	–
ZHENG Qingzhi (resigned on 12 March 2021)	–	–	–
WEN Baoman (resigned on 12 March 2021)	–	–	–

(c) Remuneration Committee

The primary responsibilities of the Remuneration Committee are:

- (1) making recommendations to the Board of the Directors on the Company's policy and structure for remuneration of directors and senior management and on the formulation of a formal and transparent process for developing policy on such remuneration;
- (2) reviewing and approving the management's remuneration proposals with reference to the corporate goals and objectives set by the Board of Directors;

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- (3) determining, as authorised by the Board of Directors, the specific remuneration packages of individual executive directors and senior management, including benefits in kind, pension rights and compensation payments, including any compensation payable for loss or termination of their office or appointment, and making recommendations to the Board of Directors in relation to the remuneration of non-executive directors;
- (4) considering salaries paid by comparable companies, time commitment and responsibilities and employment conditions of other positions in the Company; and
- (5) ensuring that no director or any of his associates is involved in deciding his own remuneration.

The Remuneration Committee's terms of reference are available on the websites of the Company and the Hong Kong Stock Exchange.

As of the end of 2021, the Remuneration Committee comprised Mr. XIU Long, who is an independent non-executive director, Mr. WEN Limin, who is a non-executive director, and Mr. ZHANG Cheng, who is an independent non-executive director, and is chaired by Mr. XIU Long.

During the reporting period, the Remuneration Committee held six meetings, at which a total of 11 proposals were considered, including the plan for the performance contract with senior management and the contract signing, remuneration and assessment payment for senior management, total remuneration management, performance remuneration and business payment management plan for personnel at all levels of the Company, performance assessment plan and remuneration management plan for responsible officer of the subordinate enterprises, and heard four briefings.

The table below sets out the details of meeting attendance of each member of the Remuneration Committee during the reporting period.

Director	Number of meetings requiring attendance	Number of meetings attended in person	Number of meetings attended by proxy
XIU Long (appointed on 12 March 2021)	6	6	–
WEN Limin (appointed on 12 March 2021)	6	6	–
ZHANG Cheng (appointed on 12 March 2021)	6	6	–
GUO Peizhang (resigned on 12 March 2021)	6	6	–
ZHENG Qingzhi (resigned on 12 March 2021)	6	6	–
WEN Baoman (resigned on 12 March 2021)	6	6	–

The emolument paid to directors, supervisors and members of senior management of the Company are determined in accordance with the contractual terms under their respective service contract. Details of the remuneration of directors and supervisors are set out in note 17 to the Financial Statements.

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(d) Nomination Committee

The primary responsibilities of the Nomination Committee are:

- (1) formulating the standards, procedures and methods for election of directors and senior management of the Company and submitting the same to the Board of Directors for consideration;
- (2) identifying individuals suitably qualified to become Board members, selecting and nominating individuals for directorship or make recommendations to the Board of Directors in this regard, reviewing the candidates for directors and President and making recommendations;
- (3) reviewing the structure, size and composition (including the skills, knowledge and experience) of the Board of Directors at least annually and making recommendations on any changes to the Board of Directors proposed to support the Company's corporate strategy;
- (4) assessing the independence of independent non-executive directors of the Company; and
- (5) making recommendations to the Board of Directors on the appointment or re-appointment of directors and succession planning for directors, in particular the Chairman and the President.

The Nomination Committee's terms of reference are available on the websites of the Company and the Hong Kong Stock Exchange.

As of the end of 2021, the Nomination Committee comprised Mr. CHEN Yun and Mr. CHEN Wenjian, who are executive directors, and Mr. CHUNG Shui Ming Timpson, Mr. ZHANG Cheng and Mr. XIU Long, who are independent non-executive directors, and is chaired by Mr CHEN Yun.

According to the nomination policy adopted by the Company, the Nomination Committee shall nominate director candidates for election in accordance with the formalities and procedures stipulated in the Articles of Association and the rules of procedures of the Nomination Committee, and consider candidates for directorship based on objective standards, including but not limited to education background, qualification, ability, industry related experience of the individual candidates and if the candidate is proposed to be elected as an independent non-executive director of the Company, whether or not such candidate meets the independence requirements under the Listing Rules.

According to the Articles of Association, the methods and procedures of nomination of director and supervisor candidates are as follows:

- (1) shareholders holding, individually or jointly, more than 3% in the total number of the outstanding voting shares of the Company may put forward in a written proposal to the general meeting of shareholders the candidates of non-independent directors and supervisors to be appointed from those other than the employee representatives, provided that the number of persons nominated must comply with the provisions of the Articles and be not more than the number of persons contemplated to be elected. The said proposal put forward by the shareholders to the Company shall be sent to the Company at least fourteen (14) days prior to the date of the general meeting of shareholders;

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- (2) the Board of Directors and the Supervisory Committee may, within the scope of the number of persons as provided in the Articles, formulate a proposed name list of the candidates of directors and supervisors who are not employee representatives according to the number of persons contemplated to be elected, and put forward the said list in a written proposal to the general meeting of shareholders;
- (3) the Company shall separately formulate a special system for the nomination of independent directors;
- (4) the written notice concerning the intention to nominate candidates of directors and supervisors and the nominees' statement for acceptance of the nomination, as well as relevant written information of the nominees, shall be sent to the Company at least seven (7) days prior to the date the general meeting of shareholders is held. The Board of Directors and the Supervisory Committee shall provide resumes and basic information of the candidates of directors and supervisors to the shareholders;
- (5) the period given by the Company to relevant nominators and nominees to submit the aforesaid notices and documents (which is counted from the next day when the notice of general meeting of shareholders is issued) shall be at least seven (7) days;
- (6) the general meeting of shareholders shall vote on each candidate of directors and supervisors one by one, except those circumstances under which the cumulative voting system is applicable;
- (7) in case of any interim increase or addition of directors and supervisors, the candidates shall be put forward and suggested by the Board of Directors and the Supervisory Committee for election or replacement by the general meeting of shareholders.

During the reporting period, the Nomination Committee held two meetings and considered six proposals.

The table below sets out the details of meeting attendance of each member of the Nomination Committee during the reporting period.

Director	Number of meetings requiring attendance	Number of meetings attended in person	Number of meetings attended by proxy
CHEN Yun (served as a member of the Nomination Committee since 30 October 2019 and served as the Chairman of the Nomination Committee since 22 December 2020)	2	2	–
CHEN Wenjian (appointed on 12 March 2021)	2	2	–
CHUNG Shui Ming Timpson	2	2	–
ZHANG Cheng (appointed on 12 March 2021)	2	2	–
XIU Long (appointed on 12 March 2021)	2	2	–
GUO Peizhang (resigned on 12 March 2021)	–	–	–
ZHENG Qingzhi (resigned on 12 March 2021)	–	–	–
WEN Baoman (resigned on 12 March 2021)	–	–	–

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In order to enhance the efficiency in decision-making of the Board and the quality of corporate governance, and to achieve diversity on the Board, the Board of Directors has adopted the Board diversity policy, which sets out the approaches to achieve diversity among members of the Board of Directors and is available on the website of the Company. When selecting Board members, the Company gives full consideration to the benefits of all aspects of Board diversity, including but not limited to gender, race, age, territory, cultural and educational background, professional experience and length of service. All the members of the Board of Directors are appointed based on meritocratic principles and eventually decided by considering their strengths and contributions they can make to the Board of Directors.

For the purpose of implementation of the Board diversity policy, the following measurable objectives were adopted by the Board:

- at least one independent non-executive director must be ordinary resident in Hong Kong;
- at least one independent non-executive director has work experience in taking charge of financial affairs in a large-scale enterprise, or is an expert in corporate financial and accounting affairs;
- at least one independent non-executive director has experience in the selection, performance review and remuneration management of senior management personnel in an enterprise;
- the number of independent non-executive directors shall not be less than one third of the members of the Board, and the number of independent non-executive directors and external non-executive directors shall be more than half of the members of the Board;
- the members of the Board shall have professional background and work experience closely related to the business development of the Company, understand the industry in which the Company conducts its business, and have the knowledge or work experience in infrastructure construction, real estate, mining resources, corporate management, accounting, economics, law, finance and etc., and most of the directors shall be experienced in decision-making on the operation and management of largescale enterprises.

For the year ended 31 December 2021, the Board has fulfilled the measurable objectives of the Board diversity policy.

(e) Safety, Health and Environmental Protection Committee

The primary responsibilities of the Safety, Health and Environmental Protection Committee include, among other things, providing guidance, inspecting and evaluating the implementation of the Company's plans on safety, health and environmental protection, making plans and recommendations to the Board of Directors regarding material matters relating to safety, health and environmental protection.

As of the end of 2021, the Safety, Health and Environmental Protection Committee comprised Mr. CHEN Yun , who is an executive director, Mr. ZHENG Qingzhi and Mr. CHUNG Shui Ming Timpson , who are independent non-executive directors, and is chaired by Mr. CHEN Yun.

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During the reporting period, the Safety, Health and Environmental Protection Committee held two meetings, at which *the Report on Safety, Quality, Health and Environmental Protection of China Railway for 2020 and the Key Working Arrangement for 2021* and *the Report on Safety Quality, Health and Environmental Protection of China Railway for the First Half Year of 2021 and the Key Working Arrangement for the Second Half Year* were heard.

The table below sets out the details of meeting attendance of each member of the Safety, Health and Environmental Protection Committee during the reporting period.

Director	Number of meetings requiring attendance	Number of meetings attended in person	Number of meetings attended by proxy
CHEN Wenjian (appointed on 12 March 2021)	2	2	–
WANG Shiqi (appointed on 12 March 2021)	2	2	–
WEN Limin (appointed on 12 March 2021)	2	2	–
ZHANG Cheng (appointed on 12 March 2021)	2	2	–
XIU Long (appointed on 12 March 2021)	2	2	–
CHEN Yun (resigned on 12 March 2021)	–	–	–
ZHENG Qingzhi (resigned on 12 March 2021)	–	–	–
CHUNG Shui Ming Timpson (resigned on 12 March 2021)	–	–	–

Supervisory Committee

The primary responsibilities of the Supervisory Committee are:

- (1) supervising the performance of directors and senior management of their duties, and proposing removal of directors or senior management who have violated laws and regulations, the Articles of Association or resolutions of shareholders' general meetings;
- (2) requesting directors and senior management to rectify any actions damaging the Company's interests;
- (3) examining the Company's financial matters;

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- (4) making proposals to convene extraordinary general meetings of shareholders, and convene and preside over shareholders' general meetings in case the Board of Directors fails to perform its duty of convening and presiding over shareholders' general meetings under the Company Law;
- (5) making proposals for shareholders' general meetings;
- (6) making proposals to convene extraordinary meetings of the Board of Directors other than regular meetings;
- (7) supervising the establishment and implementation of internal controls by Board of Directors; and
- (8) supervising the review of, voting on, disclosure and performance of connected transactions, and providing comments in the annual report.

During the reporting period, the members of the Supervisory Committee of the Company were as follows:

Name	Title
JIA Huiping (elected on 12 March 2021)	Chairman of the Supervisory Committee and Shareholder Representative Supervisor
YUAN Baoyin (elected on 10 March 2021)	Employee Representative Supervisor
LI Xiaosheng (elected on 26 January 2021)	Employee Representative Supervisor
WANG Xinhua (elected on 26 January 2021)	Employee Representative Supervisor
WAN Ming (elected on 29 September 2021)	Employee Representative Supervisor
ZHANG Huijia (resigned on 12 March 2021)	Chairman of the Supervisory Committee and Shareholder Representative Supervisor
LIU Jianyuan (resigned on 26 January 2021)	Employee Representative Supervisor
CHEN Wenxin (resigned on 12 March 2021)	Employee Representative Supervisor
FAN Jinghua (resigned on 26 January 2021)	Employee Representative Supervisor

The Supervisory Committee has detailed rules of procedures that specify its responsibilities, ensuring that the Supervisory Committee operates in a compliant and efficient manner. The term of office for each supervisor of the Company is three years which is renewable upon re-election.

During the reporting period, the Supervisory Committee held 10 meetings, considered a total of 33 proposals, and heard a total of 34 briefings. During the reporting period, the Supervisory Committee did not find any risks other than those set out in the paragraph "Business Risks" under the section "Management Discussion and Analysis" in this report, and had no objection to the supervisory matters during the reporting period.

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The table below sets out the details of meeting attendance of each member of the Supervisory Committee during the reporting period.

Supervisor	Number of meetings requiring attendance	Number of meetings attended in person	Number of meetings attended by proxy
JIA Huiping (elected on 12 March 2021)	8	8	–
YUAN Baoyin (elected on 10 March 2021)	10	6	4
LI Xiaosheng (elected on 26 January 2021)	8	8	–
WANG Xinhua (elected on 26 January 2021)	8	8	–
WAN Ming (elected on 29 September 2021)	4	4	–
ZHANG Huijia (resigned on 12 March 2021)	2	2	–
LIU Jianyuan (resigned on 26 January 2021)	1	1	–
CHEN Wenxin (resigned on 12 March 2021)	2	2	–
FAN Jinghua (resigned on 26 January 2021)	1	1	–

Joint Company Secretaries

Mr. HE Wen and Mr. TAM Chun Chung serve as joint company secretaries of the Company.

Mr. HE and Mr. TAM have confirmed that they had taken not less than 15 hours of relevant professional trainings during the reporting period.

Shareholders' Rights

1. Convening of Extraordinary General Meeting

According to the Articles of Association, the shareholders of the Company who individually or jointly hold more than 10% of the voting shares at such proposed meeting may propose to convene an extraordinary general meeting of shareholders or a class shareholders' meeting. The procedures for shareholders to convene an extraordinary general meeting or a class shareholders' meeting are stated as below:

- (1) The proposing shareholder(s) shall execute one or several copies of written request with the same form and contents to propose to the Board of Directors to convene an extraordinary general meeting of shareholders or a class shareholders' meeting and set out the topics of the meeting. The Board of Directors shall make a written response as to whether or not it agrees to convene such an extraordinary general meeting of shareholders or class shareholders' meeting within ten days upon receipt of the request in accordance with laws, regulations and the Articles of Association.

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- (2) If the Board of Directors agrees to convene an extraordinary general meeting or a class shareholders' meeting, a notice of the meeting shall be issued within five days after the resolution of the Board of Directors is passed.
- (3) In case the Board of Directors refuses to convene an extraordinary general meeting or a class shareholders' meeting, or does not give any response within ten days upon receipt of the request, the shareholders who individually or jointly hold more than 10% of the voting shares at such proposed meeting shall have the right to propose to the Supervisory Committee for convening of such meeting, and shall make such request to the Supervisory Committee in writing. If the Supervisory Committee agrees to convene an extraordinary general meeting or a class shareholders' meeting, a notice of the meeting shall be issued within five days upon receipt of the request. Changes made to the original request in the notice shall be approved by relevant shareholders. If the Supervisory Committee fails to give the notice of such a meeting within the specified time limit, it shall be deemed to have failed to convene or preside over the meeting, in which case, the shareholders who either individually or jointly hold more than 10% of the Company's shares for more than ninety consecutive days may convene and preside over the meeting by themselves.
- (4) When the Supervisory Committee or the shareholders decide to convene a general meeting of shareholders by themselves, they must notify the Board of Directors in writing and at the same time file the notice with the local branch of CSRC and the stock exchange where the Company is domiciled. Before the resolutions of general meeting of shareholders are publicly announced, the proportion of shares held by the convening shareholder should be not less than 10%. When issuing the notice of general meeting of shareholders and the public announcement of the resolutions of general meeting of shareholders, the convening shareholder shall submit relevant supporting materials to the local branch of CSRC and the stock exchange where the Company is domiciled.
- (5) For the general meeting of shareholders convened by the Supervisory Committee or the shareholders themselves, the Board of Directors and the Secretary to the Board of Directors shall provide cooperation. The Board of Directors shall provide the register of shareholders as at the date of record.

2. Putting Forward Proposals in the Shareholders' General Meeting

The procedures for putting forward proposals in the shareholders' general meeting are stated as below:

- (1) When the Company holds a general meeting of shareholders, shareholders who individually or jointly hold more than 3% of shares of the Company shall have the right to prepare a proposal to the Company. Shareholders who hold more than 3% of shares of the Company, either individually or jointly, may prepare an interim proposal and submit it in writing to the person(s) convening the meeting ten days before the general meeting of shareholders convenes. The person(s) convening the meeting shall issue a supplementary notice of the general meeting of shareholders within two days upon receipt of the proposal and publicly announce the contents of such proposal.

REPORT ON CORPORATE GOVERNANCE PRACTICES

- (2) When the Company holds an annual general meeting of shareholders, it shall send a written notice to the shareholders at least twenty clear business days prior to the meeting; when holding an extraordinary general meeting of shareholders, it shall send a written notice to the shareholders at least ten clear business days or fifteen days, whichever is longer, prior to the meeting. Shareholders intending to be present in the general meeting of shareholders shall send a written reply of attendance to the Company within the time period stipulated in the notice.

3. Enquiries to the Board

Shareholders who intend to put forward their enquiries about the Company to the Board of Directors could email their enquiries to: ir@crec.cn.

Amendment to the Articles of Association

Based on the latest revised Securities Law of the People's Republic of China which took effect in March 2020, the updated regulations in relation to the procedural requirements of shareholders' general meeting for overseas listed companies promulgated by the State Council, and taking into account the situations of the recent organizational reform of the Company as well as the Company's actual management needs, certain amendments to the Articles of Association were approved by the Company at the 2019 annual general meeting held on 23 June 2020.

Based on the Implementing Rules for the Reduction of Shares by Shareholders, Directors, Supervisors and Senior Executives of Listed Companies issued by the Shanghai Stock Exchange and the Company's actual management needs, certain amendments to the Articles of Association were approved by the Company at the 2020 second extraordinary general meeting held on 30 October 2020.

The latest version of the Articles of Association is available on the websites of the Company and the Hong Kong Stock Exchange.

Relationship with the Controlling Shareholder

CREC is the Company's controlling shareholder. The Company is independent from CREC in respect of its staff, assets, finance, organisational structure and business. During the reporting period, except for Mr. CHEN Yun, Chairman and executive director of the Company, who also serves as a chairman of CREC, Mr. CHEN Wenjian, executive director of the Company, who also serves as a director and the general manager of CREC, Mr. WANG Shiqi, executive director of the Company, who also serves as an employee director of CREC, none of the other directors, supervisors or senior management of the Company held any positions with CREC or received any salary from CREC and/or its associates. Notwithstanding the fact that Mr. CHEN Yun, Mr. CHEN Wenjian and Mr. WANG Shiqi (each an "Overlapping Director") act as directors or senior executives of CREC and directors, supervisors or senior executives of the Company respectively, they have the capacity to commit to the daily management of the Company because there was less day-to-day management work of CREC. Moreover, each of the Overlapping Director represents a minority in the Board of Directors. During the reporting period, the Board of Directors also had three independent non-executive directors, which ensured that the interests of the Company and shareholders were protected. The Company also has its own financial management system and related personnel who are independent from CREC.

REPORT ON CORPORATE GOVERNANCE PRACTICES

The Company entered into the Comprehensive Services Agreement and its renewal agreements with CREC in relation to the mutual provision of comprehensive services between the CREC and the Group on 23 November 2007, 1 January 2010, 28 March 2013 and 30 December 2015 respectively, with each valid for three years. Pursuant to the Comprehensive Services Agreement and its renewal agreements, CREC and/or its associates will provide social services, including health check, vaccination and preventive medical services, on-site medical services, prevention of occupational diseases and other special medical services to employees of the Group as well as training to the Group's employees. On 27 December 2018, the Company entered into another comprehensive services renewal agreement with CREC, effective from 1 January 2019 to 31 December 2021. None of the relevant percentage ratios of the transactions under this comprehensive services renewal agreement is more than 0.1%, and is therefore exempted from all reporting, announcement and independent shareholders' approval under the Listing Rules.

On 29 April 2014, China Railway Finance (a subsidiary of the Company, with 95% of its equity interest being held by the Company and 5% of its equity interest being held by CREC) entered into the Financial Services Framework Agreement with CREC, effective from 16 March 2014 to 31 December 2015. Pursuant to the Financial Services Framework Agreement, China Railway Finance agreed to provide deposit services, lending services and miscellaneous financial services to CREC. On 29 December 2015, China Railway Finance and CREC entered into the Financial Services Framework Renewal Agreement, effective from 1 January 2016 to 31 December 2018, to renew the Financial Services Framework Agreement. On 27 December 2018, China Railway Finance and CREC entered into another financial services framework renewal agreement, effective from 1 January 2019 to 31 December 2021. On 30 December 2021, China Railway Finance and CREC entered into a new financial services framework renewal agreement, effective from 1 January 2022 to 31 December 2024, to further renew the Financial Services Framework Agreement.

Auditors' Remuneration

The Company has engaged PricewaterhouseCoopers and PricewaterhouseCoopers Zhong Tian LLP (collectively the "External Auditors") as the international and domestic auditors of the Company for 2021, respectively.

Fees paid to the External Auditors for the audit of the financial statements of the Group for the year ended 31 December 2021 are approximately RMB43 million.

Information Disclosure

The Secretary to the Board of Directors and the Joint Company Secretaries are in charge of information disclosure affairs of the Company. During the reporting period, the Company actively studied and reacted to new changes in regulatory policies in the Chinese capital market and domestic and overseas securities, and continuously adapted itself to the new requirements on information disclosure by regulatory authorities; it continued to advocate for voluntary information disclosure as a supplement to statutory disclosure requirements, intensified its efforts in internal report and approval on material matters, strengthened targetedness and effectiveness of content of periodical reports, and effectively increased transparency in information disclosure by the Company. The Company published 310 announcements and circulars in total, among which, announcements for A shares totalled 117, and announcements and circulars for H shares totalled 193. All of the announcements and circulars are duly published through the Shanghai Stock Exchange, Hong Kong Stock Exchange and designated newspapers.

REPORT ON CORPORATE GOVERNANCE PRACTICES

Risk Management and Internal Control

In accordance with the Basic Standards for Internal Control of Enterprises and its Implementation Guidance issued by five ministries including the Ministry of Finance and the CSRC and the Internal Control of Listed Companies issued by the Shanghai Stock Exchange, subject to the working discipline of “step-by-step promotion, horizontal and vertical expansion and comprehensive coverage”, the Company established the framework for risk management and internal control at both headquarters and subsidiary and branch levels, covering various aspects including operation, production, management and control, and prepared the working standard and procedural documents according to different business modules in relation to corporate governance, strategic management, production and operation, operation supervision, information disclosure, legal matters, safety quality and environmental protection, human resources, finance management, international business, procurement management and information management, stipulated management measures on internal control system in order to ensure the internal control management of the Company and its subsidiaries and branches has rules in place. Meanwhile, controlling measures have been proactively taken to prevent and manage various risk factors and ensure the smooth production and operation of the Company.

In terms of identification, evaluation and management of significant risks, the Company formed a normalized mechanism of risk management evaluation and reporting. Through preparation of risk evaluation questionnaire and comprehensive application of qualitative and quantitative methods, the Company identifies, distinguishes and evaluates various types of risks and determines the priority of control of significant risk, principle risk and general risk. Based on the above, the Company formulates risk management strategies, solutions and control methods, and forms comprehensive risk management report.

In terms of reviewing the effectiveness of the risk management and internal control system, the Company has established three defense lines in order to review and oversee the effectiveness of the risk management and internal control system :

- The first defence line consists of the functional departments and business units who are in charge of significant risk management control, so as to implement the risk management and control mechanism into specific business procedures;
- The second defence line consists of the leading team of internal control construction system of the Company, management of the Company and the functional department in charge of risk management, which are responsible for the supervision of the formulating and implementing process of significant risk management strategies and solutions of the members of the Company; and
- The third defence line consists of the Board of Directors, the Supervisory Committee, the audit department, the supervision department and external auditors. The audit department of the Company is responsible for organizing and implementing assessment work on risk management and internal control. The supervision department is responsible for supervising the execution of significant risk management strategies and solutions, recognising problems and proposing rectification methods by carrying out various specific investigation activities and reporting to the Board regularly. The Supervisory Committee is responsible for supervising the implementation status of the risk management and internal control of the Board, and putting forward improvement suggestions.

REPORT ON CORPORATE GOVERNANCE PRACTICES

In view of the potential defects of internal control, the Company has established corporate governance structure including the shareholders' general meeting, the Board of Directors, the Supervisory Committee and senior management, clearly defined the boundaries of power on decision-making, implementation and supervision, formed scientific and efficient mechanism of divisions and balances of duties so as to ensure the effective operation of the internal control system.

In terms of the handling, dissemination and internal supervision of inside information, the Company has formulated the Insiders Registration and Management System and specified the procedures and relevant internal control methods for dissemination of inside information in accordance with the Securities Law, the Administrative Measures for the Disclosure of Information of Listed Companies and other relevant laws and regulations.

The Board is responsible for the on-going supervision of the risk management and internal control system of the Company and reviewing their effectiveness through the Audit and Risk Management Committee. The Audit and Risk Management Committee assists the Board to perform the duties of supervision and corporate governance and review the effectiveness of the risk management and internal control systems of the Company and its subsidiaries at least annually, including the functions of financial, management, compliance, risk management and internal control, and financial resources and internal audit of the Group.

In accordance with the relevant laws and regulations including the Company Law, the Code of Corporate Governance for Listed Companies and the relevant rules and requirements of the Shanghai Stock Exchange and the Hong Kong Stock Exchange, the Company has continued to improve its internal control around the goal of "strengthening internal control, preventing risks and promoting compliance" and ensure effective operation and management of the Company. **The first is improving the construction of the internal control system.** In 2021, after study and research, the Company has formulated various systems and regulations including the "Regulations on the Supervision of Overseas Financial Funds", "Regulations on the Management of Financial Personnel Dispatched by Overseas Institutions", "Interim Measures for the Management of Self-balancing of Cash Flows of Engineering Projects", "Management Measures for Operating Results Assessment (Trial)" and "Interim Measures for the Management of External Equity Investment", further consolidated the foundation of internal control and improved the internal control system. **The second is further standardizing corporate governance.** Through the formulation of "Measures for the Management of Proposals of the Board of Directors", "Measures for the Management of the Authorization to the Managers by the Board of Directors", and "Measures for the Tracking, Review and Evaluation of the Implementation of the Board's Resolutions", etc., the Company has implemented whole-chain management and control of the proposals of the Board of Directors, facilitated the standardized operation of the Board of Directors from the source, and at the same time clarified the boundary of the powers and responsibilities between the Board of Directors and the management, improved the decision-making efficiency, and strengthened the supervision and guidance of the Board of Directors on the exercise of powers and duties by the managers. **The third is building a comprehensive risk management system.** After study and research, the Company has formulated the "Comprehensive Risk Management Measures (Trial)" and the "Guiding Opinions on Carrying out the Integrated Construction of Risk Internal Control and Legal Compliance" and made efforts to extend the business risk gateway from post-event to pre-event, from in-balance sheet to off-balance sheet, from the Group to the grassroots and from the internal to the external by focusing on corporate strategies and business processes and embedding risk management into all aspects of production and operation of the Company. **The fourth is focusing on building an overall supervision structure.** By adhering to the principle of combining prevention and control and giving priority to prevention and facilitating the coordination of inspections by the Party Committee, supervision by the Disciplinary Committee, audit supervision and legal compliance, efforts have been made to build a comprehensive, authoritative and efficient "four-in-one" overall supervision structure.

REPORT ON CORPORATE GOVERNANCE PRACTICES

During the reporting period, the Audit and Risk Management Committee has reviewed the effectiveness of risk management and internal control system of the Group, covering all material aspects, including financial, operational and compliance controls, and taking into account the adequacy of resources, staff qualifications and experience, training programmes and budget of the Group's accounting, compliance, risk management, internal audit and financial reporting, and has reported relevant matters to the Board. No significant defect in respect of internal control has been discovered by relevant reviews. The Audit and Risk Management Committee has obtained the confirmation of the management on the effectiveness of the risk management and internal control system of the Group during the reporting period. The Board is of the view that the current risk management and internal control system of the Group is adequate to protect the interests of the shareholders during the reporting period.

In addition, the Company carefully complied with regulatory rules and prepared 2021 annual social responsibility report and appraisal report on internal control. The Company engaged PricewaterhouseCoopers Zhong Tian LLP as the internal control auditor of the Company for 2021. PricewaterhouseCoopers Zhong Tian LLP has audited the effectiveness of the Company's internal control in relation to financial report in 2021 and issued standard unqualified opinions in this respect.

Accountability of the Directors in Relation to Financial Statements

The directors of the Company are responsible for overseeing the preparation of financial statements. In preparing the financial statements for the year ended 31 December 2021, the directors of the Company have selected and applied appropriate accounting policies and made prudent and reasonable judgment and estimation so as to give a true and fair view of the financial position, results and cash flow of the Group for that fiscal year.

The statement of the auditors of the Company about their reporting responsibilities on the financial statements is set out in the Independent Auditor's Report on pages 107 to 113 of this annual report.

Investors Relations

The first is continuing strengthening effective communication with the market. According to the requirements of epidemic prevention and control and taking into account the characteristics and focus of different types of investors, the Company has actively communicated with the investors through a combination of offline and online methods. During the year, we have held 96 video, telephone and physical meetings, communicated with 2,095 institutions, answered 1,228 hotlines from investors, responded to 189 questions from investors on the e-interactive platform of the Shanghai Stock Exchange, handled 1,327 IR emails, and organized and carried out road shows and reverse road shows, all of which have further enhanced the investors' understanding of the Company's production and operation and confidence in the Company's sustainable development.

The second is improving the dynamic monitoring and sharing mechanism of the capital market. By compiling and sending comparable companies' stock price information, "China Railway Capital Market Monitoring Weekly Report", "Capital Market Summary of Views and Management Suggestions", "Market Value Management Report", etc., the Company's management at all levels have been kept abreast of the latest international and domestic capital market trends to enhance understanding of and interaction with the capital markets.

REPORT ON CORPORATE GOVERNANCE PRACTICES

The third is summarizing the Company's investor relationship management results in a timely manner. Based on the Company's efforts and achievements in ESG work and investor relationship management, the Company has summarized and formulated materials including "Actively Practicing Social Responsibility to Promote Sustainable High-quality Development", "ESG Disclosure Supervision Report" and "China Railway ESG Rating Improvement Experience Sharing" and "China Railway Investor Relationship Case Study – New Development of Investor Relationship from a Sustainable Perspective", which were submitted to securities regulatory authorities and industry associations, and were included into Cases of ESG Practices of Listed Companies in China, Excellent Cases of ESG Practices of Listed Companies in Beijing and Annual Results Briefings Excellent Practices Cases. The Company was selected as an Excellent Example of the Joint Pursuit of the Belt and Road Initiative by Listed Companies in China.

During the year of 2021, the Company received a number of awards, namely "The Best IR Hong Kong Stock Company" issued by New Fortune, the "Tianma Award – the Best Board of Directors of China Main Board Listed Company for Investor Relation", etc.

Continuous Involvement of Corporate Governance

The Company will continue to closely study the development of corporate governance practices by the world's leading corporations and the requirements of the investors. We will also review and strengthen our corporate governance procedures and practices on a regular basis so as to ensure the long-term sustainable development of the Company.

INDEPENDENT AUDITOR'S REPORT

To the Shareholders of China Railway Group Limited

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

Opinion

What we have audited

The consolidated financial statements of China Railway Group Limited (the "Company") and its subsidiaries (the "Group") set out on pages 114 to 286, which comprise:

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

Our opinion

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

Basis for Opinion

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

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

Independence

We are independent of the Group in accordance with the International Code of Ethics for Professional Accountants (including International Independence Standards) issued by the International Ethics Standards Board for Accountants ("the Codes"), and we have fulfilled our other ethical responsibilities in accordance with the Codes.

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 matters identified in our audit are summarised as follows:

- Revenue and cost recognition from infrastructure construction contracts
- Expected credit losses of trade receivables and contract assets

INDEPENDENT AUDITOR'S REPORT

Key Audit Matters (Continued)

Key Audit Matter	How our audit addressed the Key Audit Matter
<p>Revenue and cost recognition from infrastructure construction contracts</p> <p>Refer to Note 2.32(a), Note 4(b)(i), and Note 5 to the consolidated financial statements.</p> <p>For the year ended 31 December 2021, the revenue from infrastructure construction contracts amounted to RMB923,435 million.</p> <p>The Group's revenue from infrastructure construction contracts is recognised over the period of the contract by reference to the progress towards complete satisfaction of that performance obligation, depending on the nature of the contract, is measured mainly by reference to the proportion of contract costs incurred for work performed to date to estimated total contract costs for each contract. Management estimates the total contract revenue and total contract costs at the inception of each contract. As the contract progresses, management regularly reviews and revises the estimates of contract revenue and contract costs if circumstances change, such as variations in contract work, claims and incentive payments. The increases or decreases in estimated total contract revenue or total contract costs resulted in the adjustments to the extent of progress toward completion and revenue recognised in the period in which the circumstances that give rise to the revision becomes known by management.</p>	<p>We performed the following procedures in relation to management's estimates of contract revenue and contract costs:</p> <ul style="list-style-type: none"> – We obtained an understanding of management's internal control and assessment process of revenue and cost recognition from infrastructure construction contracts, and assessed the inherent risk of material misstatement by considering the degree of estimation uncertainty and level of other inherent risk factors such as complexity, subjectivity, changes and susceptibility to management bias; – We evaluated and tested the key controls over estimates of total contract revenue, preparation and review of total contract costs, budget adjustments and review and other key controls related to revenue and cost recognition from infrastructure construction contracts; – We compared, on a sample basis, the actual total contract revenue and total contract costs of completed projects during the year, against the most updated estimates before completion to assess the reliability of the estimates; – We checked construction costs incurred during the year by tracing to supporting documents, such as purchase agreements, materials receipt notes and labour cost records on a sample basis, and performed cut-off tests on construction costs; – In respect of projects under construction, we performed the following procedures on a sample basis:

INDEPENDENT AUDITOR'S REPORT

Key Audit Matters (Continued)

Key Audit Matter	How our audit addressed the Key Audit Matter
<p>We focused on the revenue and cost recognition from infrastructure construction contracts because the high degree of judgement and estimation of contract revenue and contract costs. Therefore, we identified the recognition of revenue and cost from infrastructure construction contracts as a key audit matter.</p>	<ul style="list-style-type: none"> (i) Reviewed the terms and conditions of the infrastructure construction contracts, inspected the contract sum, budget information, variation orders, claims and incentive payments, if any, on which the estimated total contract revenue and total contract costs were based, and evaluated the appropriateness of the basis for management's estimation; (ii) Confirmed contract variations, settlement and historical payment records with owners of infrastructure construction projects; (iii) Assessed the reasonableness of the progress toward completion by visiting the selected sites of infrastructure construction projects to observe the progress of the contract work, and discussing with the site project management the extent to completion of the contract work; and (iv) Tested the mathematical accuracy of the progress toward completion and revenue recognised during the year based on estimates of total contract revenue, total contract costs, and actual contract costs incurred. <p>Based on our work, we found the judgement and estimates adopted by management in determining the revenue and cost from infrastructure construction contracts are supported by available evidence.</p>

INDEPENDENT AUDITOR'S REPORT

Key Audit Matters (Continued)

Key Audit Matter	How our audit addressed the Key Audit Matter
<p>Expected credit losses of trade receivables and contract assets</p> <p>Refer to Note 2.20, Note 2.21, Note 4(b)(ii), Note 33, and Note 34 to the consolidated financial statements.</p> <p>As at 31 December 2021, the carrying amounts of trade receivables and contract assets amounted to RMB122,121 million and RMB310,519 million, respectively, with loss allowances amounted to RMB10,152 million and RMB3,339 million, respectively.</p> <p>Provision for credit loss allowance of trade receivables and contract assets was made based on an assessment of the lifetime expected credit losses. For trade receivables and contract assets which have impaired, the Group assessed individually and provided for credit losses allowance. For other trade receivables and contract assets, given no reasonable and supportable information is available without undue cost for expected credit losses measurement, the trade receivables and contract assets were grouped by reference to the credit risk characteristics and assessed for credit losses allowance through exposure at default and the lifetime expected credit loss rates. When measuring expected credit loss, the Group considers its own credit loss incurred in the past, and adjusts by taking into consideration current conditions and forward looking factors. In assessing forward-looking information, the Group considers factors mainly including macroeconomic indicators, economic scenarios and weights.</p>	<p>We performed the following procedures in relation to management's assessment on the expected credit losses of trade receivables and contract assets:</p> <ul style="list-style-type: none"> – We obtained an understanding of management's internal control and assessment process of expected credit losses of trade receivables and contract assets, and assessed the inherent risk of material misstatement by considering the degree of estimation uncertainty and level of other inherent risk factors such as complexity, subjectivity, changes and susceptibility to management bias; – We evaluated and tested the key controls in place on management's assessment on the expected credit losses of trade receivables and contract assets; – For trade receivables and contract assets assessed individually, we obtained an understanding of management's assessment of financial position and creditworthiness of customers, historical payment and settlement records and forecasted future economic conditions. On a sample basis, we collaborated management's assessment against available evidence to assess the reasonableness of expected credit loss allowance provided by management.

INDEPENDENT AUDITOR'S REPORT

Key Audit Matters (Continued)

Key Audit Matter	How our audit addressed the Key Audit Matter
<p>We focused on auditing the expected credit losses of trade receivables and contract assets because the judgement and estimation of expected credit losses is subject to high degree of estimation uncertainty. The inherent risk in relation to the expected credit losses of trade receivables and contract assets is considered significant due to the subjectivity of significant assumptions and estimates used. Therefore, we identified the expected credit losses of trade receivables and contract assets as a key audit matter.</p>	<ul style="list-style-type: none"> <li data-bbox="810 443 1433 1254">– For trade receivables and contract assets assessed collectively by reference to the credit risk characteristics, we assessed the reasonableness of the grouping and the measurement method of the expected credit loss model, and tested, on a sample basis, the accuracy of the grouping, the accuracy and the completeness of the source data in the model and the aging profile of trade receivables and contract assets. We evaluated the basis of determining forward-looking factors made by management, including the reasonableness of management's selection of macroeconomic indicators, economic scenarios and weights, and examined the macroeconomic indicators to publicly available external data sources to analyse the reasonableness of forecasted values. We reviewed the sensitivity analysis performed by management on the forward-looking factors to assess the potential impact on expected credit losses if the relevant key assumptions were to change in a reasonable and probable manner; and recalculated the amount of expected credit losses. <li data-bbox="810 1299 1433 1400">– We tested the cash collections of trade receivable and settlement of contract assets subsequent to end of the reporting period on a sample basis. <p data-bbox="810 1444 1433 1626">Based on our work, we considered that the significant judgments and estimates made by management in relation to the expected credit losses of trade receivables and contract assets were supportable by the evidence obtained and procedures performed.</p>

Other Information

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

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

INDEPENDENT AUDITOR'S REPORT

Other Information (Continued)

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 Audit and Risk Management Committee for the Consolidated Financial Statements

The directors of the Company are responsible for the preparation of the consolidated financial statements that give a true and fair view in accordance with IFRSs 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.

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

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

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

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

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.

INDEPENDENT AUDITOR'S REPORT

Auditor's Responsibilities for the Audit of the Consolidated Financial Statements (Continued)

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the directors.
- Conclude on the appropriateness of the directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

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

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

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

The engagement partner on the audit resulting in this independent auditor's report is Tsun NG.

PricewaterhouseCoopers

Certified Public Accountants

Hong Kong, 30 March 2022

CONSOLIDATED INCOME STATEMENT

	Note	Year ended 31 December	
		2021 RMB million	2020 RMB million
Revenue	5	1,073,272	974,732
Cost of sales and services	11	(969,886)	(884,543)
Gross profit		103,386	90,189
Other income	6	2,736	2,219
Other expenses	6	(24,756)	(21,838)
Net impairment losses on financial assets and contract assets	7	(5,478)	(2,556)
Other (losses)/gains, net	8	(82)	662
Losses from derecognition of financial assets at amortised cost	9	(4,595)	(3,302)
Selling and marketing expenses	11	(5,948)	(4,857)
Administrative expenses	11	(27,418)	(24,668)
Operating profit		37,845	35,849
Finance income	10	6,105	4,324
Finance costs	10	(7,616)	(6,756)
Share of post-tax (losses)/profits of joint ventures	26	(507)	164
Share of post-tax profits of associates	26	3,809	2,031
Profit before income tax		39,636	35,612
Income tax expense	13	(9,166)	(8,362)
Profit for the year		30,470	27,250
Profit attributable to:			
– Owners of the Company		27,618	25,188
– Non-controlling interests		2,852	2,062
		30,470	27,250
Earnings per share for profit attributable to owners of the Company (expressed in RMB per share)			
– Basic	15	1.037	0.963
– Diluted	15	1.037	0.963

The above consolidated income statement should be read in conjunction with the accompanying notes.

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

	Year ended 31 December	
	2021	2020
<i>Note</i>	RMB million	RMB million
Profit for the year	30,470	27,250
Other comprehensive (expenses)/income, net of income tax		
<i>Items that will not be reclassified to profit or loss:</i>		
Remeasurement of retirement and other supplemental benefit obligations	(78)	1
Income tax relating to remeasurement of retirement and other supplemental benefit obligations	13	2
Changes in the fair value of equity investments at fair value through other comprehensive income	57	(260)
Income tax relating to changes in the fair value of equity investments at fair value through other comprehensive income	(19)	63
	(27)	(194)
<i>Items that may be reclassified subsequently to profit or loss:</i>		
Exchange differences on translating foreign operations	(64)	(500)
Share of other comprehensive income of associates	(106)	(189)
	(170)	(689)
Other comprehensive expenses for the year, net of tax	(197)	(883)
Total comprehensive income for the year	30,273	26,367
Total comprehensive income for the year attributable to:		
– Owners of the Company	27,458	24,377
– Non-controlling interests	2,815	1,990
	30,273	26,367

The above consolidated statement of comprehensive income should be read in conjunction with the accompanying notes.

CONSOLIDATED BALANCE SHEET

	<i>Note</i>	As at 31 December	
		2021	2020
		RMB million	RMB million
ASSETS			
Non-current assets			
Property, plant and equipment	18	77,368	74,384
Right-of-use assets	19	1,659	1,892
Lease prepayments	20	14,561	14,826
Deposits for investments	21	441	453
Investment properties	22	12,065	12,046
Intangible assets	23	110,496	62,599
Mining assets	24	3,479	3,582
Contract assets	34	161,377	138,759
Investments in joint ventures	26	49,831	40,216
Investments in associates	26	46,181	38,133
Goodwill	28	1,568	1,412
Financial assets at fair value through other comprehensive income	29	12,164	9,668
Other financial assets at amortised cost	30	22,960	18,773
Financial assets at fair value through profit or loss	35	12,294	10,564
Deferred tax assets	45	10,372	9,333
Other prepayments		332	429
Trade and other receivables	33	23,374	20,801
		560,522	457,870
Current assets			
Lease prepayments	20	269	319
Properties held for sale	31	48,745	34,143
Properties under development for sale	31	109,330	117,576
Inventories	32	45,371	40,943
Financial assets at fair value through other comprehensive income	29	526	522
Trade and other receivables	33	249,169	209,861
Contract assets	34	149,142	145,611
Current income tax recoverable		3,736	3,451
Other financial assets at amortised cost	30	8,553	9,694
Financial assets at fair value through profit or loss	35	7,304	5,218
Restricted cash	36	30,797	29,305
Cash and cash equivalents	37	148,116	145,464
		801,058	742,107
Total assets		1,361,580	1,199,977

CONSOLIDATED BALANCE SHEET

	Note	As at 31 December	
		2021 RMB million	2020 RMB million
EQUITY			
Equity attributable to owners of the Company			
Share capital	38	24,571	24,571
Share premium and reserves	39	204,927	183,888
Perpetual notes	40	45,624	46,738
		275,122	255,197
Non-controlling interests		83,072	57,849
Total equity		358,194	313,046
LIABILITIES			
Non-current liabilities			
Trade and other payables	41	10,263	7,983
Borrowings	42	198,503	166,997
Lease liabilities	19	972	1,237
Retirement and other supplemental benefit obligations	43	2,293	2,482
Provisions	44	761	562
Deferred government grants and income		1,087	1,071
Deferred tax liabilities	45	1,647	1,454
		215,526	181,786
Current liabilities			
Trade and other payables	41	522,411	488,304
Contract liabilities	34	144,095	124,660
Current income tax liabilities		7,100	7,969
Borrowings	42	113,424	83,058
Lease liabilities	19	360	526
Retirement and other supplemental benefit obligations	43	300	323
Financial liabilities at fair value through profit or loss	35	122	65
Provision	44	48	240
		787,860	705,145
Total liabilities		1,003,386	886,931
Total equity and liabilities		1,361,580	1,199,977

The above consolidated balance sheet should be read in conjunction with the accompanying notes.

The financial statements on pages 114 to 286 were approved by the Board of Directors on 30 March 2022 and were signed on its behalf.

Director
Chen Yun

Director
Chen Wenjian

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

	Attributable to owners of the Company											
	Share capital	Share premium	Capital reserve	Statutory reserve (Note 39)	Foreign	Investment revaluation reserve	Retained earnings	Perpetual notes (Note 40)	Total	Non-controlling interests	Total	
					currency translation reserve							
Note	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	
Balance at 1 January 2021	24,571	51,936	3,128	14,562	(886)	(42)	115,190	46,738	255,197	57,849	313,046	
Profit for the year	-	-	-	-	-	-	25,469	2,149	27,618	2,852	30,470	
Other comprehensive expenses	-	-	(65)	-	(49)	(46)	-	-	(160)	(37)	(197)	
Total comprehensive (expenses)/ income for the year	-	-	(65)	-	(49)	(46)	25,469	2,149	27,458	2,815	30,273	
Total transactions with owners, recognised directly in equity												
Capital contributions from non-controlling shareholders of subsidiaries	-	-	-	-	-	-	-	-	-	26,720	26,720	
Transaction with non-controlling interests resulting from acquisition of equity interests of certain subsidiaries	-	-	159	-	-	-	-	-	159	(520)	(361)	
Acquisition of subsidiaries	-	-	-	-	-	-	-	-	-	221	221	
Disposal of subsidiaries	-	-	-	-	-	-	-	-	-	(2,053)	(2,053)	
Issuance of perpetual notes 40	-	-	-	-	-	-	-	11,890	11,890	-	11,890	
Redemption of perpetual notes 40	-	(6)	-	-	-	-	-	(12,994)	(13,000)	-	(13,000)	
Dividends declared to shareholders 16	-	-	-	-	-	-	(4,423)	-	(4,423)	-	(4,423)	
Dividends declared to non-controlling shareholders of subsidiaries	-	-	-	-	-	-	-	-	-	(1,239)	(1,239)	
Dividends declared to perpetual notes holders 40	-	-	-	-	-	-	-	(2,159)	(2,159)	(721)	(2,880)	
Transferred to reserves	-	-	-	2,102	-	-	(2,102)	-	-	-	-	
Balance at 31 December 2021	24,571	51,930	3,222	16,664	(935)	(88)	134,134	45,624	275,122	83,072	358,194	

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

	Attributable to owners of the Company												
	Share capital	Share premium	Capital reserve	Statutory reserve <i>(Note 39)</i>	Foreign currency translation reserve	Investment revaluation reserve	Retained earnings	Perpetual notes <i>(Note 40)</i>	Total	Non- controlling interests	Total	Total	
												RMB million	RMB million
<i>Note</i>	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	
Balance at 1 January 2020	24,571	51,978	3,112	12,495	(426)	314	97,731	31,535	221,310	24,018	245,328		
Profit for the year	-	-	-	-	-	-	23,668	1,520	25,188	2,062	27,250		
Other comprehensive income/ (expenses)	-	-	5	-	(460)	(356)	-	-	(811)	(72)	(883)		
Total comprehensive income/ (expenses) for the year	-	-	5	-	(460)	(356)	23,668	1,520	24,377	1,990	26,367		
Total transactions with owners, recognised directly in equity													
Capital contributions from non-controlling shareholders of subsidiaries	-	-	-	-	-	-	-	-	-	30,965	30,965		
Transaction with non-controlling interests resulting from acquisition of equity interests of certain subsidiaries	-	-	11	-	-	-	-	-	11	(762)	(751)		
Transfer of gains on disposal of financial assets at fair value through other comprehensive income to retained earnings	-	-	-	-	-	-	10	-	10	-	10		
Acquisition of subsidiaries	-	-	-	-	-	-	-	-	-	2,720	2,720		
Disposal of subsidiaries	-	-	-	-	-	-	-	-	-	(63)	(63)		
Issuance of perpetual notes	<i>40</i>	-	-	-	-	-	-	23,986	23,986	-	23,986		
Redemption of perpetual notes	<i>40</i>	-	(42)	-	-	-	-	(8,958)	(9,000)	-	(9,000)		
Dividends declared to shareholders	<i>16</i>	-	-	-	-	-	(4,152)	-	(4,152)	-	(4,152)		
Dividends declared to non-controlling shareholders of subsidiaries	-	-	-	-	-	-	-	-	-	(1,019)	(1,019)		
Dividends declared to perpetual notes holders	<i>40</i>	-	-	-	-	-	-	(1,345)	(1,345)	-	(1,345)		
Transferred to reserves	-	-	-	2,067	-	-	(2,067)	-	-	-	-		
Balance at 31 December 2020	24,571	51,936	3,128	14,562	(886)	(42)	115,190	46,738	255,197	57,849	313,046		

The above consolidated statement of changes in equity should be read in conjunction with the accompanying notes.

CONSOLIDATED STATEMENT OF CASH FLOWS

		Year ended 31 December	
		2021	2020
		RMB million	RMB million
Cash flows from operating activities			
Cash generated from operations	46	23,970	38,829
Income tax paid		(10,901)	(7,835)
Net cash generated from operating activities		13,069	30,994
Cash flows from investing activities			
– Payments for property, plant and equipment		(10,556)	(11,373)
– Proceeds from disposal of property, plant and equipment		1,620	1,169
– Payments for lease prepayments		(322)	(896)
– Proceeds from disposal of lease prepayments		604	478
– Payments for investment properties		(256)	(217)
– Proceeds from disposal of investment properties		20	8
– Payments for intangible assets		(44,837)	(30,689)
– Proceeds from disposal of intangible assets		17	14
– Payments for mining assets		(2)	(116)
– Payments for acquisition of subsidiaries, net of cash acquired		(749)	(100)
– Net proceeds from sale of subsidiaries		(696)	2,540
– Payments for investments in associates		(7,821)	(9,301)
– Payments for investments in joint ventures		(8,455)	(9,696)
– Proceeds from disposal of associates		845	1,145
– Proceeds from disposal of joint ventures		575	171
– Payments for financial assets at fair value through profit or loss		(9,023)	(6,870)
– Proceeds from disposal of financial assets at fair value through profit or loss		4,593	5,524
– Payments for financial assets at fair value through other comprehensive income		(3,646)	(2,917)
– Proceeds from disposal of financial assets at fair value through other comprehensive income		1,035	82
– Net flow in respect of other financial assets at amortised cost		(6,705)	3,493
– Interests received		744	1,595
– Dividends received		1,464	848
– Decrease of term deposits with initial term of over three months		5,198	725
– Increase of term deposits with initial term of over three months		(824)	(4,454)
– Other investing cash flows		(280)	(4,304)
Net cash used in investing activities		(77,457)	(63,141)

CONSOLIDATED STATEMENT OF CASH FLOWS

	Year ended 31 December	
	2021	2020
	RMB million	RMB million
Cash flows from financing activities		
– Capital contributions from non-controlling shareholders of subsidiaries	27,320	30,965
– Transaction with non-controlling interests resulting from acquisition of equity interests of certain subsidiaries	(10)	(757)
– Proceeds from debentures	14,495	11,996
– Repayment of debentures	(983)	(8,653)
– Proceeds from issuance of perpetual notes	11,890	23,986
– Redemption of perpetual notes	(13,000)	(9,000)
– Proceeds from bank borrowings	162,736	186,034
– Repayments of bank borrowings	(114,154)	(173,445)
– Proceeds from other borrowings	2,322	10,863
– Repayment of other borrowings	(2,618)	(10,782)
– Interests paid	(12,265)	(11,595)
– Dividends paid to non-controlling shareholders of subsidiaries	(1,900)	(979)
– Dividends paid to owners of the Company	(4,423)	(4,152)
– Dividends paid to holders of perpetual notes	(1,970)	(1,461)
– Repayments of lease liabilities	(960)	(1,435)
– Other financing cash flow	885	(1,384)
Net cash generate from financing activities	67,365	40,201
Net increase in cash and cash equivalents	2,977	8,054
Cash and cash equivalents at beginning of the year	145,464	138,186
Effect of foreign exchange rate changes	(325)	(776)
Cash and cash equivalents at end of the year	148,116	145,464

The above consolidated statement of cash flow should be read in conjunction with the accompanying notes.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

1. General Information

China Railway Group Limited (the "Company") was established in the People's Republic of China (the "PRC") on 12 September 2007 as a joint stock company with limited liability, as part of the group reorganisation ("Reorganisation") of China Railway Engineering Group Company Limited ("CREC") in preparation for the listing of the Company's A shares on Shanghai Stock Exchange and H shares on the Main Board of The Stock Exchange of Hong Kong Limited (the "HKSE").

The address of the Company's registered office is 918, Block 1, No.128 South 4th Ring Road West, Fengtai District, Beijing, the PRC. The Company's ultimate holding company is CREC, established in the PRC.

The Company and its subsidiaries (together, the "Group") are principally engaged in infrastructure construction, survey, design and consulting services, engineering equipment and component manufacturing, property development, mining and merchandise trading, financial trust management, comprehensive financial services and insurance agent.

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

These consolidated financial statements have been approved for issue by the Board of Directors on 30 March 2022.

2. Summary of Significant Accounting Policies

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

2.1 Basis of preparation

The consolidated financial statements of the Group have been prepared in accordance with International Financial Reporting Standards ("IFRS") issued by the International Accounting Standards Board ("IASB") and interpretations issued by the IFRS Interpretations Committee ("IFRS IC") applicable to companies reporting under IFRS.

The consolidated financial statements have been prepared on a historical cost basis, except for certain financial assets and liabilities (including derivative instruments) measured at fair value.

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

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

2. Summary of Significant Accounting Policies (Continued)

2.1 Basis of preparation (Continued)

(a) Amended standards adopted by the Group

The following amended standards have been adopted by the Group for the first time for the financial year beginning on 1 January 2021.

	Effective for accounting periods beginning on or after
Amendments to IFRS 16 "Covid-19-related Rent Concessions" beyond 30 June 2021	1 April 2021
Amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16 "Interest Rate Benchmark Reform Phase 2"	1 January 2021

The adoption of above did not have any material impact on the Group's results for the year ended 31 December 2021 and the Group's financial position as at 31 December 2021. The Group did not have to change its accounting policies or make retrospective adjustments as a result of adopting these amended standards.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

2. Summary of Significant Accounting Policies (Continued)

2.1 Basis of preparation (Continued)

(b) New and amended standards not yet adopted by the Group

Certain new and amended standards are effective for annual periods beginning after 1 January 2021, and have not been applied in preparing the consolidated financial statements.

	Effective for accounting periods beginning on or after
IFRS 17 "Insurance Contracts"	1 January 2023
Amendments to IAS 1 "Classification of Liabilities as Current or Non-current"	1 January 2023
Amendments to IAS 1 and IFRS Practice Statement 2 "Disclosure of Accounting Policies"	1 January 2023
Amendments to IAS 8 "Definition of Accounting Estimates"	1 January 2023
Amendments to IAS 12 "Deferred Tax related to Assets and Liabilities arising from a Single Transaction"	1 January 2023
Amendments to IAS 16 "Proceeds before intended use"	1 January 2022
Amendments to IAS 37 "Onerous contracts – costs of fulfilling a contract"	1 January 2022
Amendments to IFRS 3 "Update reference to the Conceptual framework"	1 January 2022
Annual Improvements to IFRS Standards 2018-2020 affecting IFRS 1, IFRS 9, IFRS 16 and IAS 41	1 January 2022
Amendments to IFRS 10 and IAS 28 "Sale or contribution of assets between an investor and its associate or joint venture"	to be determined

The adoption of above new and amended standards will have no material impact on the Group's results and financial position.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

2. Summary of Significant Accounting Policies (Continued)

2.2 Principles of consolidation and equity accounting

(a) Subsidiaries

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

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

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

(b) Associates

Associates are all entities over which the Group has significant influence but not control or joint control. This is generally the case where the Group holds between 20% and 50% of the voting rights. Investments in associates are accounted for using the equity method of accounting (see (d) below), after initially being recognised at cost.

In the Company's balance sheet, the investments in associates are stated at cost less provision for impairment losses. The results of associates are accounted for by the Company on the basis of dividends received and receivable.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

2. Summary of Significant Accounting Policies (Continued)

2.2 Principles of consolidation and equity accounting (Continued)

(c) Joint arrangements

Under IFRS 11 Joint Arrangements, investments in joint arrangements are classified as either joint operations or joint ventures. The classification depends on the contractual rights and obligations of each investor, rather than the legal structure of the joint arrangement. The Group has both joint operations and joint ventures.

Joint operations

The Group recognises its direct right to the assets, liabilities, revenues and expenses of joint operations and its share of any jointly held or incurred assets, liabilities, revenues and expenses. These have been incorporated in the financial statements under the appropriate headings. Details of the joint operations are set out in Note 27.

Joint ventures

Interests in joint ventures are accounted for using the equity method (see (d) below), after initially being recognised at cost in the consolidated balance sheet.

In the Company's balance sheet, investments in joint ventures are stated at cost less provision for impairment losses. The results of joint ventures are accounted for by the Company on the basis of dividends received and receivable.

(d) Equity accounting

Under the equity method of accounting, the investments are initially recognised at cost and adjusted thereafter to recognise the Group's share of the post-acquisition profits or losses of the investee in profit or loss, and the Group's share of movements in other comprehensive income of the investee in other comprehensive income. Dividends received or receivable from associates and joint ventures are recognised as a reduction in the carrying amount of the investment.

When the Group's share of losses in an equity-accounted investment equals or exceeds its interest in the entity, including any other unsecured long-term receivables, the Group does not recognise further losses, unless it has incurred obligations or made payments on behalf of the other entity.

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

The carrying amount of equity-accounted investments is tested for impairment in accordance with the policy described in Note 2.13.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

2. Summary of Significant Accounting Policies (Continued)

2.2 Principles of consolidation and equity accounting (Continued)

(e) Changes in ownership interests

The Group treats transactions with non-controlling interests that do not result in a loss of control as transactions with equity owners of the Group. A change in ownership interest results in an adjustment between the carrying amounts of the controlling and non-controlling interests to reflect their relative interests in the subsidiary. Any difference between the amount of the adjustment to non-controlling interests and any consideration paid or received is recognised in a separate reserve within equity attributable to owners of the Company.

When the Group ceases to consolidate or equity account for an investment because of a loss of control, joint control or significant influence, any retained interest in the entity is remeasured to its fair value, with the change in carrying amount recognised in profit or loss. This fair value becomes the initial carrying amount for the purposes of subsequently accounting for the retained interest as an associate, joint venture or financial asset. In addition, any amounts previously recognised in other comprehensive income in respect of that entity are accounted for as if the Group had directly disposed of the related assets or liabilities. This may mean that amounts previously recognised in other comprehensive income are reclassified to profit or loss or transferred to another category of equity as specified/permitted by applicable IFRSs.

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

2.3 Business combinations

The acquisition method of accounting is used to account for the acquisitions of subsidiaries of the Group, except for those acquisitions which are considered as a business combination under common control in a manner similar to pooling-of-interests and with reference to the principles of merger accounting under Hong Kong Accounting Guideline 5 “Merger Accounting for Common Control Combinations”.

Merger accounting for common control combinations

The consolidated financial statements incorporate the financial statements of the combining entities or businesses in which the common control combination occurs as if they had been combined from the date when the combining entities or businesses first came under the control of the ultimate controlling party.

The net assets of the combining entities or businesses are combined using the existing book values from the ultimate controlling parties’ perspective. No amount is recognised in consideration for goodwill or excess of acquirers’ interest in the net fair value of acquiree’s identifiable assets, liabilities and contingent liabilities over cost at the time of common control combination, to the extent of the continuation of the ultimate controlling party’s interest.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

2. Summary of Significant Accounting Policies (Continued)

2.3 Business combinations (Continued)

Merger accounting for common control combinations (Continued)

The consolidated income statement includes the results of each of the combining entities or businesses from the earliest date presented or since the date when the combining entities or businesses first came under the common control, where there is a shorter period, regardless of the date of the common control combination.

The comparative amounts in the consolidated financial statements are presented as if the entities or businesses had been combined at the previous end of the reporting period or when they first came under common control, whichever is shorter.

Transaction costs, including professional fees, registration fees, costs of furnishing information to shareholders, costs incurred in combining operations of the previously separate businesses, etc., incurred in relation to the common control combination that is to be accounted for by using merger accounting is recognised as an expense in the year in which it is incurred.

Acquisition method of accounting for non-common control combinations

The Group applies the acquisition method to account for non-common control business combinations. The consideration transferred for the acquisition of a subsidiary comprises the:

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

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

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

2. Summary of Significant Accounting Policies (Continued)

2.3 Business combinations (Continued)

Acquisition method of accounting for non-common control combinations (Continued)

Acquisition-related costs are expensed as incurred.

The excess of the

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

over the fair value of the net identifiable assets acquired is recorded as goodwill. If those amounts are less than the fair value of the net identifiable assets of the business acquired, the difference is recognised directly in profit or loss as a bargain purchase.

Where settlement of any part of cash consideration is deferred, the amounts payable in the future are discounted to their present value as at the date of exchange. The discount rate used is the entity's incremental borrowing rate, being the rate at which a similar borrowing could be obtained from an independent financier under comparable terms and conditions.

Any contingent consideration to be transferred by the Group is recognised at fair value at the acquisition date. Subsequent changes to the fair value of the contingent consideration that is deemed to be an asset or liability is recognised in accordance with IAS 39 either in profit or loss or as a change to other comprehensive income. Contingent consideration that is classified as equity is not remeasured, and its subsequent settlement is accounted for within equity.

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

2.4 Separate financial statements

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

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

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

2. Summary of Significant Accounting Policies (Continued)

2.5 Segment reporting

Operating segments are reported in a manner consistent with the internal reporting provided to the board of directors of the Company (the “Directors”), who is the chief operating decision-maker. The Directors are responsible for allocating resources and assessing performance of the operating segments, and making strategic decisions.

2.6 Foreign currency translation

(a) Functional and presentation currency

Items included in the financial statements of each of the Group’s entities are measured using the currency of the primary economic environment in which the entity operates (“the functional currency”). The consolidated financial statements are presented in RMB, which is the Company’s functional and the Group’s presentation currency.

(b) Transactions and balances

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

Foreign exchange gains and losses are presented in the consolidated income statement within “Other gains/(losses), net”.

Non-monetary items that are measured at fair value in a foreign currency are translated using the exchange rates at the date when the fair value was determined. Translation differences on assets and liabilities carried at fair value are reported as part of the fair value gain or loss. For example, translation differences on non-monetary financial assets and liabilities such as equities held at fair value through profit or loss are recognised in profit or loss as part of the fair value gain or loss. Translation differences on non-monetary financial assets such as equities classified as at fair value through other comprehensive income are included in other comprehensive income.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

2. Summary of Significant Accounting Policies (Continued)

2.6 Foreign currency translation (Continued)

(c) 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 balance sheet presented are translated at the closing rate at the date of that balance sheet;
- (ii) income and expenses for each income statement 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. Currency translation differences arising are recognised in other comprehensive income.

(d) Disposal of foreign operation and partial disposal

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

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

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

2. Summary of Significant Accounting Policies (Continued)

2.7 Property, plant and equipment

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

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

Depreciation is calculated using the straight-line method and the units of production method to allocate their cost to their residual values over their estimated useful lives, as follows:

– Buildings	15-50 years
– Infrastructure construction equipment	8-15 years
	Units of production method
– Transportation equipment	4-12 years
– Manufacturing equipment	5-18 years
– Testing equipment and instruments	5-10 years
– Other equipment	3-10 years

Construction-in-progress represents buildings, machinery and equipments under construction or pending installation and is stated at cost less accumulated impairment losses, if any. Costs include construction and acquisition costs, and interest charges arising from borrowings used to finance the assets during the construction period. No provision for depreciation is made on construction-in-progress until such time as the relevant assets are completed and available for use. When the assets concerned become available for use, the costs are transferred to appropriate category of property, plant and equipment and depreciated in accordance with the policy as stated above.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

2. Summary of Significant Accounting Policies (Continued)

2.7 Property, plant and equipment (Continued)

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

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

Gains and losses on disposals are determined by comparing the proceeds with the carrying amount and are recognised within "Other gains/(losses), net" in the consolidated income statement.

2.8 Investment properties

Investment properties, principally comprising leasehold buildings, are held for long-term rental yields and are not occupied by the Group. They also include properties that are being constructed or developed for future use as investment properties. Investment properties are stated at historical cost less accumulated depreciation and accumulated impairment losses, if any.

Depreciation is calculated using the straight-line method to write off the cost less accumulated impairment loss of the asset over its estimated useful life.

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

Gains and losses on disposals are determined by comparing the proceeds with the carrying amount and are recognised within "Other gains/(losses), net" in the consolidated income statement.

2.9 Lease prepayments

Lease prepayments represent upfront prepayments made for the land use rights and are expensed in the consolidated income statement on a straight-line basis over the period of the lease or when there is impairment, the impairment is expensed in the consolidated income statement.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

2. Summary of Significant Accounting Policies (Continued)

2.10 Intangible assets

(a) Service concession arrangements

The Group is engaged in certain service concession arrangements in which the Group carries out construction work (e.g. toll highways and others) in exchange for a right for the Group to operate the asset concerned in accordance with pre-established conditions set by the granting authority. In accordance with the IFRIC Interpretation 12 Service Concession Arrangement (IFRIC 12), the assets under the concession arrangements may be classified as intangible assets or financial assets. The assets are classified as intangibles if the operator receives a right (a license) to charge users of the public service or as financial assets if the operator has an unconditional contractual right to receive cash or another financial asset from or at the direction of the grantor for the construction services. The Group classifies the non-current assets linked to the long-term investment as "service concession arrangements" within intangible assets on the balance sheet if the intangible asset model is adopted. Such concession assets represented the consideration received for its construction service rendered (Note 2.32). Once the underlying infrastructure of the concession arrangements is completed, the concession assets are amortised over the expected useful lives or the term of the concession, whichever is shorter, using traffic flow method or straight-line method under the intangible asset model.

(b) Patent and non-patented technologies

Separately acquired patent and non-patented technologies are shown at historical cost. Patent and non-patented technologies acquired in a business combination are recognised at fair value at the acquisition date. Patent and non-patented technologies have a finite useful life and are subsequently carried at cost less accumulated amortisation and impairment losses. Amortisation is calculated using the straight-line method to allocate the cost over their estimated useful lives of 2 to 10 years.

(c) Computer software

Acquired computer software license costs recognised as assets are amortised over their estimated useful lives of 2 to 10 years.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

2. Summary of Significant Accounting Policies (Continued)

2.11 Mining assets

(a) Exploration and evaluation assets

Exploration and evaluation assets are recognised at cost on initial recognition. Subsequent to initial recognition, exploration and evaluation assets are stated at cost less any identified impairment loss.

Exploration and evaluation assets include the cost of exploration rights and the expenditures incurred in the search for mineral resources as well as the determination of the technical feasibility and commercial viability of extracting those resources. Exploration and evaluation assets are assessed for impairment when facts and circumstances suggest that the carrying amount of an exploration and evaluation asset may exceed its recoverable amount. An impairment loss is recognised in profit and loss.

When the technical feasibility and commercial viability of extracting a mineral resource become demonstrable and the mining rights are obtained, any previously recognised exploration and evaluation assets are reclassified as mining rights or property, plant and equipment, as appropriate. Exploration and evaluation assets are assessed for impairment and any impairment loss is recognised before reclassification.

(b) Mining rights

Mining rights acquired separately are initially measured at cost. Mining rights are reclassified from exploration and evaluation assets at the carrying amount when the technical feasibility and commercial viability of extracting mineral resources are demonstrable. Mining rights with finite useful lives are carried at costs less accumulated amortisation and any identified impairment loss. Amortisation for mining rights with finite useful lives is provided using the unit of production method based on the actual production volume over the estimated total proved and probable reserves of the ores mines.

2.12 Goodwill

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

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

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

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

2. Summary of Significant Accounting Policies (Continued)

2.13 Impairment of non-financial assets

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

2.14 Investments and other financial assets

2.14.1 Classification

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

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

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

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

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

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

2. Summary of Significant Accounting Policies (Continued)

2.14 Investments and other financial assets (Continued)

2.14.2 Recognition and derecognition

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

2.14.3 Measurement

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

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

Debt instruments

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

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

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

2. Summary of Significant Accounting Policies (Continued)

2.14 Investments and other financial assets (Continued)

2.14.3 Measurement (Continued)

Debt instruments (Continued)

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

Equity instruments

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

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

2.14.4 Impairment

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

For trade and bills receivables, the Group applies the simplified approach permitted by IFRS 9, which requires expected lifetime losses to be recognised from initial recognition of the receivables, see Note 33 for further details.

2.15 Offsetting financial instruments

Financial assets and liabilities are offset and the net amount reported in the balance sheet when the Group currently has 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 Group has also entered into arrangements that do not meet the criteria for offsetting but still allow for the related amounts to be set off in certain circumstances, such as bankruptcy or the termination of a contract.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

2. Summary of Significant Accounting Policies (Continued)

2.16 Financial Guarantee Contracts

Financial guarantee contracts are recognised as a financial liability at the time the guarantee is issued. The liability is initially measured at fair value and subsequently at the higher of:

- the amount determined in accordance with the expected credit loss model under IFRS 9 Financial Instruments and
- the amount initially recognised less, where appropriate, the cumulative amount of income recognised in accordance with the principles of IFRS 15 Revenue from Contracts with Customers.

The fair value of financial guarantees is determined based on the present value of the difference in cash flows between the contractual payments required under the debt instrument and the payments that would be required without the guarantee, or the estimated amount that would be payable to a third party for assuming the obligations.

Where guarantees in relation to loans or other payables of associates and joint ventures are provided for no compensation, the fair values are accounted for as contributions and recognised as part of the cost of the investment.

2.17 Derivatives and hedging activities

Derivatives are initially recognised at fair value on the date a derivative contract is entered into and are subsequently remeasured to their fair value at the end of each reporting period. The accounting for subsequent changes in fair value depends on whether the derivative is designated as a hedging instrument, and if so, the nature of the item being hedged. The Group designates certain derivatives as either:

- hedges of the fair value of recognised assets or liabilities or a firm commitment (fair value hedges)
- hedges of a particular risk associated with the cash flows of recognised assets and liabilities and highly probable forecast transactions (cash flow hedges), or
- hedges of a net investment in a foreign operation (net investment hedges).

At the inception of the hedging, the Group documents the economic relationship between hedging instruments and hedged items, including whether changes in the cash flows of the hedging instruments are expected to offset changes in the cash flows of hedged items. The Group documents its risk management objective and strategy for undertaking its hedge transactions.

The fair values of derivative financial instruments designated in hedge relationships are disclosed in Note 3. Movements in the hedging reserve in shareholders' equity are shown in the consolidated statement of changes in equity. The full fair value of a hedging derivative is classified as a non-current asset or liability when the remaining maturity of the hedged item is more than 12 months; it is classified as a current asset or liability when the remaining maturity of the hedged item is less than 12 months. Trading derivatives are classified as a current asset or liability.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

2. Summary of Significant Accounting Policies (Continued)

2.17 Derivatives and hedging activities (Continued)

(i) Cash flow hedge that quantity for hedge accounting

The effective portion of changes in the fair value of derivatives that are designated and qualify as cash flow hedges is recognised in cash flow hedge reserve within equity. The gain or loss relating to the ineffective portion is recognised immediately in profit or loss within "other gains/(losses), net".

When option contracts are used to hedge forecast transactions, the Group designates only the intrinsic value of the options as the hedging instrument.

Gains or losses relating to the effective portion of the change in intrinsic value of the options are recognised in the cash flow hedge reserve within equity. The changes in the time value of the options that relate to the hedged item ("aligned time value") are recognised within other comprehensive income in the costs of hedging reserve within equity.

When forward contracts are used to hedge forecast transactions, the Group generally designates only the change in fair value of the forward contract related to the spot component as the hedging instrument. Gains or losses relating to the effective portion of the change in the spot component of the forward contracts are recognised in the cash flow hedge reserve within equity. The change in the forward element of the contract that relates to the hedged item ("aligned forward element") is recognised within other comprehensive income in the costs of hedging reserve within equity. In some cases, the entity may designate the full change in fair value of the forward contract (including forward points) as the hedging instrument. In such cases, the gains or losses relating to the effective portion of the change in fair value of the entire forward contract are recognised in the cash flow hedge reserve within equity.

Amounts accumulated in equity are reclassified in the periods when the hedged item affects profit or loss, as follows:

- Where the hedged item subsequently results in the recognition of a non-financial asset (such as inventory), both the deferred hedging gains and losses and the deferred time value of the option contracts or deferred forward points, if any, are included within the initial cost of the asset. The deferred amounts are ultimately recognised in profit or loss as the hedged item affects profit or loss (for example through "cost of sales").
- The gain or loss relating to the effective portion of the interest rate swaps hedging variable rate borrowings is recognised in profit or loss within finance cost at the same time as the interest expense on the hedged borrowings.

When a hedging instrument expires, or is sold or terminated, or when a hedge no longer meets the criteria for hedge accounting, any cumulative deferred gain or loss and deferred costs of hedging in equity at that time remains in equity until the forecast transaction occurs, resulting in the recognition of a non-financial asset such as inventory. When the forecast transaction is no longer expected to occur, the cumulative gain or loss and deferred costs of hedging that were reported in equity are immediately reclassified to profit or loss.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

2. Summary of Significant Accounting Policies (Continued)

2.17 Derivatives and hedging activities (Continued)

(ii) Net investment hedges

Hedges of net investments in foreign operations are accounted for similarly to cash flow hedges.

Any gain or loss on the hedging instrument relating to the effective portion of the hedge is recognised in other comprehensive income and accumulated in reserves in equity. The gain or loss relating to the ineffective portion is recognised immediately in profit or loss within "other gains/(losses), net".

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

(iii) Derivatives that do not qualify for hedge accounting

Certain derivative instruments do not qualify for hedge accounting. Changes in the fair value of any derivative instrument that does not qualify for hedge accounting are recognised immediately in profit or loss and are included in "other gains/(losses), net".

2.18 Inventories

Inventories comprise raw materials and consumables, work in progress and finished goods. Inventories are stated at the lower of cost and net realisable value. Cost is determined using the first-in-first-out, weighted average or specific identification method for inventories with a different nature or use. The cost of finished goods and work in progress comprises raw materials, direct labour, other direct costs and related production overheads (based on normal operating capacity). It excludes borrowing costs. Net realisable value is the estimated selling price in the ordinary course of business, less the estimated costs of completion and the estimated costs necessary to make the sale.

2.19 Properties held for sale/properties under development for sale

Properties held for sale and under development for sale are stated at the lower of cost and net realisable value. Development cost of properties comprises cost of land use rights, construction costs and borrowing costs eligible for capitalisation incurred during the construction period. Upon completion, the properties are transferred to completed properties held for sale. Net realisable value takes into account the price ultimately expected to be realised, less applicable variable selling expenses and the anticipated costs to completion. Properties held for sale and under development for sale are classified as current assets unless the construction period of the relevant property development project is expected to complete beyond normal operating cycle.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

2. Summary of Significant Accounting Policies (Continued)

2.20 Trade receivables

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

Trade receivables are recognised initially at the amount of consideration that is unconditional unless they contain significant financing components, when they are recognised at fair value. The Group holds the trade receivables with the objective to collect the contractual cash flows and therefore measures them subsequently at amortised cost using the effective interest method. See Note 33 for further information about the Group's accounting for trade receivables and a description of the Group's impairment policies.

2.21 Contract assets and liabilities

A contract asset is the Group's right to consideration in exchange for goods or services that the Group has transferred to the customer. A contract asset becomes a receivable when the Group's right to consideration is unconditional, which is the case when only the passage of time is required before payment of the consideration is due.

The Group applied the simplified approach to measure expected credit losses which uses a lifetime expected loss allowance for contract assets, see Note 34 for further details.

A contract liability is the Group's obligation to transfer, or to stand ready to transfer goods or services to the customer that the Group has received consideration or the amount is due from the customer. The Group derecognised a contract liability when the Group transfers goods or services and, therefore satisfies performance obligation.

Contract in the financial statements is presented as a contract asset or a contract liability, depending on the relationship between the Group's performance and the customer's payment.

2.22 Cash and cash equivalents

For the purpose of presentation in the statement of cash flows, cash and cash equivalents includes cash on hand, deposits held at call with financial institutions, other short-term, highly liquid investments with original maturities of three months or less that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value, and bank overdrafts. Bank overdrafts are shown within borrowings in current liabilities in the balance sheet.

2.23 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.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

2. Summary of Significant Accounting Policies (Continued)

2.24 Financial instruments classified as equity

Financial instruments issued by the Group are classified as equity instruments when all the following conditions have been met:

- (i) The financial instruments have no contracted obligation to pay cash or other financial assets to others, nor to exchange financial assets or liabilities with others under potential unfavorable circumstance;
- (ii) The financial instruments will or may be settled in the Group's own equity instruments: if the financial instrument is non-derivative, it should not have the contractual obligation to be settled by the Group delivering a variable number of its own equity instruments; if the financial instrument is derivative, it should solely be settled by the Group delivering a fixed number of its own equity instruments in exchange for a fixed amount of cash or other financial assets.

Financial instruments classified as equity instruments are recognised initially at fair value, net of transaction costs incurred.

2.25 Trade payables

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

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

2.26 Borrowings

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

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

Borrowings are removed from the balance sheet when the obligation specified in the contract is discharged, cancelled or expired. The difference between the carrying amount of a financial liability that has been extinguished or transferred to another party and the consideration paid, including any non-cash assets transferred or liabilities assumed, is recognised in profit or loss as finance costs.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

2. Summary of Significant Accounting Policies (Continued)

2.26 Borrowings (Continued)

Where the terms of a financial liability are renegotiated and the entity issues equity instruments to a creditor to extinguish all or part of the liability (debt for equity swap), a gain or loss is recognised in profit or loss, which is measured as the difference between the carrying amount of the financial liability and the fair value of the equity instruments issued.

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

2.27 Borrowing costs

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

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

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

2.28 Current and deferred income tax

The income tax expense for the period is the tax payable on the current period's taxable income based on the applicable income tax rate for each jurisdiction adjusted by changes in deferred tax assets and liabilities attributable to temporary differences and to unused tax losses. Income tax is recognised in the consolidated income statement, except to the extent that it relates to items recognised in other comprehensive income or directly in equity. In this case, the income tax is also recognised in other comprehensive income or directly in equity, respectively.

(a) Current income tax

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

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

2. Summary of Significant Accounting Policies (Continued)

2.28 Current and deferred income tax (Continued)

(b) Deferred income tax

Inside basis differences

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

Deferred 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.

Outside basis differences

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

(c) Offsetting

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

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

2. Summary of Significant Accounting Policies (Continued)

2.29 Employee benefits

The Group operates various post-employment schemes, including both defined benefit and defined contribution pension plans and post-employment medical plans.

(a) Pension obligations

For defined contribution plans, the full-time employees of the Group in the Mainland China are covered by the government-sponsored state-managed retirement plans under which the employees are entitled to a monthly pension based on certain formula. The relevant government agencies are responsible for the pension liability to these retired employees. The Group pays contributions to these pension plans monthly, on a mandatory or contractual basis. The Group has no further payment obligations once the contributions have been paid. The contributions are recognised as employee benefit expense as incurred.

The Group also provides supplementary pension subsidies to certain qualified retired employees in Mainland China. Such supplementary pension subsidies are considered as defined benefit plans. The cost of providing benefits is determined using the projected unit credit method, with actuarial valuations being carried out at the end of each annual reporting period. The present value of the defined benefit plans is determined by discounting the estimated future cash outflows using interest rates of government bonds that are denominated in the currency in which the benefits will be paid, and that have terms to maturity approximating the terms of the related pension obligation. Remeasurement, comprising actuarial gains and losses is reflected immediately in the consolidated balance sheet with a charge or credit recognised in other comprehensive income in the period in which they occur. Remeasurement recognised in other comprehensive income will not be reclassified to profit or loss. Past service cost is recognised in profit or loss in the period of a plan amendment. Net interest is calculated by applying the discount rate at the beginning of the period to the net defined benefit liability or asset. Defined benefit costs are categorised as follows:

- service cost (including current service cost, past service cost, as well as gains and losses on curtailments and settlements);
- net interest expense or income; and
- remeasurement.

The Group presents the first two components of defined benefit costs in profit or loss. Curtailment gains and losses are accounted for as past service costs.

In addition, the Group participates in various defined contribution retirement schemes for its qualified employees in certain countries or jurisdictions outside Mainland China. Employees' and employers' contributions are calculated based on various percentages of employees' gross salaries of fixed sums and length of service.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

2. Summary of Significant Accounting Policies (Continued)

2.29 Employee benefits (Continued)

(b) Other post-employment obligations

The Group provides post-retirement healthcare benefits to certain qualified retired employees. The expected costs of these benefits are accrued over the period of employment using the same accounting methodology as used for defined benefit pension plans. Actuarial gains and losses arising from experience adjustments and changes in actuarial assumptions are charged or credited to equity in other comprehensive income in the period in which they arise. These obligations are valued semiannually by independent qualified actuaries.

(c) Termination benefits

Termination benefits are payable when employment is terminated by the Group before the normal retirement date, or whenever an employee accepts voluntary redundancy in exchange for these benefits. The Group recognises termination benefits at the earlier of the following dates: (a) when the Group can no longer withdraw the offer of those benefits; and (b) when the entity recognises costs for a restructuring that is within the scope of IAS 37 and involves the payment of termination benefits. In the case of an offer made to encourage voluntary redundancy, the termination benefits are measured based on the number of employees expected to accept the offer. Benefits falling due more than 12 months after the end of the reporting period are discounted to their present value.

(d) Short-term employee benefits

Short-term employee benefits are recognised at the undiscounted amount of the benefits expected to be paid as and when employees rendered the services. All short-term employee benefits are recognised as an expense unless another IFRS requires or permits the inclusion of the benefits in the cost of an asset.

A liability is recognised for benefits accruing to employees (such as wages and salaries, annual leave and sick leave) after deducting any amount already paid.

(e) Housing funds

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

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

2. Summary of Significant Accounting Policies (Continued)

2.30 Provisions

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

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

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

2.31 Government grants

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

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

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

2.32 Revenue recognition

Revenue is measured at the transaction price agreed under the contract. Revenue is shown, net of discounts and after eliminating sales within the Group. The Group considers the effects of variable consideration, constraining estimates of variable consideration, the existence of a significant financing component in the contract, non-cash consideration and consideration payable to a customer to determine the transaction price.

Revenues are recognised when or as the control of the asset is transferred to the customer and when specific criteria have been met for each of the Group's activities, as described below. The Group bases its estimates on historical results, taking into consideration the type of customer, the type of transaction and the specifics of each arrangement.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

2. Summary of Significant Accounting Policies (Continued)

2.32 Revenue recognition (Continued)

(a) Revenue from infrastructure construction contracts and bridge steel structure manufacturing and installation services

Revenue from infrastructure construction contracts and bridge steel structure manufacturing and installation services is recognised when or as the constructions projects and bridge steel structure products and related installation services are transferred to the customer. Depending on the terms of the contracts and the laws that are applicable to the contracts, control of the construction projects and bridge steel structure products and related installation services may transfer over time or at a point in time. If the construction projects and the bridge steel structure manufacturing and installation services have no alternative use to the Group contractually and the Group has an enforceable right to payment from the customers for performance completed to date, the Group satisfies the performance obligation over time, and therefore, recognises revenue over the period of the contract by reference to the progress towards complete satisfaction of that performance obligation. The progress towards complete satisfaction of the performance obligation, in an amount that reflects the consideration expected to be entitled and, depending on the nature of the contract, is measured mainly by reference to (a) the proportion of contract costs incurred for work performed to date to estimated total contract costs for each contract; (b) the amount of work certified by site engineers; or (c) completion of physical proportion of the contract work.

(b) Services rendered

Revenue for services rendered including surveying, design, consulting, research and development, feasibility study, compliance certification services with respect to infrastructure projects, is recognised over the period of services are rendered by the progress towards complete satisfaction of that performance obligation measured by reference to (a) the proportion of contract costs incurred for work performed to date to estimated total contract costs for each contract; (b) stage of completion of the specific transactions and when it is probable that the economic benefits associated with the transaction will flow to the entity.

For (a) and (b) above, estimates of revenue, costs or extent of progress toward completion are revised if circumstances change. Any resulting increases or decreases in estimated revenues or costs are reflected in profit or loss in the period in which the circumstances that give rise to the revision become known by management.

The excess of cumulative revenue recognised in profit or loss over the cumulative billings to customers is recognised as contract assets. The excess of cumulative billings to customers over the cumulative revenue recognised in profit or loss is recognised as contract liabilities.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

2. Summary of Significant Accounting Policies (Continued)

2.32 Revenue recognition (Continued)

(c) Revenue from properties development

Revenue from sale of properties is recognised when control over the property has been transferred to the customer. The properties have generally no alternative use for the Group due to contractual restrictions. However, an enforceable right to payment does not arise until legal title has passed to the customer. Therefore, revenue is recognised at a point in time when the legal title has passed to the customer.

Some of the Group's primary land development recognised revenue over time, and the progress of implementation is based on the proportion of the cost incurred over the budgeted cost by the end of the reporting period. Some recognised revenue at a point in time.

(d) Sale of goods

Sales of goods are recognised when an entity has transferred the products to the customer, and the customer has obtained control of the products.

2.33 Interest income

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

Interest income is presented as finance income where it is earned from financial assets that are held for cash management purposes.

2.34 Dividends

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

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

2. Summary of Significant Accounting Policies (Continued)

2.35 Leases

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

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

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

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

To determine the incremental borrowing rate, the Group:

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

If a readily observable amortising loan rate is available to the individual lessee (through recent financing or market data) which has a similar payment profile to the lease, then the Group entities use that rate as a starting point to determine the incremental borrowing rate.

The Group is exposed to potential future increases in variable lease payments based on an index or rate, which are not included in the lease liability until they take effect. When adjustments to lease payments based on an index or rate take effect, the lease liability is reassessed and adjusted against the right-of-use asset.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

2. Summary of Significant Accounting Policies (Continued)

2.35 Leases (Continued)

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

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

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

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

Payments associated with short-term leases and leases of low-value assets are recognised on a straight-line basis as an expense in profit or loss. Short-term leases are leases with a lease term of 12 months or less without a purchase option.

The Group has adopted Amendment to IFRS 16 Covid-19-Related Rent Concessions retrospectively from 1 January 2020. Moreover, the Group has early adopted Amendment to IFRS 16 Covid-19-Related Rent Concessions beyond 30 June 2021, which extended the practical expedient to lease payments that were due on or before 30 June 2022. The Group has applied the practical expedient to all qualifying COVID-19-related rent concessions.

For the lessor, the Group derecognises assets held under a finance lease in balance sheet and present them as a receivable at the present value of the lease payments. Lease income from operating leases is recognised in the consolidated income statement on a straight-line basis over the lease term. Initial direct costs incurred in obtaining an operating lease are added to the carrying amount of the underlying asset and recognised as expense over the lease term on the same basis as lease income. The respective leased assets are included in the balance sheet based on their nature.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

2. Summary of Significant Accounting Policies (Continued)

2.36 Research and development

Research expenditure is recognised as an expense as incurred. Costs incurred on development projects (relating to the design and developing of new or improved products and processes) are recognised as intangible assets when it is probable that the project will be a success considering its commercial and technical feasibility and its costs can be measured reliably. Other development expenditures that do not meet these criteria are recognised as an expense when incurred. Development costs previously recognised as an expense are not recognised as an asset in a subsequent period.

Capitalised development cost is measured at cost less accumulated amortisation and accumulated impairment losses. Amortisation of capitalised development cost is calculated using the straight-line method over its expected useful life from the date they are available for use.

2.37 Dividend distribution

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

3. Financial Risk Management

3.1 Financial risk factors

The Group's activities expose it to a variety of financial risks: market risk (including foreign currency risk, price risk and cash flow and fair value interest rate risk), credit risk, and liquidity risk.

The Group's overall risk management programme focuses on the unpredictability of financial markets and seeks to minimise potential adverse effects on the Group's financial performance. The Group identifies, evaluates and uses derivative financial instruments to hedge certain risk exposures.

There has been no change to the types of the Group's exposure in respect of financial instruments or the manner in which it manages and measures the risks.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

3. Financial Risk Management (Continued)

3.1 Financial risk factors (Continued)

(a) Market risk

(i) Foreign currency risk

The functional currency of majority of the entities within the Group is RMB. Most of the Group's transactions are based and settled in RMB. Foreign currencies are used to settle the Group's revenue from overseas operations, the Group's purchases of machinery and equipment from overseas suppliers, and certain expenses.

RMB is not freely convertible into other foreign currencies and conversion of RMB into foreign currencies is subject to rules and regulations of foreign exchange control promulgated by the PRC Government.

Details of the Group's other financial assets at amortised cost, trade and other receivables, restricted cash, cash and cash equivalents, trade and other payables and borrowings as at 31 December 2021, denominated in foreign currencies, mainly United States Dollars ("USD"), are disclosed in Notes 30, 33, 36, 37, 41 and 42 respectively.

The management of the Group monitors foreign exchange exposure and will consider hedging significant foreign exchange exposure should the need arises.

As at 31 December 2021, if RMB had strengthened/weakened by 2% against USD with all other variables held constant, post-tax profit for the year would have been approximately RMB34 million lower/higher (2020: 6%, RMB3 million lower/higher), mainly as a result of foreign exchange gains/losses on translation of USD-denominated cash and cash equivalents, trade and other receivables, other financial assets at amortised cost, restricted cash, borrowings, and trade and other payables.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

3. Financial Risk Management (Continued)

3.1 Financial risk factors (Continued)

(a) Market risk (Continued)

(ii) Price risk

The Group's exposure to equity securities price risk arises from investments held by the Group and classified in the balance sheet either as at FVPL or at FVOCI and measured by reference to quoted prices.

The Group currently does not have a policy to hedge the securities price risk. However, the management closely monitors such risk by maintaining a diversified portfolio of investments with different risks.

The Group's sensitivity to equity price risk on the financial assets and liabilities at FVPL and at FVOCI at the end of the reporting period while all other variables were held constant is as follows:

	2021	2020
Increase/decrease in quoted price in open markets	6%	12%

	2021 RMB million	2020 RMB million
Increase/(decrease) in post-tax profit for the year		
– as a result of increase in equity price	49	10
– as a result of decrease in equity price	(49)	(10)
Increase/(decrease) in other comprehensive income		
– as a result of increase in equity price	36	75
– as a result of decrease in equity price	(36)	(75)

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

3. Financial Risk Management (Continued)

3.1 Financial risk factors (Continued)

(a) Market risk (Continued)

(iii) Cash flow and fair value interest rate risk

The fair value interest rate risk relates primarily to the Group's fixed-rate borrowings and other financial assets at amortised cost. The cash flow interest rate risks of the Group relates primarily to floating-rate bank borrowing and unlisted debt related entrusted products classified in the balance sheet at FVPL. The management of the Group monitors interest rate exposure and will consider hedging significant interest rate exposure should the need arise. The fair value interest rate risk on bank deposits is insignificant as the fixed rate deposits are short-term. During 2021 and 2020, the Group's borrowings at variable rate were mainly denominated in RMB and USD.

The Group's sensitivity to interest rate risk is prepared assuming the amount of floating-rate borrowings at the end of the reporting period were outstanding and the amount of unlisted debt related entrusted products classified in the balance sheet at FVPL at the end of the reporting period retained for the whole year. Bank balances are excluded from sensitivity analysis as the Directors consider that the exposure of cash flow interest rate risk arising from variable-rate bank balances is insignificant.

	2021	2020
Increase/decrease in interest rate	25 basis points	25 basis points

	2021	2020
	RMB million	RMB million
(Decrease)/increase in post-tax profit for the year		
– as a result of increase in interest rate	(280)	(135)
– as a result of decrease in interest rate	280	135

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

3. Financial Risk Management (Continued)

3.1 Financial risk factors (Continued)

(b) Credit risk

Credit risk arises from cash and bank balances, trade and other receivables except for prepayments, contract assets, debt investments carried at amortised cost and FVOCI, and the nominal value of the guarantees provided on liabilities.

In order to minimise the credit risk, the management of the Group has delegated the teams responsible for assessment of the credit quality of the customer, taking into account its financial position, past experience and other factors and determination of credit limits, credit approvals and other monitoring procedures to ensure that follow-up action is taken to recover long aged debts. In addition, the Group reviews the recoverable amount of each material individual debt at the end of the reporting period to ensure that adequate expected credit losses are made for irrecoverable amounts. One major customer (including its controlled entities), which is a wholly state-owned enterprise, contributes a significant portion of the revenue and receivables of the Group. The management considers that the credit risk in respect of this customer is limited.

The Group's concentration of credit risk by geographical locations is mainly in Mainland China, where the Group's operations are primarily located.

The Group has concentration of credit risk in respect of trade receivable as the Group's largest trade receivable and the five largest trade receivables represent 9% (2020: 10%) and 18% (2020: 19%) of the total trade receivables respectively.

The Group has concentration of credit risk in respect of other financial assets at amortised cost as the Group's largest other financial assets at amortised cost and the five largest other financial assets at amortised cost represent 9% (2020: 11%) and 31% (2020: 32%) of the total other financial assets at amortised cost respectively.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

3. Financial Risk Management (Continued)

3.1 Financial risk factors (Continued)

(b) Credit risk (Continued)

(i) Impairment of financial assets

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

- trade and other receivables
- contract assets
- debt investments carried at amortised cost, and
- debt investments carried at FVOCI.

The Group holds substantially all of bank deposits in major financial institutions located in the PRC and certain overseas banks with proper credit ratings. While cash and cash equivalents are also subject to the impairment requirements of IFRS 9, the identified impairment loss was immaterial.

Trade receivables and contract assets

For trade receivables and contract assets which have impaired, the Group assessed individually and provided for credit losses allowance. For other trade receivables and contract assets, given no reasonable and supportable information is available without undue cost for expected credit losses measurement, the trade receivables and contract assets were grouped by reference to the credit risk characteristics and assessed for credit losses allowance through exposure at default and the lifetime expected credit loss rates. When measuring expected credit loss, the Group considers its own credit loss incurred in the past, and adjusts by taking into consideration current conditions and forward looking factors. In assessing forward-looking information, the Group considers factors mainly including macroeconomic indicators, economic scenarios and weights.

Debt investments

The Group assesses the loss allowance for debt investments at amortised costs and FVOCI based on expected credit loss model. The management assesses whether the credit risk of debt investments have increased significantly since their initial recognition, and apply a three-stage impairment model to calculate their expected credit loss. For debt investments classified into stages 1 for which credit risk has not increased significantly since initial recognition, the management assesses loss allowance at an amount equal to 12-month expected credit loss. For debt investments classified into stages 2 for which credit risk has increased significantly since initial recognition but that are not credit-impaired, and debt investments classified into stages 3 that are credit-impaired since initial recognition, the management assesses loss allowance at an amount equal to lifetime expected credit loss. When measuring expected credit loss, the Group considers its own credit loss incurred in the past, and adjusts by taking into consideration current conditions and forward looking factors.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

3. Financial Risk Management (Continued)

3.1 Financial risk factors (Continued)

(b) Credit risk (Continued)

(ii) Financial guarantees and shortfall payments

The Group has provided guarantees to banks in respect of banking facilities utilised by certain related companies and third parties.

The Company has provided shortfall payments given to the senior tranches in respect of asset-backed medium-term notes ("ABN") & asset-backed securitisation ("ABS") issued by the subsidiaries of the Company.

The maximum exposure of these financial guarantees and shortfall payments to the Group is as follows:

	2021		2020	
	RMB million	Expiry period	RMB million	Expiry period
Guarantees given to banks in respect of banking facilities to:				
Joint ventures	2,969	2022-2042	5,048	2022-2042
Associates	4,730	2023	2,441	2023
Government-related entities	480	2021-2030	480	2021-2030
Property purchasers	51,313	2021-2046	44,684	2021-2046
Shortfall payments given to the senior tranches in respect of ABN & ABS	93,898	2021-2036	54,651	2021-2026
	153,390		107,304	

(c) Liquidity risk

Liquidity risk encompasses the risk that the Group cannot meet its financial obligations in full.

Prudent liquidity risk management includes maintaining sufficient cash and the availability of funding from an adequate amount of committed credit facilities to meet obligations when due. Due to capital intensive nature of the Group's business, the Group ensures that it maintains flexibility through keeping sufficient cash and cash equivalents and credit lines to meet its liquidity requirements. The Group finances its working capital requirements through a combination of funds generated from operations and bank and other borrowings.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

3. Financial Risk Management (Continued)

3.1 Financial risk factors (Continued)

(c) Liquidity risk (Continued)

The table below analyses the Group's non-derivative financial liabilities for which the contractual maturities are essential for an understanding of the timing of cash flows into relevant maturity groupings based on the remaining period at the balance sheet date to the contractual maturity date. The spot rate as at the end of the reporting period is used for the cash flow calculation in relation to the amounts settled with foreign currencies. The amounts disclosed in the table are the contractual undiscounted cash flows. To the extent that interest cash flows are floating rate, the undiscounted amount is derived from interest rate at the end of the reporting period.

	On demand or Less than 1 year RMB million	Between 1 and 2 years RMB million	Between 2 and 5 years RMB million	Over 5 years RMB million	Total undiscounted cash flows RMB million	Carrying amount RMB million
At 31 December 2021						
Trade and other payables (excluding statutory and non-financial liabilities) (Note 41)	487,681	6,427	3,377	1,096	498,581	497,930
Borrowings (Note 42)	123,005	38,882	81,143	154,193	397,223	311,927
Lease liabilities (Note 19)	421	291	306	390	1,408	1,332
Financial guarantee contracts and shortfall payments	153,390	-	-	-	153,390	-
Financial liabilities at FVPL (Note 35)	122	-	-	-	122	122
	764,619	45,600	84,826	155,679	1,050,724	811,311
At 31 December 2020						
Trade and other payables (excluding statutory and non-financial liabilities) (Note 41)	456,959	4,926	2,465	996	465,346	464,900
Borrowings (Note 42)	89,018	52,562	63,007	92,090	296,677	250,055
Lease liabilities (Note 19)	550	632	390	329	1,901	1,763
Financial guarantee contracts and shortfall payments	107,304	-	-	-	107,304	-
Financial liabilities at FVPL (Note 35)	65	-	-	-	65	65
	653,896	58,120	65,862	93,415	871,293	716,783

Note: The difference between total undiscounted cash flows and the carrying amount of trade and other payables represents the imputed interest expenses on interest-free retention payables.

As at 31 December 2021, there is no bank borrowing that contains a repayment on demand clause.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

3. Financial Risk Management (Continued)

3.1 Financial risk factors (Continued)

(c) Liquidity risk (Continued)

The amounts included above for financial guarantee contracts and shortfall payment agreements are the maximum amounts the Group could be required to settle under the arrangement for the full guaranteed amount if that amount is claimed by the counterparty to the guarantee. Based on expectations at the end of the reporting period, the Group considers that it is more likely than not that no amount will be payable under the arrangement. However, this estimate is subject to change depending on the probability of the counterparty claiming under the guarantee or shortfall payment which is a function of the likelihood that the financial receivables held by the counterparty which are guaranteed suffer credit losses.

The amounts included above for variable interest rate instruments for non-derivative financial liabilities are subject to change if changes in variable interest rates differ to those estimates of interest rates determined at the end of the reporting period.

(d) 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.

In order to maintain or adjust the capital structure, the Group may adjust the amount of dividends paid to shareholders, return capital to shareholders, issue new shares or sell assets to reduce debt.

The Group monitors capital on the basis of the asset-liability ratio. This ratio is calculated as total liabilities divided by total assets. The Group aims to maintain the asset-liability ratio at a reasonable level.

	2021	2020
	RMB million	RMB million
Total liabilities	1,003,386	886,931
Total assets	1,361,580	1,199,977
Asset-liability ratio	73.69%	73.91%

The asset-liability ratio as at 31 December 2021 decreased by 0.22% percentage points compared with that in 2020 primarily attributable to capital contribution from non-controlling interests in 2021.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

3. Financial Risk Management (Continued)

3.2 Fair value estimation

Some of the Group's financial assets and financial liabilities are measured at fair value at the end of each reporting period. The following table gives information about how the fair values of these financial assets and financial liabilities are determined (in particular, the valuation technique(s) and inputs used), as well as the level of the fair value hierarchy into which the fair value measurements are categorised (levels 1 to 3) based on the degree to which the inputs to the fair value measurements is observable.

- Level 1: The fair value of financial instruments traded in active markets is based on quoted market prices at the end of the reporting period. The quoted market price used for financial assets held by the Group is the current bid price. These instruments are included in level 1.
- Level 2: The fair value of financial instruments that are not traded in an active market is determined using valuation techniques which maximise the use of observable market data and rely as little as possible on entity-specific estimates. If all significant inputs required to fair value an instrument are observable, the instrument is included in level 2.
- Level 3: If one or more of the significant inputs is not based on observable market data, the instrument is included in level 3. This is the case for unlisted equity securities, unlisted open-end equity funds, unlisted entrusted products, and other financial assets at FVPL.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

3. Financial Risk Management (Continued)

3.2 Fair value estimation (Continued)

(a) Fair value of the Group's financial assets and financial liabilities that are measured at fair value

Financial assets/financial liabilities	Fair value as at (RMB million)		Fair value hierarchy	Valuation technique(s) and key input(s)	Significant unobservable input(s)	Range of inputs (probability-weighted average)	Relationship of unobservable inputs to fair value
	2021	2020					
1) Derivative financial instruments	Assets/Liabilities	Amount	Level 3	Option pricing model	Risk-free interest, Volatility	3.04%, 28.31%	The higher the risk-free interest rate, the higher the option value. The higher the volatility, the higher the option value.
	Assets	149					
	Assets	160					
2) Listed equity securities and money – market securities investment funds at FVPL	Held-for-trading financial assets in Mainland China:	Amount	Level 1	Quoted bid prices in active markets.	N/A	N/A	N/A
	Industry	Amount					
	Finance	5,791					
	Manufacturing	65					
	Transportation	1					
	Others	1					
		5,858					
	Finance	–	Level 3	Market valuation method by reference to discount rate that reflects the liquidity level.	N/A	N/A	N/A
	Finance	1,175					
	Total	5,858					
	Total	3,660					
3) Listed equity securities at fair value through other comprehensive income ("FVOCI")	Listed equity securities in Mainland China:	Amount	Level 1	Quoted bid prices in active markets.	N/A	N/A	N/A
	Listed equity securities in Mainland China:	Amount					
	Industry	Amount					
	Finance	522					
	Industry	Amount					
	Finance	568					

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

3. Financial Risk Management (Continued)

3.2 Fair value estimation (Continued)

(a) Fair value of the Group's financial assets and financial liabilities that are measured at fair value (Continued)

Financial assets/financial liabilities	Fair value as at (RMB million)		Fair value hierarchy	Valuation technique(s) and key input(s)	Significant unobservable input(s)	Range of inputs (probability-weighted average)	Relationship of unobservable inputs to fair value
	2021	2020					
4) Unlisted open-end equity funds at FVPL	Listed equity securities in Hong Kong: Industry Amount 288 Manufacturing	Listed equity securities in Hong Kong: Amount 269 Manufacturing	Level 1	Quoted bid prices in active markets.	N/A	N/A	N/A
	Unlisted open-end equity funds in Mainland China: Assets Industry Amount 396 Finance Finance 1,870 Total 2,266	Unlisted open-end equity funds in Mainland China: Assets Industry Amount 1,381 Finance 1,384 Finance 2,765 Total	Level 1 Level 3	Quoted bid prices in active markets. Discounted cash flow. Future cash flows are estimated based on expected recoverable amounts, discounted at rates that reflect management's best estimation of the expected risk level.	N/A Expected future cash flow, Discount rates that correspond to the expected risk level.	N/A 2.59%	N/A The higher the future cash flow, the higher the fair value. The lower the discount rate, the higher the fair value.
	Liabilities Industry Amount 54 Finance	Liabilities Industry Amount 65 Finance	Level 3	Discounted cash flow. Future cash flows are estimated based on expected recoverable amounts, discounted at rates that reflect management's best estimation of the expected risk level.	Expected future cash flow, Discount rates that correspond to the expected risk level.	2.59%	The higher the future cash flow, the higher the fair value. The lower the discount rate, the higher the fair value.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

3. Financial Risk Management (Continued)

3.2 Fair value estimation (Continued)

(a) Fair value of the Group's financial assets and financial liabilities that are measured at fair value (Continued)

Financial assets/financial liabilities	Fair value as at (RMB million)		Fair value hierarchy	Valuation technique(s) and key input(s)	Significant unobservable input(s)	Range of inputs (probability-weighted average)	Relationship of unobservable inputs to fair value	
	2021	2020						
5) Unlisted entrusted products and other financial assets at FVPL	Unlisted entrusted products in Mainland China:		Level 3	Discounted cash flow. Future cash flows that are estimated based on expected recoverable amounts, discounted at rates that reflect management's best estimation of the expected risk level.	Expected future cash flow. Discount rates that correspond to the expected risk level.	7.21%-10.64%	The higher the future cash flow, the higher the fair value. The lower the discount rate, the higher the fair value.	
	Industry	Amount	Unlisted entrusted products in Mainland China: Amount					
	Real estate	1,662	Industry					1,583
	Construction	846	Real estate					1,543
	Finance	3,485	Construction					1,428
	Mining	10	Finance					10
	Others	256	Mining					456
Total	6,259	Others	5,020					
6) Unlisted equity investments at FVOCI	Unlisted equity investment in Mainland China:		Level 3	Market valuation method by reference to P/B ratio, P/S ratio, P/E ratio, discount rate that reflects the liquidity level, and cost method by reference to the original investment cost.	P/B ratio, P/S ratio, P/E ratio. Discount rates that reflect the liquidity level, Original investment cost	0.46-1.80, 1.19-5.57, 11.94-30.56, 10.00%-40.00%, n/a	The higher the P/B ratio, P/S ratio, P/E ratio, the higher the fair value. The lower discount rate, the higher the fair value. The original investment cost is positively correlated with the fair value of unlisted equity instruments.	
	Industry	Amount	Unlisted equity investment in Mainland China: Amount					
	Construction	8,228	Industry					6,433
	Finance	132	Construction					834
	Manufacturing	947	Finance					80
	Real estate	13	Manufacturing					11
	Mining	5	Real estate					5
Others	2,029	Mining	1,468					
Total	11,354	Others	8,831					

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

3. Financial Risk Management (Continued)

3.2 Fair value estimation (Continued)

(a) Fair value of the Group's financial assets and financial liabilities that are measured at fair value (Continued)

Financial assets/financial liabilities	Fair value as at (RMB million)		Fair value hierarchy	Valuation technique(s) and key input(s)	Significant unobservable input(s)	Range of inputs (probability-weighted average)	Relationship of unobservable inputs to fair value
	2021	2020					
7) Unlisted equity investments at FVPL	Unlisted equity investment in Mainland China:		Level 3	Market valuation method by reference to P/B ratio, discount rate that reflects the liquidity level, and cost method by reference to the original investment cost.	P/B ratio, Discount rates that reflect the liquidity level, Original investment cost	0.46-1.80, 20.54%, n/a	The higher the P/B ratio, the higher the fair value. The lower discount rate, the higher the fair value. The original investment cost is positively correlated with the fair value of unlisted equity instruments.
	Industry	Amount					
8) Bills receivables at FVOCI	Bills receivables in Mainland China:		Level 3	Discounted cash flow with future cash flows that are estimated based on expected recoverable amounts, discounted at rates that reflect management's best estimation of the expected risk level.	Expected future cash flow, Discount rates that correspond to the expected risk level.	3.85%	The higher the future cash flow, the higher the fair value. The lower the discount rate, the higher the fair value.
	Industry	Amount					
	Construction	526					

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

3. Financial Risk Management (Continued)

3.2 Fair value estimation (Continued)

(a) Fair value of the Group's financial assets and financial liabilities that are measured at fair value (Continued)

There were no transfer between Level 1 and 2 during the year.

Reconciliation of Level 3 fair value measurements:

	Unlisted entrusted products RMB million	Unlisted open-end funds RMB million	Unlisted equity investments RMB million	Listed equity securities RMB million	Others RMB million	Total RMB million
Opening balance at 1 January 2021	4,057	1,319	13,008	1,175	1,645	21,204
Acquisitions	2,398	970	5,827	-	2,502	11,697
Losses recognised in profit or loss	(25)	(23)	(17)	(103)	(291)	(459)
Gains recognised in other comprehensive income	-	-	80	-	-	80
Disposals	(3,305)	(450)	(2,478)	(1,072)	(47)	(7,352)
Closing balance at 31 December 2021	3,125	1,816	16,420	-	3,809	25,170

	Unlisted entrusted products RMB million	Unlisted open-end funds RMB million	Unlisted equity investments RMB million	Listed equity securities RMB million	Others RMB million	Total RMB million
Opening balance at 1 January 2020	6,132	664	10,088	941	1,195	19,020
Acquisitions	2,706	1,834	6,383	-	967	11,890
Gains/(losses) recognised in profit or loss	147	(31)	9	234	(241)	118
Gains recognised in other comprehensive income	-	-	2	-	-	2
Disposals	(4,928)	(1,148)	(3,474)	-	(276)	(9,826)
Closing balance at 31 December 2020	4,057	1,319	13,008	1,175	1,645	21,204

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

3. Financial Risk Management (Continued)

3.2 Fair value estimation (Continued)

(b) Fair value of financial assets and liabilities measured at amortised cost

Except as detailed in the following table, the Directors consider that the carrying amounts of financial assets and financial liabilities recorded at amortised cost in the consolidated financial statements approximate to their fair values:

	2021		2020	
	Carrying amount RMB million	Fair value RMB million	Carrying amount RMB million	Fair value RMB million
Financial assets				
Other financial assets at amortised cost – fixed rate	29,513	30,849	25,467	26,960
Financial liabilities				
Long-term bank borrowings – fixed rate	43,674	45,638	28,267	28,863
Long-term debentures – fixed rate	55,007	55,657	49,443	48,952
Other long-term borrowings – fixed rate	–	–	259	259

The fair values hierarchy of the fair value of fixed rate other financial assets at amortised cost, bank borrowings, long-term debentures and other long-term borrowings are included in level 3. The fair values have been determined based on a discounted cash flow analysis, with the most significant input being the discount rate that reflects the credit risk of counterparties or the issuer.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

4. Critical Accounting Estimates, Assumptions and Judgments

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

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

(a) Critical judgements in application of accounting policies

(i) Revenue from sale of properties

Revenue from sales of properties is recognised at a point in time when the buyer obtains control of the completed property. The Group may recognise the revenue from sales of properties over time when the Group's performance do 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. Normally, the Group may not change or substitute the property unit or redirect the property unit for another use due to the contractual restrictions with the customer and thus the property unit does not have an alternative use to the Group. However, whether there is an enforceable right to payment depends on the terms of sales contract and the interpretation of the applicable laws that apply to the contract. Such determination requires significant judgments.

The Group provided guarantees in respect of mortgage facilities granted by certain banks relating to the mortgage loans arranged for certain purchasers of the Group's properties. These guarantees will expire when relevant property ownership certificates are mortgaged to banks by the purchasers. In addition, based on the past experiences, defaults of mortgage facilities by the purchasers which resulted in the bank guarantees being called upon were rare. Further, the credit risk of the Group under the circumstance that a purchaser defaults on the payment of its mortgage during the term of the guarantee is very low. The Group believes that significant risks and rewards associated to the ownership of the properties have been transferred to the purchasers when the buyer checks and accepts the property or when the buyer is regarded as checking and accepting the property.

(ii) Determination of control over structured entities

The Group invested in several structured entities which were mainly engaged in infrastructure investment activities or acted as manager to a number of structured entities and also carries interests in these entities. Determining whether the Group controls these structured entities usually focuses on the assessment of the power of the Group, its variable returns (including but not limited to any carried interests and commission income or management fees earned) and the ability to exercise its power to influence the variable returns from these structured entities.

Management considers a number of factors to assess if the Group has control over these structured entities, including the Group acts as a principal or an agent through analysis of the scope of the decision-making authority of the Group, its remuneration entitlement, other interests the Group held, and the rights held by other parties. Based on the assessment following the accounting policies set out in Notes 2.2 and 2.3, the Group consolidates certain structured entities that it has control, accounts for as joint ventures or associates when it has joint control or significant influence over the structured entities. For those that the Group has neither control, joint control nor significant influence, the Group accounts for as financial assets. Judgement is involved when performing the assessment. Should those joint ventures, associates and financial assets be consolidated, net assets, revenue and profit of the Group could be affected.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

4. Critical Accounting Estimates, Assumptions and Judgments (Continued)

(a) Critical judgements in application of accounting policies (Continued)

(ii) Determination of control over structured entities (Continued)

Further disclosure in respect of unconsolidated structured entities in which the Group has an interest has been set out in Note 25.

(iii) Classification of financial assets

The Group classified the financial assets based on the business model for managing the financial assets and the contractual cash flow characteristics of the financial asset.

The Group's business model is determined at a level that reflects how groups of financial assets are managed together to achieve a particular business objective. The judgement when the Group assesses its business model for managing financial assets includes:

- a. how the performance of the business model and the financial assets held within that business model are evaluated and reported to the entity's key management personnel;
- b. the risks that affect the performance of the business model (and the financial assets held within that business model) and, in particular, the way in which those risks are managed; and
- c. how managers of the business are compensated (for example, whether the compensation is based on the fair value of the assets managed or on the contractual cash flows collected).

The judgement in assessing contractual cash flows are consistent with a basic lending arrangement include:

- a. if the timing or amount of principal may change over the life of the financial asset (for example, if there are repayment of principal before maturity);
- b. if the interest consists of consideration for the time value of money, for the credit risk associated with the principal amount outstanding during a particular period of time and for other basic lending risks and costs, as well as a profit margin.

For example, the prepayment amount before maturity solely represents unpaid amounts of principal and interest on the principal amount outstanding, which may include reasonable additional compensation of the early termination of the contract.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

4. Critical Accounting Estimates, Assumptions and Judgments (Continued)

(b) Critical accounting estimates and assumptions

The following critical accounting estimates and assumptions have important risks that will cause significant adjustments to the value of assets and liabilities in the next year:

(i) Revenue recognition from infrastructure construction contracts

Revenue from infrastructure construction contracts is recognised over the period of the contract by reference to the progress towards complete satisfaction of that performance obligation, depending on the nature of the contract, is measured mainly by reference to the proportion of contract costs incurred for work performed to date to estimated total contract costs for each contract. Management estimates the total contract revenue and total contract costs at the inception of each contract. As the contract progresses, management regularly reviews and revises the estimates of contract revenue and contract costs if circumstances change, such as variations in contract work, claims and incentive payments. The increases or decreases in estimated total contract revenue or total contract costs resulted in the adjustments to the extent of progress toward completion and revenue recognised in the period in which the circumstances that give rise to the revision becomes known by management.

(ii) Expected credit losses of trade receivables and contract assets

The Group applies the IFRS 9 simplified approach to measure expected credit losses which uses a lifetime expected loss allowance for all trade receivables and contract assets. For trade receivables and contract assets which have impaired, the Group assessed individually and provided for credit losses allowance. For other trade receivables and contract assets, given no reasonable and supportable information is available without undue cost for expected credit losses measurement, the trade receivables and contract assets were grouped by reference to the credit risk characteristics and assessed for credit losses allowance through exposure at default and the lifetime expected credit loss rates. When measuring expected credit loss, the Group considers its own credit loss incurred in the past, and adjusts by taking into consideration current conditions and forward looking factors.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

4. Critical Accounting Estimates, Assumptions and Judgments (Continued)

(b) Critical accounting estimates and assumptions (Continued)

(ii) Expected credit losses of trade receivables and contract assets (Continued)

In assessing forward-looking information, the Group considers different macroeconomic scenarios and weights. In 2021, the weights of the three economic scenarios of "baseline", "unfavourable" and "favourable" are 50%, 40% and 10% respectively. The Group regularly monitors and reviews critical macroeconomic assumptions and parameters related to the measurement of expected credit loss, including the economic policies, macroeconomic indicators, industry risks, and changes in customer conditions, etc. In 2021, the Group has considered the uncertainty caused by the COVID-19 outbreak and updated relevant assumptions and parameters accordingly. The key macroeconomic parameters applicable to each scenario are set out below:

	Scenario		
	Baseline	Unfavourable	Favourable
GDP	5.48%	5.10%	5.60%
Industrial Added Value	5.23%	3.93%	6.00%

The details of the expected credit loss of trade receivables and contract assets are set out in Note 33 and Note 34, respectively.

(iii) Expected credit losses of debt investments at amortised cost and FVOCI

The Group assesses on a forward looking basis the expected credit losses associated with its debt investments at amortised cost and FVOCI using the risk parameters including exposure at default and expected credit loss rate, which is determined based on probabilities of default and default rates. When measuring expected credit loss, the Group considers its own credit loss incurred in the past, and adjusts by taking into consideration current conditions and forward looking factors.

In assessing forward-looking information, the Group adopted the method consistent with expected credit losses of trade receivables and contract assets.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

4. Critical Accounting Estimates, Assumptions and Judgments (Continued)

(b) Critical accounting estimates and assumptions (Continued)

(iii) Expected credit losses of debt investments at amortised cost and FVOCI (Continued)

To assess whether there is a significant increase in credit risks the Group compares the risk of a default occurring on the asset as at the reporting date with the risk of default as at the date of initial recognition. It considers available reasonable and supportive forwarding-looking information. Especially the following indicators are incorporated:

- past due information
- actual or expected significant adverse changes in business, financial or economic conditions that are expected to cause a significant change to the borrower's ability to meet its obligations
- internal and external credit rating
- actual or expected significant changes in the operating results of the borrower
- significant changes in the value of the collateral supporting the obligation or in the quality of third-party guarantees or credit enhancements.

(iv) Impairment of properties held for sale and under development for sale

The Group measures properties held for sale and under development for sale at the lower of cost and net realisable value on the balance sheet date. The net realisable value calculation requires the use of assumptions and estimates on the selling price and the costs and expenses that will be incurred until completion. Where the expectation is different from the original estimate, such differences will have an impact on the net realisable value calculation and the provision for inventory impairment in the periods in which such estimate is changed.

(v) Fair value of financial instruments

The fair value of financial instruments that are traded in an active market is measured at quoted price. If the market for a financial instrument is not active, the Group determines fair value by using valuation techniques. The Group uses its judgment to select a variety of methods and make assumptions that are mainly based on market conditions existing at each end of the reporting period. For details of the key assumptions used and the impact of changes to these assumptions see Note 3.2.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

4. Critical Accounting Estimates, Assumptions and Judgments (Continued)

(b) Critical accounting estimates and assumptions (Continued)

(vi) Income taxes

The Group is subject to income taxes in the PRC and other jurisdictions. Significant judgment is required in determining the worldwide provision for income taxes. There are many transactions and calculations for which the ultimate tax determination is uncertain. Where the final tax outcome of these matters is different from the amounts that were initially recorded, such differences will impact the current income tax and deferred income tax provisions in the period in which such determination are made.

Certain subsidiaries of the Group are qualified as high-tech enterprises and are entitled to the preferential income tax rate of 15%. The qualification is valid 3 years, and upon expiry the subsidiaries are required to submit the application to relevant government authorities to certify the high-tech qualification. If the subsidiaries disqualified from the high-tech certification, they cannot enjoy the preferential income tax, and the change in tax rate will affect the current and deferred income taxes in the period in which the change takes place.

Deferred income tax assets relating to tax losses are recognised as management considers it is probable that future taxable profit will be available against which the tax losses can be utilised.

Future taxable profit includes the profit from operating results and taxable profits of future periods reversed of taxable temporary differences. Estimates and judgement are required in determining the timing and amount of future taxable profit generated. In case where the actual future taxable profit generated are less than expected, or change in facts and circumstances which result in revision of future taxable profit estimation, a material reversal or further recognition of deferred tax assets may arise, which will be recognised in the consolidated income statement in the period in which such a reversal or further recognition takes place.

(vii) Pension benefits

The present value of the pension obligations depends on a number of factors that are determined on an actuarial basis using a number of assumptions. The assumptions used in determining the net cost (income) for pensions include the discount rate. Any changes in these assumptions will impact the carrying amount of pension obligations.

The Group determines the appropriate discount rate at the end of each year. This is the interest rate that should be used to determine the present value of estimated future cash outflows expected to be required to settle the pension obligations. In determining the appropriate discount rate, the Group considers the interest rates of government bonds that are denominated in the currency in which the benefits will be paid, and that have terms to maturity approximating the terms of the related pension obligation.

Other key assumptions for pension obligations are based in part on current market conditions. Additional information is disclosed in Note 43.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

4. Critical Accounting Estimates, Assumptions and Judgments (Continued)

(b) Critical accounting estimates and assumptions (Continued)

(viii) Amortisation of service concession arrangements in relation to toll highways

Amortisation of service concession arrangements in relation to the toll highways operations are calculated to write off their cost, over their expected useful lives or the remaining concession period, whichever is the shorter, commencing from the date of commencement of commercial operation of the toll highways, based on a units-of-usage basis, which is the ratio of actual traffic volume compared to the total expected traffic volume of the toll highways as estimated by the management or by reference to traffic projection reports prepared by independent traffic consultants. Appropriate adjustment will be made should there be any material change.

5. Segment Information

The Directors are the chief operating decision maker. Management has determined the operating segments based on the reports reviewed by the Directors that are used to allocate resources to the segments and assess their performance. The reports reviewed by the Directors are prepared in accordance with the relevant PRC accounting standards, which resulted in the difference in the basis of measurement of segment results, segment assets and segment liabilities, the details of which are shown as reconciling items.

The Directors consider the business from the service and product perspective. Management assesses the performance of the following five operating segments:

- (a) Construction of railways, highways, bridges, tunnels, metropolitan railways (including subways and light railways), buildings, irrigation works, hydroelectricity projects, ports, docks, airports and other municipal works ("Infrastructure construction");
- (b) Survey, design, consulting, research and development, feasibility study and compliance certification services with respect to infrastructure construction projects ("Survey, design and consulting services");
- (c) Design, research and development, manufacture and sale of turnouts, bridge steel structures, and other railway related equipment, engineering machinery and materials ("Engineering equipment and component manufacturing");
- (d) Development, sale and management of residential and commercial properties ("Property development"); and
- (e) Mining, financial business, operation of service concession arrangements, merchandise trading and other ancillary business ("Other businesses").

Revenue between segments is carried out at actual transaction prices.

The segment information regarding the Group's reportable and operating segments is presented below.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

5. Segment Information (Continued)

The following is an analysis of the Group's revenue and results by reportable segments:

	For the year ended 31 December 2021						
	Infrastructure construction	Survey, design and consulting services	Engineering equipment and component manufacturing	Property development	Other businesses	Elimination	Total
	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million
External revenue	923,435	17,604	23,831	50,249	51,744	-	1,066,863
Inter-segment revenue	25,855	820	8,864	488	48,175	(84,202)	-
Other revenue	3,356	183	481	563	1,826	-	6,409
Inter-segment other revenue	392	-	-	-	197	(589)	-
Segment revenue	953,038	18,607	33,176	51,300	101,942	(84,791)	1,073,272
Segment results							
Profit before income tax	34,204	1,615	2,029	1,622	5,830	(7,714)	37,586
Segment results included:							
Share of (losses)/profit of joint ventures	(239)	1	104	(13)	(360)	-	(507)
Share of profit of associates	912	17	46	33	2,801	-	3,809
Interest income	1,043	70	94	198	4,264	(627)	5,042
Interest expenses	(2,514)	(37)	(90)	(1,249)	(4,624)	1,124	(7,390)
Losses from derecognition of financial assets at amortised cost	(4,298)	(4)	(117)	-	(176)	-	(4,595)

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

5. Segment Information (Continued)

	For the year ended 31 December 2020						
	Infrastructure construction	Survey, design and consulting services	Engineering equipment and component manufacturing	Property development	Other businesses	Elimination	Total
	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million
External revenue	844,110	16,187	23,074	49,304	36,286	–	968,961
Inter-segment revenue	29,553	1,026	6,368	–	35,153	(72,100)	–
Other revenue	2,328	108	351	459	2,525	–	5,771
Inter-segment other revenue	319	–	–	–	219	(538)	–
Segment revenue	876,310	17,321	29,793	49,763	74,183	(72,638)	974,732
Segment results							
Profit before income tax	36,876	2,241	2,132	(4,096)	5,016	(8,785)	33,384
Segment results included:							
Share of profit/(losses) of joint ventures	430	5	106	140	(517)	–	164
Share of profit of associates	654	5	48	132	1,192	–	2,031
Interest income	935	70	56	333	2,272	(870)	2,796
Interest expenses	(2,400)	(189)	(69)	(1,612)	(2,852)	654	(6,468)
Losses from derecognition of financial assets at amortised cost	(3,172)	(8)	(64)	–	(58)	–	(3,302)

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

5. Segment Information (Continued)

A reconciliation of the amounts presented for reportable segments to the consolidated financial statements is as follows:

	2021 RMB million	2020 RMB million
(i) Segment interest income, before inter-segment elimination	5,669	3,666
Inter-segment elimination	(627)	(870)
	5,042	2,796
Reconciling items:		
Reclassification of interest income obtained from other financial assets at amortised cost (<i>Note 10</i>)	1,063	1,528
Total consolidated finance income, as reported	6,105	4,324
(ii) Segment interest expenses, before inter-segment elimination	8,514	7,122
Inter-segment elimination	(1,124)	(654)
	7,390	6,468
Reconciling item:		
Imputed interest expenses on retention payables (<i>Note 10</i>)	226	288
Total consolidated finance costs, as reported	7,616	6,756
(iii) Segment results, before inter-segment elimination	45,300	42,169
Inter-segment elimination	(7,714)	(8,785)
	37,586	33,384
Reconciling item:		
Land appreciation tax (<i>Note (a)</i>)	2,050	2,228
Total consolidated profit before income tax, as reported	39,636	35,612

(a) Land appreciation tax is included as charge to segment results under segment reporting and is classified as income tax expense in the consolidated income statement.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

5. Segment Information (Continued)

The following is an analysis of the Group's assets and liabilities by reportable segments:

	As at 31 December 2021						
	Infrastructure construction	Survey, design and consulting services	Engineering equipment and component manufacturing	Property development	Other businesses	Elimination	Total
	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million
Segment assets	751,756	27,476	62,116	281,252	559,696	(333,527)	1,348,769
Investments in joint ventures	38,653	171	438	403	10,166	-	49,831
Investments in associates	36,874	888	680	379	7,360	-	46,181
Unallocated assets							12,811
Total assets							1,361,580
Segment liabilities	626,780	12,324	35,318	254,905	392,472	(324,002)	997,797
Unallocated liabilities							5,589
Total liabilities							1,003,386

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

5. Segment Information (Continued)

	As at 31 December 2020						
	Infrastructure construction	Survey, design and consulting services	Engineering equipment and component manufacturing	Property development	Other businesses	Elimination	Total
	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million
Segment assets	711,979	24,550	55,851	252,295	444,050	(300,532)	1,188,193
Investments in joint ventures	29,768	81	385	417	9,565	-	40,216
Investments in associates	31,899	816	607	322	4,489	-	38,133
Unallocated assets							11,784
Total assets							1,199,977
Segment liabilities	574,136	13,197	30,579	228,249	334,894	(300,247)	880,808
Unallocated liabilities							6,123
Total liabilities							886,931

For the purposes of monitoring segment performances and allocating resources between segments:

- (a) all assets are allocated to operating segments other than deferred tax assets and current income tax recoverable excluding prepaid land appreciation tax which is allocated to operating segments; and
- (b) all liabilities are allocated to operating segments other than deferred tax liabilities and current income tax liabilities excluding land appreciation tax payable which is allocated to operating segments.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

5. Segment Information (Continued)

A reconciliation of the amounts presented for reportable segments to the consolidated financial statements is as follows:

	2021 RMB million	2020 RMB million
Segment assets, before inter-segment elimination	1,682,296	1,488,725
Inter-segment elimination	(333,527)	(300,532)
	1,348,769	1,188,193
Reconciling items:		
Deferred tax assets	10,372	9,333
Non-tradable shares reform of subsidiaries <i>(Note (a))</i>	(148)	(148)
Current income tax recoverable	3,736	3,451
Prepaid land appreciation tax included in current income tax recoverable	(1,149)	(852)
	12,811	11,784
Total consolidated assets, as reported	1,361,580	1,199,977
Segment liabilities, before inter-segment elimination	1,321,799	1,181,055
Inter-segment elimination	(324,002)	(300,247)
	997,797	880,808
Reconciling items:		
Deferred tax liabilities	1,647	1,454
Current income tax liabilities	7,100	7,969
Land appreciation tax payable included in current income tax liabilities	(3,158)	(3,300)
	5,589	6,123
Total consolidated liabilities, as reported	1,003,386	886,931

(a) Losses on non-tradable shares reform of subsidiaries are recorded in segment assets in segment reporting and were adjusted to other gains and losses in consolidated income statement in prior years.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

5. Segment Information (Continued)

Other segment information:

	Year ended 31 December 2021					
	Infrastructure construction	Survey, design and consulting services	Engineering equipment and component manufacturing	Property development	Other businesses	Consolidated
	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million
Capital expenditure:						
Property, plant and equipment	8,977	378	1,648	354	1,663	13,020
Lease prepayments	91	–	138	77	16	322
Investment properties	137	–	–	8	130	275
Intangible assets	569	28	149	3,368	47,229	51,343
Mining assets	–	–	–	–	2	2
Right-of-use assets	397	97	37	7	42	580
Total	10,171	503	1,972	3,814	49,082	65,542
Depreciation and amortisation:						
Property, plant and equipment	5,055	288	718	353	1,929	8,343
Lease prepayments	248	16	47	76	72	459
Investment properties	10	5	11	334	35	395
Intangible assets	92	29	43	2	631	797
Mining assets	44	–	–	–	60	104
Right-of-use assets	446	32	55	48	114	695
Other prepayments	84	4	14	1	30	133
Total	5,979	374	888	814	2,871	10,926
Gains on disposal and/or write-off of property, plant and equipment	(269)	(6)	(24)	–	(29)	(328)
Gains on disposal of lease prepayments	(41)	–	(57)	–	–	(98)
Decrease in foreseeable losses on contracts	(329)	–	–	–	–	(329)
Impairment loss/(reversal of impairment) on trade and other receivables	3,940	113	21	375	(755)	3,694
(Reversal of impairment)/impairment loss on other financial assets at amortised cost	(97)	–	–	75	582	560
Impairment loss on contract assets	1,224	–	–	–	–	1,224
Impairment loss on property, plant and equipment	1	–	3	128	–	132
Impairment loss on investment properties	48	–	–	–	–	48

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

5. Segment Information (Continued)

Other segment information:

	Year ended 31 December 2020					
	Infrastructure construction RMB million	Survey, design and consulting services RMB million	Engineering equipment and component manufacturing RMB million	Property development RMB million	Other businesses RMB million	Consolidated RMB million
Capital expenditure:						
Property, plant and equipment	10,818	760	861	746	2,194	15,379
Lease prepayments	1,372	214	17	379	16	1,998
Investment properties	516	61	–	6	205	788
Intangible assets	359	50	48	109	36,995	37,561
Mining assets	–	–	–	–	116	116
Right-of-use assets	710	18	36	4	143	911
Total	13,775	1,103	962	1,244	39,669	56,753
Depreciation and amortisation:						
Property, plant and equipment	5,549	293	598	312	1,348	8,100
Lease prepayments	214	13	44	65	78	414
Investment properties	16	6	6	322	47	397
Intangible assets	88	27	37	1	309	462
Mining assets	–	–	–	–	262	262
Right-of-use assets	722	34	56	20	149	981
Other prepayments	65	1	27	1	66	160
Total	6,654	374	768	721	2,259	10,776
(Gains)/losses on disposal and/or write-off of property, plant and equipment	(195)	2	(40)	(7)	12	(228)
Gains on disposal of lease prepayments	(180)	(181)	–	–	–	(361)
Increase in foreseeable losses on contracts	228	–	–	–	–	228
Impairment loss/(reversal of impairment) on trade and other receivables	783	(97)	11	2,389	(970)	2,116
Impairment loss/(reversal of impairment) on other financial assets at amortised cost	66	(38)	–	(112)	117	33
Impairment loss on contract assets	260	–	–	–	147	407
Impairment loss on property, plant and equipment	1	–	–	–	40	41
Impairment loss on investment properties	3	–	–	–	–	3

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

5. Segment Information (Continued)

(i) Disaggregation of revenue

Type of services and products	Year ended 31 December 2021					
	Infrastructure construction	Survey, design and consulting services	Engineering equipment and component manufacturing	Property development	Other businesses	Total
	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million
Infrastructure construction contracts	923,435	-	-	-	-	923,435
Manufacturing and sales of engineering equipment and component	-	-	23,831	-	-	23,831
Rendering of services	-	17,604	-	-	5,384	22,988
Sales of properties	-	-	-	50,249	-	50,249
Sales of goods and others	3,356	183	481	563	48,186	52,769
Total revenue	926,791	17,787	24,312	50,812	53,570	1,073,272
Timing of revenue recognition:						
– At a point of time	3,356	183	15,873	49,329	52,256	120,997
– Over time	923,435	17,604	7,900	1,483	-	950,422
Total revenue from contracts with customers	926,791	17,787	23,773	50,812	52,256	1,071,419
Rental income	-	-	539	-	1,314	1,853
Total revenue	926,791	17,787	24,312	50,812	53,570	1,073,272

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

5. Segment Information (Continued)

(i) Disaggregation of revenue (Continued)

Type of services and products	Year ended 31 December 2020					Total RMB million
	Infrastructure construction	Survey, design and consulting services	Engineering equipment and component manufacturing	Property development	Other businesses	
	RMB million	RMB million	RMB million	RMB million	RMB million	
Infrastructure construction contracts	844,110	–	–	–	–	844,110
Manufacturing and sales of engineering equipment and component	–	–	23,074	–	–	23,074
Rendering of services	–	16,187	–	–	4,845	21,032
Sales of properties	–	–	–	49,304	–	49,304
Sales of goods and others	2,328	108	351	459	33,966	37,212
Total revenue	846,438	16,295	23,425	49,763	38,811	974,732
Timing of revenue recognition:						
– At a point of time	2,328	108	16,378	46,775	36,951	102,540
– Over time	844,110	16,187	7,047	2,988	–	870,332
Total revenue from contracts with customers	846,438	16,295	23,425	49,763	36,951	972,872
Rental income	–	–	–	–	1,860	1,860
Total revenue	846,438	16,295	23,425	49,763	38,811	974,732

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

5. Segment Information (Continued)

(ii) Revenue from external customers in the Mainland China and other regions is as follows:

	For the year ended 31 December	
	2021	2020
	RMB million	RMB million
Mainland China	1,018,485	927,647
Other regions (including Hong Kong and Macau)	54,787	47,085
	1,073,272	974,732

(iii) Non-current assets other than trade and other receivables, financial instruments, investments in joint ventures, investments in associates, deposits for investments and deferred tax assets located in the Mainland China and other regions are as follows:

	2021	2020
	RMB million	RMB million
Mainland China	368,413	297,450
Other regions (including Hong Kong and Macau)	14,492	12,479
	382,905	309,929

Other regions primarily include countries and regions in Africa, South America, South East Asia and Oceania.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

6. Other Income and Expenses

	2021	2020
	RMB million	RMB million
Other income from:		
Government subsidies (a)	1,389	1,147
Dividends from financial assets at FVPL	603	398
Compensation and claims	224	139
Dividends from financial assets at FVOCI	85	58
Relocation compensation	13	43
Others	422	434
	2,736	2,219
Other expenses on:		
Research and development expenditures	24,756	21,838

Notes:

(a) Government subsidies relating to income include various government subsidies received by the group entities from the relevant government bodies in connection with enterprise expansion, technology advancement, environmental protection measures enhancement, product development, etc. All subsidies were recognised at the time when the Group fulfilled the relevant criteria and the related expenses were incurred.

Government subsidies relating to assets include government subsidies obtained by the group entities in relation to the acquisition of property, plant and equipment, which were included in the consolidated balance sheet as deferred government grants and credited to profit or loss on a straight-line basis over the expected useful lives of the relevant assets.

7. Net Impairment Losses on Financial Assets and Contract Assets

	2021	2020
	RMB million	RMB million
Trade and other receivables (excluding advance to suppliers)	3,694	2,116
Contract assets	1,224	407
Other financial assets at amortised cost (Note 30(a))	560	33
	5,478	2,556

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

8. Other (losses)/gains, Net

	2021	2020
	RMB million	RMB million
Gains/(losses) on disposal and/or write-off of:		
– Interest in subsidiaries	72	(133)
– Interest in associates	14	(27)
– Lease prepayments	98	361
– Property, plant and equipment	328	228
Gains on disposal of financial assets/liabilities at FVPL	47	58
(Losses)/gains arising on change in fair value of financial assets/liabilities at FVPL (<i>Note 35(c)</i>)	(515)	218
Gains on debt restructurings	135	180
Impairment loss recognised on:		
– Property, plant and equipment (<i>Note 18</i>)	(132)	(41)
– Advance to suppliers	(4)	(39)
– Investment properties (<i>Note 22</i>)	(48)	(3)
Foreign exchange losses, net	(80)	(45)
Others	3	(95)
	(82)	662

9. Losses From Derecognition of Financial Assets at Amortised Cost

	2021	2020
	RMB million	RMB million
ABN & ABS (<i>Note 33</i>)	3,910	2,619
Factoring expense (<i>Note 33</i>)	634	683
Bills receivables discounted expense	51	–
	4,595	3,302

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

10. Finance Income and Costs

	2021	2020
	RMB million	RMB million
Finance income from:		
Trade receivables and contract assets	4,150	2,029
Other financial assets at amortised cost	1,063	1,528
Cash and cash equivalents and restricted cash	892	767
Total finance income	6,105	4,324
Interest expenses on:		
Bank borrowings	9,177	8,482
Long-term debentures	1,647	1,467
Other long-term borrowings	430	424
Other short-term borrowings	411	398
Total borrowing costs	11,665	10,771
Less: amount capitalised	(4,822)	(4,755)
	6,843	6,016
Lease (<i>Note 19</i>)	65	59
Imputed interest expenses on retention payables	226	288
Imputed interest expenses on defined benefit obligations (<i>Note 43</i>)	85	85
Others	397	308
Total finance costs	7,616	6,756

Borrowing costs directly attributable to the construction and acquisition of qualifying assets were capitalised as part of the costs of those assets. Borrowing costs of RMB4,822 million (2020: RMB4,755 million) were capitalised in the year ended 31 December 2021, of which approximately RMB2,985 million was charged to properties under development for sale, approximately RMB20 million was included in cost of construction-in-progress and approximately RMB1,817 million was included in the cost of intangible assets (2020: RMB3,808 million was charged to properties under development for sale, approximately RMB21 million was included in cost of construction-in-progress and approximately RMB926 million was included in the cost of intangible assets). A general capitalisation rate of 3.25%-9.50% per annum (2020: 2.50%-9.50%) was used, representing the costs of the borrowings used to finance the qualifying assets.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

11. Expenses by Nature

The additional information of cost of sales and services, selling and marketing expenses and administrative expenses is as follows:

	2021	2020
	RMB million	RMB million
Employee benefit expenses & subcontracting costs	432,359	382,846
Raw materials and consumables used	398,360	367,594
Equipment usage costs	39,113	34,312
Cost of property development	39,098	37,864
Depreciation of property, plant and equipment (<i>Note 18</i>), right-of-use assets (<i>Note 19</i>) and investment properties (<i>Note 22</i>)	9,433	9,478
Taxes and surcharges	3,881	3,496
Transportation costs	2,795	2,404
Amortisation of:		
Intangible assets (<i>Note 23</i>)	797	462
Lease prepayments (<i>Note 20</i>)	459	414
Mining assets (<i>Note 24</i>)	104	262
Other prepayments	133	160
Advertising and publication costs	1,401	1,342
Auditors' remuneration	43	39

12. Employee Benefit Expenses

	2021	2020
	RMB million	RMB million
Salaries, wages and bonuses	51,148	47,999
Welfare, medical and other expenses	23,328	19,998
Pension costs – defined contribution plans (<i>i</i>)	8,194	5,978
Housing benefits	4,693	4,324
	87,363	78,299

(i) The Group did not have any forfeited contribution for the year ended 31 December 2021 in connection with the defined contribution plan operated by local governments.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

13. Income Tax Expense

	2021	2020
	RMB million	RMB million
Current income tax		
– Enterprise income tax (“EIT”)	7,931	7,838
– Land appreciation tax (“LAT”)	2,050	2,228
– Under/(over) provision in prior years	51	(87)
Deferred income tax	(866)	(1,617)
Income tax expense	9,166	8,362

The majority of the entities in the Group are located in Mainland China. Pursuant to the relevant laws and regulations, the statutory EIT rate of 25% (2020: 25%) is applied to the Group except for certain subsidiaries which were mainly either exempted from EIT or entitled to the preferential tax rate of 20% and 15% (2020: 20% and 15%) for the year ended 31 December 2021.

Certain of the Group’s overseas entities are located in The Republic of Uganda, Republic of Singapore, The Lao People’s Democratic Republic, Malaysia, Democratic Republic of the Congo, Republic of Indonesia, People’s Republic of Bangladesh, United Republic of Tanzania and Federal Democratic Republic of Ethiopia. Pursuant to the relevant laws and regulations of these jurisdictions, the EIT rates of 30%, 17%, 24%, 24%, 30%, 20%, 25%, 30% and 30% (2020: 30%, 17%, 24%, 24%, 30%, 20%, 25%, 30% and 30%) are applied to these entities respectively.

The provision of LAT is estimated according to the requirements set forth in the relevant PRC tax laws and regulations. LAT has been provided at ranges of progressive rates of the appreciation value, with certain allowable exemptions and deductions.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

13. Income Tax Expense (Continued)

The tax charge for the year can be reconciled to profit before income tax per the consolidated income statement as follows:

	2021 RMB million	2020 RMB million
Profit before income tax	39,636	35,612
Tax at PRC EIT rate of 25% (2020: 25%)	9,909	8,903
Tax effect of:		
Non-deductible expenses	354	93
Non-taxable income	(259)	(123)
Share of losses/(profits) of joint ventures	127	(41)
Share of profits of associates	(496)	(508)
Tax losses not recognised as deferred tax assets	864	891
Utilisation of tax losses previously not recognised as deferred tax assets	(40)	(99)
Other deductible temporary differences not recognised as deferred tax assets	1,175	1,350
Utilisation of other deductible temporary differences previously not recognised as deferred tax assets	(236)	(126)
Preferential tax rates on income of group entities and other income tax credits	(3,392)	(3,149)
Deferred tax credit resulting from changes in applicable tax rates	(28)	(166)
LAT	2,050	2,228
Tax effect of LAT	(513)	(557)
Over provision in prior years	51	(87)
Deductible dividends on perpetual notes	(493)	(356)
Others	93	109
Income tax expense for the year	9,166	8,362

The PRC EIT rate is used as it is the domestic tax rate in the jurisdiction where the operation of the Group is substantially based.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

13. Income Tax Expense (Continued)

The tax charge relating to components of other comprehensive income is as follows:

	2021			2020		
	Before tax	Tax charge	After tax	Before tax	Tax charge	After tax
	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million
Actuarial (losses)/gains on retirement and other supplemental benefit obligations	(78)	13	(65)	1	2	3
Changes in fair value of financial assets at FVOCI	57	(19)	38	(260)	63	(197)
Share of other comprehensive income of associates	(106)	–	(106)	(189)	–	(189)
Exchange differences	(64)	–	(64)	(500)	–	(500)
Other comprehensive expenses	(191)	(6)	(197)	(948)	65	(883)
Current income tax		–			–	
Deferred income tax (Note 45)		(6)			65	
		<u>(6)</u>			<u>65</u>	

14. Profit Attributable to Owners of the Company

The profit attributable to owners of the Company is dealt with in the financial statements of the Company to the extent of RMB18,343 million (2020: RMB17,987 million).

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

15. Earnings Per Share

(a) Basic

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

For those financial instruments classified as equity, if the distributions are cumulative, the undeclared amount of the cumulative distributions were deducted in arriving at earnings for the purposes of the EPS calculation. On the other hand, if the distributions are non-cumulative, only the amount of dividends declared in respect of the year should be deducted in arriving at the profit attributable to ordinary shareholders.

	2021	2020
Profit attributable to owners of the Company (RMB million)	27,618	25,188
Less: dividends attributable to the perpetual notes (RMB million) (Note (i))	2,149	1,520
Profit used to determine basic earnings per share (RMB million)	25,469	23,668
Weighted average number of ordinary shares in issue (RMB millions)	24,571	24,571
Basic earnings per share (RMB per share)	1.037	0.963

(i) The perpetual notes issued by the Company were classified as equity instruments with deferrable cumulative interest distribution and payment. The perpetual notes interests, which was generated and attributable to the year ended 31 December 2021, were deducted from earnings when calculate the earnings per share for the year ended 31 December 2021.

(b) Diluted

Diluted earnings per share is the same as basic earnings per share as there were no potential dilutive ordinary shares outstanding during both years.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

16. Dividends

	2021 RMB million	2020 RMB million
Proposed final dividend of RMB0.196 per ordinary share (2020: RMB0.180)	4,849	4,423

The dividends paid in 2021 and 2020 were RMB4,849 million (RMB0.196 per ordinary share) and RMB4,423 million (RMB0.180 per ordinary share) respectively. A dividend in respect of the year ended 31 December 2021 of RMB0.196 per ordinary share, amounting to a total dividend of RMB4,849 million, is to be approved at the 2021 annual general meeting of the Company. These financial statements do not reflect this dividend payable.

17. Emoluments of Directors, Chief Executive, Supervisors and Employees

(a) Directors', Chief Executives and Supervisors' Emoluments

	2021 RMB'000	2020 RMB'000
Directors, chief executives and supervisors		
– Basis salaries, housing allowances and other allowances	4,150	4,104
– Fees	295	260
– Contributions to pension plans	423	336
– Discretionary bonuses (<i>note</i>)	4,141	4,143
	9,009	8,843

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

17. Emoluments of Directors, Chief Executive, Supervisors and Employees (Continued)

(a) Directors', Chief Executives and Supervisors' Emoluments (Continued)

The emoluments of every director and supervisor for the year ended 31 December 2021 are set out below:

Name	Basis salaries, housing allowances and other allowances RMB'000	Fees RMB'000	Contributions to pension plans RMB'000	Discretionary bonuses RMB'000	Total RMB'000
<i>(note)</i>					
Executive directors					
Chen Yun	430	–	53	676	1,159
Wang Shiqi	402	–	53	607	1,062
Chen Wenjian (i)	432	–	53	352	837
Independent directors					
Guo Peizhang (ii)	–	35	–	–	35
Wen Baoman (iii)	–	35	–	–	35
Zheng Qingzhi (iv)	–	35	–	–	35
Chung Shui Ming Timpson	–	100	–	57	157
Zhang Cheng (v)	–	45	–	–	45
Xiu Long (vi)	–	45	–	–	45
Non-executive director					
Wen Limin (vii)	–	–	–	–	–
Directors' remunerations	1,264	295	159	1,692	3,410

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

17. Emoluments of Directors, Chief Executive, Supervisors and Employees (Continued)

(a) Directors', Chief Executives and Supervisors' Emoluments (Continued)

Name	Basis salaries, housing allowances and other allowances RMB'000	Fees RMB'000	Contributions to pension plans RMB'000	Discretionary bonuses RMB'000	Total RMB'000
<i>(note)</i>					
Supervisors					
Zhang Huijia <i>(viii)</i>	148	–	13	237	398
Liu Jianyuan <i>(ix)</i>	89	–	4	194	287
Chen Wenxin <i>(x)</i>	159	–	13	113	285
Fan Jinghua <i>(xi)</i>	55	–	4	41	100
Jia Huiping <i>(xii)</i>	334	–	40	264	638
Li Xiaosheng <i>(xiii)</i>	614	–	53	407	1,074
Wang Xinhua <i>(xiv)</i>	521	–	53	472	1,046
Wan Ming <i>(xv)</i>	183	–	18	63	264
Hou Shezhong <i>(xvi)</i>	181	–	13	230	424
Yuan Baoyin	602	–	53	428	1,083
Supervisors' remunerations	2,886	–	264	2,449	5,599
Total	4,150	295	423	4,141	9,009

(i) Mr. Chen Wenjian was appointed as the executive director of the Company on 12 March 2021.

(ii) Mr. Guo Peizhang resigned from his position as an independent director of the Company on 12 March 2021.

(iii) Mr. Wen Baoman resigned from his position as an independent director of the Company on 12 March 2021.

(iv) Mr. Zheng Qingzhi resigned from his position as an independent director of the Company on 12 March 2021.

(v) Mr. Zhang Cheng was appointed as the independent director of the Company on 12 March 2021.

(vi) Mr. Xiu Long was appointed as the independent director of the Company on 12 March 2021.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

17. Emoluments of Directors, Chief Executive, Supervisors and Employees (Continued)

(a) Directors', Chief Executives and Supervisors' Emoluments (Continued)

- (vii) Mr Wen Limin was appointed as the non-executive director of the Company on 12 March 2021.
- (viii) Mr Zhang Huijia resigned from his position as a supervisor of the Company on 12 March 2021.
- (ix) Mr Liu Jianyuan resigned from his position as a supervisor of the Company on 26 January 2021.
- (x) Mr Chen Wenxin resigned from his position as a supervisor of the Company on 12 March 2021.
- (xi) Mr Fan Jinghua resigned from his position as a supervisor of the Company on 26 January 2021.
- (xii) Mr Jia Huiping was appointed as the supervisor of the Company on 12 March 2021.
- (xiii) Mr Li Xiaosheng was appointed as the supervisor of the Company on 26 January 2021.
- (xiv) Mr Wang Xinhua was appointed as the supervisor of the Company on 26 January 2021.
- (xv) Mr. Wan Ming was appointed as the supervisor of the Company on 29 September 2021.
- (xvi) Mr. Hou Shezhong was appointed as the supervisor of the Company on 26 January 2021 and resigned from his position as a supervisor of the Company on 10 March 2021.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

17. Emoluments of Directors, Chief Executive, Supervisors and Employees (Continued)

(a) Directors', Chief Executives and Supervisors' Emoluments (Continued)

The emoluments of every director and supervisor for the year ended 31 December 2020 are set out below:

Name	Basis salaries, housing allowances and other allowances RMB'000	Fees RMB'000	Contributions to pension plans RMB'000	Discretionary bonuses RMB'000	Total RMB'000
<i>(note)</i>					
Executive directors					
Chen Yun (i)	427	–	39	461	927
Wang Shiqi (ii)	307	–	29	497	833
Zhang Zongyan (iii)	427	–	39	641	1,107
Zhang Xian (iv)	371	–	34	534	939
Independent directors					
Guo Peizhang	–	60	–	–	60
Wen Baoman	–	60	–	–	60
Zheng Qingzhi	–	60	–	–	60
Chung Shui Ming Timpson	–	80	–	69	149
Non-executive director					
Ma Zonglin (v)	–	–	–	–	–
Directors' remunerations	1,532	260	141	2,202	4,135

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

17. Emoluments of Directors, Chief Executive, Supervisors and Employees (Continued)

(a) Directors', Chief Executives and Supervisors' Emoluments (Continued)

Name	Basis salaries, housing allowances and other allowances RMB'000	Fees RMB'000	Contributions to pension plans RMB'000	Discretionary bonuses RMB'000 <i>(note)</i>	Total RMB'000
Supervisors					
Zhang Huijia	401	–	39	535	975
Liu Jianyuan	405	–	39	537	981
Chen Wenxin	570	–	39	327	936
Fan Jinghua	599	–	39	198	836
Yuan Baoyin	597	–	39	344	980
Supervisors' remunerations	2,572	–	195	1,941	4,708
Total	4,104	260	336	4,143	8,843

(i) Mr. Chen Yun was appointed as the chairman of the Company on 22 December 2020.

(ii) Mr. Wang Shiqi was appointed as a director of the Company on 29 April 2020.

(iii) Mr. Zhang Zongyan resigned from his position as the chairman of the Company on 22 December 2020.

(iv) Mr. Zhang Xian resigned from his position as a director of the Company on 4 November 2020.

(v) Mr. Ma Zonglin resigned from his position as a non-executive director of the Company on 26 August 2020.

The executive directors', chief executive's and supervisors' emolument shown above were mainly for their services in connection with the management affairs of the Company and the Group. The independent directors' emoluments shown above were mainly for their services as directors of the Company.

During the year, no directors, supervisors or senior management of the Company waived any emoluments and no emoluments were paid by the Company to any of the directors, supervisors or senior management as an inducement to join or upon joining the Group or as compensation for loss of office.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

17. Emoluments of Directors, Chief Executive, Supervisors and Employees (Continued)

(b) Five Highest Paid Individuals

None of the directors and supervisors was amongst the five highest paid individuals during both years. The emoluments of the five highest paid individuals in the Group during the year are as follows:

	2021 RMB'000	2020 RMB'000
Basic salaries, housing allowances, and other allowances and benefits in kind	8,713	9,543
Contributions to pension plans	206	13
Discretionary bonuses (<i>note</i>)	14,634	7,742
	23,553	17,298

The emoluments of the above individuals fall within the following bands:

	2021	2020
– HKD3,000,000 to HKD3,500,000 (equivalent to approximately RMB2,452,800 to RMB2,861,600)	–	1
– HKD4,000,001 to HKD4,500,000 (equivalent to approximately RMB3,270,401 to RMB3,679,200)	–	3
– HKD4,500,001 to HKD5,000,000 (equivalent to approximately RMB3,679,201 to RMB4,088,000)	2	1
– HKD5,500,001 to HKD6,000,000 (equivalent to approximately RMB4,496,801 to RMB4,905,600)	2	–
– HKD7,500,001 to HKD8,000,000 (equivalent to approximately RMB6,132,001 to RMB6,540,800)	1	–

Note: The discretionary bonus is determined by the remuneration committee in accordance with the relevant human resources policies.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

18. Property, Plant and Equipment

	Buildings	Infra-structure construction equipment	Transportation equipment	Manufacturing equipment	Testing equipment and instruments	Other equipment	Construction in progress	Total
	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million
At 1 January 2020								
Cost	38,647	51,036	13,308	9,291	3,861	5,609	7,407	129,159
Accumulated depreciation and impairment	(8,763)	(30,024)	(10,061)	(4,915)	(2,711)	(3,716)	(563)	(60,753)
Net book amount	29,884	21,012	3,247	4,376	1,150	1,893	6,844	68,406
Year ended 31 December 2020								
Opening net book amount	29,884	21,012	3,247	4,376	1,150	1,893	6,844	68,406
Additions	141	3,865	1,739	703	407	843	4,510	12,208
Transfers	2,307	797	38	183	10	131	(3,466)	-
Transferred from investment properties (Note 22)	10	-	-	-	-	-	-	10
Transferred from properties under development for sale and properties held for sale (Note 31)	215	58	-	1	-	-	1,169	1,443
Acquisition of subsidiaries	1,600	20	23	1,289	20	15	204	3,171
Disposal of subsidiaries	(2)	(10)	(1)	-	(1)	-	-	(14)
Disposals	(109)	(732)	(16)	(68)	(19)	(87)	(1,279)	(2,310)
Transferred to investment properties (Note 22)	(166)	-	-	-	-	-	-	(166)
Depreciation charge (Note 11)	(1,358)	(3,545)	(1,170)	(1,021)	(356)	(650)	-	(8,100)
Impairment losses recognised (Note 8)	-	-	-	-	-	-	(41)	(41)
Exchange differences	(81)	(49)	(9)	(62)	(1)	(15)	(6)	(223)
Closing net book amount	32,441	21,416	3,851	5,401	1,210	2,130	7,935	74,384
At 31 December 2020								
Cost	42,554	52,747	14,353	11,135	4,124	6,292	8,531	139,736
Accumulated depreciation and impairment	(10,113)	(31,331)	(10,502)	(5,734)	(2,914)	(4,162)	(596)	(65,352)
Net book amount	32,441	21,416	3,851	5,401	1,210	2,130	7,935	74,384

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

18. Property, Plant and Equipment (Continued)

	Buildings	Infrastructure construction equipment	Transportation equipment	Manufacturing equipment	Testing equipment and instruments	Other equipment	Construction in progress	Total
	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million
Year ended 31 December 2021								
Opening net book amount	32,441	21,416	3,851	5,401	1,210	2,130	7,935	74,384
Additions	666	3,762	1,193	451	400	1,000	5,207	12,679
Transfers	1,794	1,152	7	329	13	352	(3,647)	-
Transferred from investment properties (Note 22)	606	-	-	-	-	-	-	606
Transferred from properties under development for sale and properties held for sale (Note 31)	639	-	-	-	-	-	314	953
Transferred from inventories	-	214	-	-	1	-	-	215
Acquisition of subsidiaries	52	-	2	-	-	1	286	341
Disposal of subsidiaries	-	-	-	-	-	-	-	-
Disposals	(181)	(1,249)	(46)	(14)	(11)	(10)	(1,184)	(2,695)
Transferred to investment properties (Note 22)	(164)	-	-	-	-	-	(218)	(382)
Transferred to intangible assets (Note 23)	-	-	-	-	-	-	(117)	(117)
Depreciation charge (Note 11)	(1,434)	(3,814)	(1,021)	(909)	(386)	(779)	-	(8,343)
Impairment losses recognised (Note 8)	(128)	(1)	-	(2)	-	(1)	-	(132)
Exchange differences	(23)	(69)	(9)	(18)	(1)	(5)	(16)	(141)
Closing net book amount	34,268	21,411	3,977	5,238	1,226	2,688	8,560	77,368
At 31 December 2021								
Cost	45,671	53,170	14,955	11,580	4,376	7,439	9,113	146,304
Accumulated depreciation and impairment	(11,403)	(31,759)	(10,978)	(6,342)	(3,150)	(4,751)	(553)	(68,936)
Net book amount	34,268	21,411	3,977	5,238	1,226	2,688	8,560	77,368

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

18. Property, Plant and Equipment (Continued)

- (a) Depreciation of the Group's property, plant and equipment of RMB6,874 million (2020: RMB6,899 million) has been charged to cost of sales, RMB289 million (2020: RMB179 million) to other expenses, RMB1,120 million (2020: RMB971 million) to administrative expenses, and RMB60 million (2020: RMB51 million) to selling and marketing expenses.
- (b) As at 31 December 2021, bank borrowings amounting to RMB295 million (2020: RMB367 million) are secured by certain property, plant and equipment with an aggregate book carrying amount of approximately RMB1,715 million (2020: RMB1,022 million) (Note 42).
- (c) As at 31 December 2021, the Group is in the process of applying for registration of the ownership certificates for certain of its properties with an aggregate book carrying amount of approximately RMB2,657 million (2020: RMB3,565 million). The Directors of the Company are of the opinion that the Group is entitled to lawfully and validly occupy or use these properties.
- (d) The category of infrastructure construction equipment, transportation equipment and other equipment leased by the Group to third parties under operating leases with the following carrying amounts:

	2021	2020
	RMB million	RMB million
Cost	445	98
Accumulated depreciation	(130)	(41)
Net book amount	315	57

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

19. Lease

This note provides information for leases where the Group is a lessee.

(a) Amounts recognised in the consolidated balance sheet

The consolidated balance sheet shows the following amounts relating to leases:

Right-of-use assets	2021	2020
	RMB million	RMB million
Buildings	1,074	1,109
Infrastructure construction equipment	441	651
Transportation equipment	47	79
Manufacturing equipment	1	–
Other equipment	96	53
	1,659	1,892

Lease liabilities	2021	2020
	RMB million	RMB million
Current	360	526
Non-current	972	1,237
	1,332	1,763

Additions to the right-of-use assets during the year ended 31 December 2021 were RMB580 million. Maturity and modification to the right-of-use assets during the year ended 31 December 2021 were RMB490 million.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

19. Lease (Continued)

(b) Amounts recognised in the consolidated income statement

The consolidated income statement shows the following amounts relating to leases:

Depreciation charge of right-of-use assets	2021	2020
	RMB million	RMB million
Buildings	382	393
Infrastructure construction equipment	240	504
Transportation equipment	50	77
Manufacturing equipment	1	1
Other equipment	22	6
	695	981
Interest expenses (included in finance cost) (<i>Note 10</i>)	65	59
Expenses relating to leases of low-value assets that are not shown above as short-term leases (included in cost of sales and services and administrative expenses)	24,644	23,108

The total cash outflow for leases in the year ended 31 December 2021 was RMB25,010 million (2020: RMB23,822 million).

(c) The Group's leasing activities and how these are accounted for

The Group leases buildings, infrastructure construction equipment, transportation equipment, manufacturing equipment and other equipment. Rental contracts are made for fixed periods, but may have extension options as described in (d) below.

Lease terms are negotiated on an individual basis and contain a wide range of different terms and conditions. The lease agreements do not impose any covenants, but leased assets may not be used as security for borrowing purposes.

(d) Extension and termination options

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

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

20. Lease Prepayments

	2021 RMB million	2020 RMB million
At 1 January		
Cost	18,357	16,394
Accumulated amortisation and impairment	(3,212)	(2,840)
Net book amount	15,145	13,554
For the year ended 31 December		
Opening net book amount	15,145	13,554
Additions	317	896
Transferred from properties held for sale (<i>Note 31(b)</i>)	409	169
Acquisition of subsidiaries	5	1,102
Disposals	(506)	(117)
Disposal of subsidiaries	–	(2)
Transferred to properties held for sale (<i>Note 31(b)</i>)	(81)	(43)
Amortisation charge (<i>Note 11</i>)	(459)	(414)
Closing net book amount	14,830	15,145
At 31 December		
Cost	18,459	18,357
Accumulated amortisation and impairment	(3,629)	(3,212)
Net book amount	14,830	15,145
Analysed for reporting purpose as:		
– Non-current	14,561	14,826
– Current	269	319
	14,830	15,145

- (a) Amortisation of the Group's lease prepayments of RMB244 million (2020: RMB188 million) has been charged to cost of sales and services, and RMB215 million (2020: RMB226 million) to administrative expenses.
- (b) As at 31 December 2021, the Group is in the process of applying for registration of the title certificates for certain of its leasehold land with an aggregate carrying value of approximately RMB175 million (2020: RMB299 million). The Directors of the Company are of the opinion that the Group is entitled to lawfully and validly occupy or use these leasehold land.
- (c) As at 31 December 2021, no bank borrowings were secured by lease prepayments (As at 31 December 2020, bank borrowings amounting to RMB197 million were secured by lease prepayments with carrying amount of approximately RMB309 million).

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

21. Deposits for Investments

	2021 RMB million	2020 RMB million
Deposits for investments accounted for using the equity method	441	453

22. Investment Properties

	2021 RMB million	2020 RMB million
At 1 January		
Cost	14,119	12,856
Accumulated depreciation and impairment	(2,073)	(1,689)
Net book amount	12,046	11,167
For the year ended 31 December		
Opening net book amount	12,046	11,167
Additions	256	217
Acquisition of subsidiaries	19	571
Transferred from property, plant and equipment (<i>Note 18</i>)	382	166
Transfer from properties held for sale (<i>Note 31(b)</i>)	632	631
Transfer to property, plant and equipment (<i>Note 18</i>)	(606)	(10)
Transfer to properties held for sale (<i>Note 31(b)</i>)	(193)	(270)
Disposals	(20)	(8)
Depreciation charge (<i>Note 11</i>)	(395)	(397)
Impairment losses recognised (<i>Note 8</i>)	(48)	(3)
Exchange difference	(8)	(18)
Closing net book amount	12,065	12,046
At 31 December		
Cost	14,595	14,119
Accumulated depreciation and impairment	(2,530)	(2,073)
Net book amount	12,065	12,046
Fair value at end of the year (<i>a</i>)	22,502	21,960

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

22. Investment Properties (Continued)

- (a) As at 31 December 2021, the fair value of the Group's investment properties is based on valuations performed by Jones Lang LaSalle Corporate Appraisal and Advisory Limited, a firm of independent and professionally qualified valuers. The investment properties, mainly located in the Mainland China, are valued by the income approach by taking into account the net rental income of the properties derived from the existing leases and/or achievable in the existing market with due allowance for the reversionary income potential of the leases, which have been then capitalised to determine the fair value at an appropriate capitalisation rate, or by the comparison approach by making reference to comparable market transactions, which rests on the wide acceptance of the market transactions as the best indicator and pre-supposes that evidence of relevant transactions in the market place can be extrapolated to similar properties, subject to allowances for variable factors. The fair value falls into the category of fair value measurements using significant unobservable inputs (level 3) including future rental cash inflows, capitalisation rate and current prices in an active market for similar properties.
- (b) Rental income and depreciation of the Group's investment properties of RMB890 million and RMB395 million (2020: RMB775 million and RMB397 million), respectively, was recognised as "revenue" and "cost of sales and services" in the consolidated income statement for the year ended 31 December 2021.
- (c) As at 31 December 2021, the Group had no unprovided contractual obligations for future repairs and maintenance (2020: nil).
- (d) The Group is in the process of applying for the title certificates for certain of its investment properties with an aggregate carrying value of RMB1,715 million (2020: RMB1,870 million) as at 31 December 2021. The Directors are of the opinion that the Group is entitled to lawfully and validly occupy or use these investment properties.
- (e) Minimum lease payments receivable on leases of investment properties are as follows:

	2021	2020
	RMB million	RMB million
Within 1 year	579	599
Between 1 and 2 years	404	291
Between 2 and 3 years	348	315
Between 3 and 4 years	228	257
Between 4 and 5 years	152	159
Later than 5 years	369	372
	2,080	1,993

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

23. Intangible Assets

	Service concession arrangements RMB million	Non- patented technologies RMB million	Patents RMB million	Computer software RMB million	Others RMB million	Total RMB million
At 1 January 2020						
Cost	24,132	666	13	829	873	26,513
Accumulated amortisation and impairment	(164)	(227)	(10)	(417)	(136)	(954)
Net book amount	23,968	439	3	412	737	25,559
Year ended at 31 December 2020						
Opening net book amount	23,968	439	3	412	737	25,559
Additions	33,021	–	2	255	8	33,286
Acquisition of subsidiaries	4,217	–	5	16	37	4,275
Disposals	(13)	–	–	(1)	–	(14)
Amortisation charge (Note 11)	(273)	(52)	(1)	(119)	(17)	(462)
Exchange differences	(45)	–	–	–	–	(45)
Closing net book amount	60,875	387	9	563	765	62,599
At 31 December 2020						
Cost	61,305	666	23	1,109	911	64,014
Accumulated amortisation and impairment	(430)	(279)	(14)	(546)	(146)	(1,415)
Net book amount	60,875	387	9	563	765	62,599
Year ended at 31 December 2021						
Opening net book amount	60,875	387	9	563	765	62,599
Additions	50,799	106	4	415	18	51,342
Acquisition of subsidiaries	–	–	–	1	–	1
Disposals	–	–	–	(10)	(7)	(17)
Disposals of subsidiaries	(2,620)	–	–	–	–	(2,620)
Amortisation charge (Note 11)	(484)	(52)	(2)	(142)	(117)	(797)
Exchange differences	(12)	–	–	–	–	(12)
Closing net book amount	108,558	441	11	827	659	110,496
At 31 December 2021						
Cost	109,471	771	22	1,503	911	112,678
Accumulated amortisation and impairment	(913)	(330)	(11)	(676)	(252)	(2,182)
Net book amount	108,558	441	11	827	659	110,496

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

23. Intangible Assets (Continued)

- (a) The Group has entered into a number of service concession arrangements with certain government authorities in the PRC in respect of its toll road operations, sewage plants and other constructions in exchange for a right for the Group to operate the asset. The assets are classified as intangible assets if the operator receives a right to charge users of the public service and this right is not an unconditional contractual right to receive cash. Pursuant to the service concession arrangement contracts, the Group is responsible for the construction of toll roads, sewage plants and other constructions, and the acquisition of the related facilities and equipment, and is entitled to operate the toll roads, the sewage plants and other construction upon completion for a specified remaining concession period from 12 to 40 years (2020: from 12 to 40 years) by charging users of the public service, which amounts are contingent on the extent that the public uses the service. The Group will not hold any residual interest in the toll roads, the sewage plants and other constructions upon expiration of the concession period. As such, the service concession arrangement contracts are accounted for as service concession arrangements and an intangible asset was recognised at an amount equals to the fair value of the consideration for provision of construction service upon initial recognition.
- (b) As at 31 December 2021, the cost of service concession arrangements have been put into operations amounted to RMB26,772 million (2020: RMB12,437 million). The cost of service concession arrangements where the related projects were under construction amounted to RMB82,699 million (2020: RMB48,868 million).
- (c) Amortisation of the Group's intangible assets of RMB633 million (2020: RMB349 million) has been charged to cost of sales and services, and RMB164 million (2020: RMB113 million) to administrative expenses.
- (d) As at 31 December 2021, bank borrowings amounting to RMB45,894 million (2020: RMB39,104 million) are secured by concession assets with carrying amount of approximately RMB64,728 million (2020: RMB50,991 million) (Note 42).

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

24. Mining Assets

	Mining rights RMB million	Exploration and evaluation assets RMB million	Total RMB million
At 1 January 2020			
Cost	5,147	134	5,281
Accumulated amortisation and impairment	(1,428)	(121)	(1,549)
Net book amount	3,719	13	3,732
Year ended at 31 December 2020			
Opening net book amount	3,719	13	3,732
Additions	116	–	116
Amortisation charge (<i>Note 11</i>)	(262)	–	(262)
Exchange differences	(4)	–	(4)
Closing net book amount	3,569	13	3,582
At 31 December 2020			
Cost	5,379	134	5,513
Accumulated amortisation and impairment	(1,810)	(121)	(1,931)
Net book amount	3,569	13	3,582
Year ended at 31 December 2021			
Opening net book amount	3,569	13	3,582
Additions	2	–	2
Amortisation charge (<i>Note 11</i>)	(104)	–	(104)
Exchange differences	(1)	–	(1)
Closing net book amount	3,466	13	3,479
At 31 December 2021			
Cost	5,380	134	5,514
Accumulated amortisation and impairment	(1,914)	(121)	(2,035)
Net book amount	3,466	13	3,479

The exploration and evaluation assets represent the expenditure on exploration and evaluation of mine projects at Australia and Heilongjiang.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

25. Subsidiaries

(a) Details of the principal subsidiaries as at 31 December 2021 are shown in Note 51.

(b) **Material non-controlling interests**

The table below shows the details of non-wholly-owned subsidiaries of the Group that have material non-controlling interests.

Name of subsidiary	中鐵高新工業股份有限公司 China Railway Hi-Tech Industry Co., Ltd. ("China Railway Industry")
Principal activities	Engineering Equipment and Component Manufacturing
Country/place of establishment and operation	PRC

	2021 RMB million	2020 RMB million
Particulars of issued share capital	2,222	2,222
Proportion of interest and voting power held by non-controlling interests	50.88%	50.88%
Accumulated non-controlling interests	13,204	12,503
Total comprehensive income allocated to non-controlling interests	981	956

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

25. Subsidiaries (Continued)

(b) Material non-controlling interests (Continued)

Financial information on subsidiaries with material non-controlling interests

Set out below is summarised financial information for China Railway Industry in which there is non-controlling interests that are material to the Group. The amounts disclosed are before inter-company eliminations.

Summarised balance sheet	2021	2020
	RMB million	RMB million
Current		
Assets	36,178	32,482
Liabilities	25,182	21,489
Total current net assets	10,996	10,993
Non-current		
Assets	12,999	11,708
Liabilities	734	812
Total non-current net assets	12,265	10,896
Net assets	23,261	21,889
Summarised income statement		
	2021	2020
	RMB million	RMB million
Revenue	27,157	24,292
Profit for the year attributable to owners of company	1,856	1,826
Other comprehensive (expenses)/income attributable to owners of company	(51)	(15)
Total comprehensive income attributable to owners of company	1,805	1,811
Total comprehensive income attributable to non-controlling interests	981	956
Dividends paid to non-controlling interests	13	13

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

25. Subsidiaries (Continued)

(b) Material non-controlling interests (Continued)

Financial information on subsidiaries with material non-controlling interests (Continued)

Summarised cash flows	2021	2020
	RMB million	RMB million
Net cash generated from operating activities	1,627	1,074
Net cash used in investing activities	(1,472)	(831)
Net cash (used in)/generated from financing activities	(420)	1,142
Effect of foreign exchange rate changes	44	(7)
Net (decrease)/increase in cash and cash equivalents	(221)	1,378

(c) Consolidation of the structured entities

To determine whether to consolidate the structured entities (mainly the unlisted entrust products) or not, the main factor considered by the Group is the ability to control these structured entities. For those structured entities managed and invested by China Railway Trust Co., Ltd. ("China Railway Trust"), the directly owned subsidiary of the Company, the Group consolidated those structured entities when the Group is exposed to significant variable returns and has the ability to affect the variable returns, including the returns of its interests in these structured entities as investor and trust commission fee earned from these structured entities as manager.

As at 31 December 2021, the total assets of the consolidated structured entities amounted to RMB11,947 million (2020: RMB9,015 million), and the interests of other investors in these structured entities amounted to RMB2,162 million (2020: RMB3,499 million).

As at 31 December 2021 and 2020, there was no contractual liquidity arrangements, guarantees or other commitments between the Group and the consolidated structured entities.

(d) Interests in unconsolidated structured entities

- (i) China Railway Trust serves as manager of unconsolidated structured entities (mainly the unlisted entrust products) and earns trust commission fee. In the opinion of the Directors, the Group did not consolidate these structured entities that it has no control over these structured entities.

As at 31 December 2021, the scale of the unconsolidated structured entities established with interest held by the Group amounted to RMB51,815 million (2020: RMB38,311 million). As at 31 December 2021, the maximum exposure to the loss of the Group's investments and the amount recognised as financial assets at fair value through profit or loss in the consolidated financial statements over these unconsolidated structured entities which the Group has interests in amounted to RMB739 million (2020: RMB1,550 million).

As at 31 December 2021, the scale of the unconsolidated structured entities established with no interest held by the Group amounted to RMB336,602 million (2020: RMB363,292 million).

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

25. Subsidiaries (Continued)

(d) Interests in unconsolidated structured entities (Continued)

- (ii) The Group and several unlisted entrust products (“Investee Entrust Products”), which the Group has interests in, invested in certain limited liability partnership funds (the “Funds”). The Funds are mainly engaged in infrastructure activities. Some asset managers (related parties of the Group), or together with the Group, acted as general partners of the Fund, and applied various investment strategies to accomplish the respective investment objectives of the Funds. A number of Investee Entrust Products acted as limited partners of the Funds to finance the operation activities of the Funds.

The Directors of the Company are of the opinion that the Group did not have control over Investee Entrust Products and the Funds and therefore, these Investee Entrust Products and the Funds were deemed as structured entities and were not consolidated by the Group.

As at 31 December 2021, the scale of these unconsolidated structured entities amounted to RMB24,724 million (2020: RMB23,771 million).

The maximum exposure to the loss of the Group’s investments in the unconsolidated structured entities as at 31 December 2021 is disclosed in the following table.

	2021 RMB million	2020 RMB million
Investments in joint ventures	7,166	4,931
Financial assets at fair value through profit or loss	1,099	1,314
	8,265	6,245

As at 31 December 2021 and 2020, there was no contractual liquidity arrangements, guarantees or other commitments between the Group and the unconsolidated structured entities.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

26. Investments Accounted for Using the Equity Method

The amounts recognised in the consolidated balance sheet are as follows:

	2021 RMB million	2020 RMB million
Associates	46,181	38,133
Joint ventures	49,831	40,216
	96,012	78,349

The amounts recognised in the consolidated income statement are as follows:

	2021 RMB million	2020 RMB million
Associates	3,809	2,031
Joint ventures	(507)	164
	3,302	2,195

(a) Investments in associates

	2021 RMB million	2020 RMB million
At 1 January	38,133	30,565
Additions	7,932	10,517
Disposals	(2,702)	(2,260)
Share of profit or loss, net	3,809	2,031
Dividend distribution	(488)	(547)
Share of other comprehensive income of associates	(106)	(189)
Share of other reserves of associates	(397)	(1,984)
At 31 December	46,181	38,133

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

26. Investments Accounted for Using the Equity Method (Continued)

(a) Investments in associates (Continued)

- (i) All of the associates of the Group are unlisted and there is no quoted market price available for their shares.
- (ii) In 2021, the Group acts as the guarantors for various external borrowings made by an associate amounted to RMB4,730 million (2020: RMB2,441 million).
- (iii) Details of Group's material associates as at 31 December 2021 and 2020 are as follows:

Name of associate	Country/place of establishment/ operations	Proportion of ownership interest held by the Group		Principal activities
		2021	2020	
雲南省滇中引水工程有限公司 Yunnan Dianzhong Water Diversion Engineering Co., Ltd. ("Dianzhong Water")	PRC	9.47%	9.47%	Build-operate-transfer service concession arrangement
華剛礦業股份有限公司 LA Sino-Congolaise Des Mines S.A. ("SICOMINGS S.A.")	Democratic Republic of the Congo	41.72%	41.72%	Mining

Summarised financial information in respect of each of the Group's material associates is set out below. The summarised financial information below represents amounts shown in the associates financial statements prepared in accordance with IFRSs.

All of these associates are accounted for using the equity method in the consolidated financial statements.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

26. Investments Accounted for Using the Equity Method (Continued)

(a) Investments in associates (Continued)

	2021		2020	
	Dianzhong Water RMB million (Unaudited)	SICOMINGS S.A. RMB million (Unaudited)	Dianzhong Water RMB million (Unaudited)	SICOMINGS S.A. RMB million (Unaudited)
Current assets	6,473	11,016	6,721	10,707
Non-current assets	29,007	20,768	10,837	17,896
Current liabilities	100	2,545	316	2,020
Non-current liabilities	124	15,411	–	18,472
Revenue	–	10,411	–	5,917
Profit for the year	–	6,586	–	2,805
Other comprehensive income for the year	–	(259)	–	(447)
Total comprehensive income for the year	–	6,327	–	2,358
Dividends received	–	402	–	359

Reconciliation of the above summarised financial information to the carrying amount of the interests in associates recognised in the consolidated financial statements:

	2021		2020	
	Dianzhong Water RMB million (Unaudited)	SICOMINGS S.A. RMB million (Unaudited)	Dianzhong Water RMB million (Unaudited)	SICOMINGS S.A. RMB million (Unaudited)
Net assets of associates	35,256	13,828	17,242	8,111
Proportion of the Group's ownership in associates	9.47%	41.72%	9.47%	41.72%
Other adjustments	2,566	(977)	4,272	(574)
Carrying amount of the Group's interests in associates	5,904	4,792	5,904	2,810

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

26. Investments Accounted for Using the Equity Method (Continued)

(a) Investments in associates (Continued)

In addition to the interests in associates disclosed above, the Group also has interests in a number of individually immaterial associates that are accounted for using the equity method.

	2021	2020
	RMB million	RMB million
Aggregate carrying amount of the Group's interests in these associates	35,485	29,419
The Group's share of profits	1,061	860
The Group's share of other comprehensive expenses	1	(2)
The Group's share of total comprehensive income	1,062	858

(b) Investments in joint ventures

	2021	2020
	RMB million	RMB million
At 1 January	40,216	29,314
Additions	12,171	11,469
Disposals	(1,780)	(171)
Share of profit or loss, net	(507)	164
Dividend distribution	(246)	(560)
Share of other reserves of joint ventures	(23)	–
At 31 December	49,831	40,216

- (i) All of the joint ventures of the Group are unlisted and there is no quoted market price available for their shares.
- (ii) In 2021, the Group acts as the guarantor for external borrowing made by a joint venture amounted to RMB2,969 million (2020: RMB5,048 million).

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

26. Investments Accounted for Using the Equity Method (Continued)

(b) Investments in joint ventures (Continued)

(iii) Details of Group's material joint ventures as at 31 December 2021 and 2020 are as follows:

Name of joint venture	Country/place of establishment/ operations	Proportion of ownership interest held by the Group		Principal activities
		2021	2020	
招商中鐵控股有限公司 China Merchants Railway Co., Ltd. (Formerly "Guangxi China Railway Expressway Management Co., Ltd.")	PRC	49.00%	49.00%	Build-operate-transfer service concession arrangement
昆明軌道交通四號線土建項目建設管理有限公司 Kunming Rail Transit Line 4 Construction Management Co., Ltd. ("Kunming Line 4")	PRC	75.73%	75.73%	Subway construction management
四川天府機場高速公路有限公司 Sichuan Tianfu Airport Expressway Co., Ltd. ("Sichuan Tianfu")	PRC	50.00%	50.00%	Build-operate-transfer service concession arrangement

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

26. Investments Accounted for Using the Equity Method (Continued)

(b) Investments in joint ventures (Continued)

Summarised financial information in respect of each of the Group's material joint venture is set out below. The summarised financial information below represents amounts shown in the joint ventures financial statements prepared in accordance with IFRSs.

The joint ventures are accounted for using the equity method in the consolidated financial statements.

	2021			2020		
	China Merchants Railway Co., Ltd.	Kunming Line 4	Sichuan Tianfu	China Merchants Railway Co., Ltd.	Kunming Line 4	Sichuan Tianfu
	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million
	(Unaudited)	(Unaudited)	(Unaudited)	(Unaudited)	(Unaudited)	(Unaudited)
Current assets	2,318	1,136	482	980	100	201
Including: cash and cash equivalents	2,120	55	469	680	73	200
Non-current assets	39,516	16,334	36,184	40,977	17,231	32,873
Current liabilities	9,287	764	1,530	8,332	711	254
Non-current liabilities	19,351	10,583	28,095	20,080	10,440	25,796
Revenue	3,290	436	45	2,462	–	–
Interest expenses	(1,168)	(646)	(155)	1,259	–	–
Losses and total comprehensive expenses for the year	(101)	(4)	(208)	(788)	–	–
Dividends received	127	–	–	–	–	–

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

26. Investments Accounted for Using the Equity Method (Continued)

(b) Investments in joint ventures (Continued)

Reconciliation of the above summarised financial information to the carrying amount of the interests in joint ventures recognised in the consolidated financial statements:

	2021			2020		
	China Merchants Railway Co., Ltd.	Kunming Line 4	Sichuan Tianfu	China Merchants Railway Co., Ltd.	Kunming Line 4	Sichuan Tianfu
	RMB million (Unaudited)	RMB million (Unaudited)	RMB million (Unaudited)	RMB million (Unaudited)	RMB million (Unaudited)	RMB million (Unaudited)
Net assets of joint ventures	10,615	6,123	7,041	10,976	6,180	7,024
Proportion of the Group's ownership in joint ventures	49.00%	75.73%	50.00%	49.00%	75.73%	50.00%
Other adjustments	-	40	-	-	-	(112)
Carrying amount of the Group's interests in joint ventures	5,201	4,677	3,521	5,378	4,680	3,400

In addition to the interests in joint ventures disclosed above, the Group also has interests in a number of individually immaterial joint ventures that are accounted for using the equity method.

	2021	2020
	RMB million	RMB million
Aggregate carrying amount of the Group's interests in these joint ventures	36,432	26,758
The Group's share of profits	(351)	550
The Group's share of total comprehensive income	(351)	550

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

27. Joint Operations

In 2021, the Group has one joint operation in Hong Kong (2020: one) and has 30% share (2020: 30%) in the ownership of this construction project. The Group is entitled to a proportionate share of the assets, the liabilities and the construction revenue, and bears a proportionate share of the joint operation's expenses.

28. Goodwill

	2021 RMB million	2020 RMB million
Cost		
At beginning of year	1,440	1,068
Addition	156	374
Disposal	–	(2)
At end of year	1,596	1,440
Impairment		
At beginning of year	(28)	(28)
Disposal	–	–
At end of year	(28)	(28)
Net book amount		
At beginning of year	1,412	1,040
At end of year	1,568	1,412

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

28. Goodwill (Continued)

The carrying amount of goodwill at the end of the reporting period is attributable to acquisition of subsidiaries in the following subsidiaries (whose principal activities are disclosed in Note 51) and sub-groups headed by these subsidiaries:

	2021 RMB million	2020 RMB million
China Railway No.1 Engineering Group Co., Ltd.	64	64
China Railway No.2 Engineering Group Co., Ltd.	77	77
China Railway No.3 Engineering Group Co., Ltd.	51	51
China Railway No.4 Engineering Group Co., Ltd.	195	195
China Railway No.5 Engineering Group Co., Ltd.	82	82
China Railway No.6 Engineering Group Co., Ltd.	12	12
China Railway No.8 Engineering Group Co., Ltd.	26	26
China Railway No.9 Engineering Group Co., Ltd.	48	48
China Railway No.10 Engineering Group Co., Ltd.	26	26
China Railway Major Bridge Engineering Group Co., Ltd.	28	28
China Railway Electrification Engineering Group Co., Ltd.	100	100
China Railway Construction Group Co., Ltd.	218	62
China Railway Tunnel Group Co., Ltd.	19	19
China Railway Trust	206	206
China Railway No.6 Survey and Design Institute Group Co., Ltd.	24	24
China Railway Prefabricate Construction Co., Ltd.	333	333
China Railway Changjiang Transport Design Group Co., Ltd.	36	36
China Railway Water Conservancy & Hydropower Planning and Design Group Co.,Ltd.	5	5
Other Subsidiaries	18	18
	1,568	1,412

The basis of determining the recoverable amounts of the above subsidiaries and their major underlying assumptions are summarised below:

China Railway Trust, which is included in other businesses of the Group, is principally engaged in financial trust management. The recoverable amount in respect of this subsidiary has been determined based on fair value less costs of disposal. The key assumptions in determining the fair value is the publicly disclosed value ratio of comparable transactions and estimated costs of disposal. Management believes that any reasonably possible change in the assumptions would not cause the carrying amount of this subsidiary to exceed its recoverable amount.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

28. Goodwill (Continued)

The recoverable amounts in respect of subsidiaries, which are principally engaged in infrastructure construction, survey, design and consulting services and engineering equipment and component manufacturing, other than China Railway Trust, have been determined based on a value in use calculation. That calculation uses cash flow projections based on the most recent financial budgets of five years approved by management and an extrapolated financial budget for the following five years, and a discount rate of 10% (2020: 10%). One of the key assumptions in preparing cash flow projections is annual growth rates in revenue which vary among different subsidiaries for the most recent financial budgets period and a nil growth rate for the extrapolation period. The growth rates are based on the relevant industry growth forecasts and do not exceed the average long-term growth rate for the relevant industry. Another key assumption for the cash flow projections is the stable budgeted gross margin, which is determined based on the subsidiaries' past performance. Management believes that any reasonably possible change in any of these assumptions would not cause the carrying amounts of the subsidiaries to exceed its recoverable amounts.

29. Financial Assets at Fair Value Through Other Comprehensive Income

Financial assets at FVOCI comprise:

- Equity securities which are not held for trading, and which the Group has irrevocably elected at initial recognition to recognise in this category. These are strategic investments and the Group considers this classification to be more relevant.
- Debt securities where the contractual cash flows are solely payments of principal and interest and the objective of the Group's business model is achieved both by collecting contractual cash flows and selling financial assets.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

29. Financial Assets at Fair Value Through Other Comprehensive Income (Continued)

(a) Financial assets at FVOCI include the following:

	2021 RMB million	2020 RMB million
Non-current assets		
Unlisted equity investments	11,354	8,831
Listed equity securities		
– Mainland China	522	568
– Hong Kong	288	269
	12,164	9,668
Current assets		
Bills receivables	526	522

On disposal of these equity instruments, any related balance within the FVOCI reserve is reclassified to retained earnings.

In 2021, the Group disposed certain listed equity securities and unlisted equity investments at a fair value of RMB79 million (2020: RMB402 million). The Group realised no gain or loss in 2021 (2020: RMB12 million).

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

29. Financial Assets at Fair Value Through Other Comprehensive Income (Continued)

(b) Amounts recognised in profit or loss and other comprehensive income

During the year, the following gains were recognised in profit or loss and other comprehensive income:

	2021 RMB million	2020 RMB million
Gains recognised in other comprehensive income	57	(248)
Gains reclassified from other comprehensive income to retained earnings upon disposal of financial assets at FVOCI	–	(12)
Dividends from equity instruments held at FVOCI recognised in profit or loss in other income (Note 6):		
– Related to instruments held at the end of the year	84	57
– Related to instruments derecognised during the year	1	1

(c) Fair value, impairment and risk exposure

Information about the methods and assumptions used in determining fair value is provided in Note 3.2.

The loss allowance for debt instruments at FVOCI as a result of applying the expected credit risk model is immaterial.

Financial assets at FVOCI are denominated in the following currencies:

	2021 RMB million	2020 RMB million
RMB	12,402	9,921
HKD	288	269
	12,690	10,190

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

30. Other Financial Assets at Amortised Cost

	2021	2020
	RMB million	RMB million
Debt investments		
– Short-term	9,369	10,579
– Long-term	27,541	23,316
	36,910	33,895
Less: Loss allowance for debt investments (a)	(5,397)	(5,428)
Total other financial assets at amortised cost	31,513	28,467
Less: Amount due within one year included in current assets	(8,553)	(9,694)
Amount due after one year	22,960	18,773

(a) Movements in impairment on debt instruments are as follows:

	2021	2020
	RMB million	RMB million
At 31 December in prior year	5,428	5,400
Impairment losses recognised during the year (Note 7)	560	33
Write off	(591)	–
Exchange differences	–	(5)
At 31 December	5,397	5,428

(b) The other financial assets at amortised cost carry fixed-rate interests within a range of 1.25% to 24.00% (31 December 2020: 1.31% to 24.00%) per annum.

(c) As at 31 December 2021, other financial assets at amortised cost amounting to RMB4,881 million (31 December 2020: RMB5,355 million) are secured by property, plant and equipments, investment properties or guaranteed by a third party.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

30. Other Financial Assets at Amortised Cost (Continued)

(d) Other financial assets at amortised cost are denominated in the following currencies:

	2021	2020
	RMB million	RMB million
RMB	31,016	27,958
USD	497	509
	31,513	28,467

31. Properties Held for Sale/Properties Under Development for Sale

(a) Properties under development for sale

	2021	2020
	RMB million	RMB million
As at 1 January	121,171	134,747
Additions	46,772	37,595
Properties completed during the year	(55,320)	(49,152)
Transfers to property, plant and equipment (<i>Note 18</i>)	(314)	(1,169)
Disposal of subsidiaries	(117)	(850)
	112,192	121,171
Less: provision for impairment	(2,862)	(3,595)
As at 31 December	109,330	117,576

	2021	2020
	RMB million	RMB million
Properties under development for sale comprise:		
Land use rights	84,383	90,068
Construction cost	17,531	17,322
Borrowing costs capitalised	10,278	13,781
	112,192	121,171

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

31. Properties Held for Sale/Properties Under Development for Sale (Continued)

(b) Properties held for sale

	2021 RMB million	2020 RMB million
As at 1 January	36,789	25,746
Additions	55,320	49,152
Transferred from investment properties (Note 22)	193	270
Transferred from lease prepayments (Note 20)	81	43
Properties sold during the year	(37,334)	(37,348)
Transferred to investment properties (Note 22)	(632)	(631)
Transferred to lease prepayments (Note 20)	(409)	(169)
Transferred to property, plant and equipment (Note 18)	(854)	(274)
	53,154	36,789
Less: provision for impairment	(4,409)	(2,646)
As at 31 December	48,745	34,143

Properties under development for sale amounting to RMB30,698 million (2020: RMB37,371 million) have been pledged to secure bank borrowings amounting to RMB7,699 million (2020: RMB11,769 million) granted to the Group (Note 42).

All of the properties under development are expected to be completed within the Group's normal operating cycle and are included under current assets.

The Group's properties held for sale and properties under development for sale at the end of the reporting period are stated at the lower of cost and net realisable value.

32. Inventories

	2021 RMB million	2020 RMB million
Raw materials and consumables	29,444	26,919
Work in progress	8,222	7,383
Finished goods	7,705	6,641
	45,371	40,943

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

33. Trade and Other Receivables

	2021	2020
	RMB million	RMB million
Trade and bills receivables	157,025	139,831
Less: Loss allowance	(13,935)	(10,314)
Trade and bills receivables – net	143,090	129,517
Other receivables (net of impairment)	81,688	70,854
Advance to suppliers (net of impairment)	47,765	30,291
	272,543	230,662
Less: Amount due after one year included in non-current assets	(23,374)	(20,801)
Amount due within one year included in current assets	249,169	209,861

(a) Ageing analysis of trade and bills receivables, based on invoice date, is as follows:

	2021	2020
	RMB million	RMB million
Less than 1 year	118,517	105,239
1 year to 2 years	14,919	16,642
2 years to 3 years	10,297	6,238
3 years to 4 years	4,562	2,815
4 years to 5 years	1,407	1,695
More than 5 years	7,323	7,202
Total	157,025	139,831

Majority of the Group's revenues are generated through infrastructure construction, survey, design and consulting, engineering equipment and component manufacturing contracts. The settlements are made in accordance with the terms specified in the contracts governing the relevant transactions.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

33. Trade and Other Receivables (Continued)

- (b) Trade and bills receivables of RMB221 million (31 December 2020: RMB310 million) were pledged to secure borrowings amounting to RMB221 million (31 December 2020: RMB310 million) (Note 42).
- (c) As at 31 December 2021, trade receivables of RMB85,945 million (31 December 2020: RMB55,142 million) had been transferred in accordance with relevant ABN and ABS issuance, and trade receivables of RMB14,971 million (31 December 2020: RMB16,854 million) had been transferred to financial institutions in accordance with relevant non-recourse factoring agreements. Relevant trade receivables were derecognised as the Directors are of the opinion that the substantial risks and rewards associated with the trade receivables have been transferred and therefore qualified for derecognition.
- (d) As at 31 December 2021, bills receivables – bank acceptance and commercial acceptance notes of RMB310 million (31 December 2020: RMB640 million) were endorsed to suppliers, and RMB46 million (31 December 2020: RMB520 million) were discounted with banks. In the opinion of the Directors, as the counter party bears higher credit risk, such transactions did not qualify for derecognition. In addition, as at 31 December 2021, bills receivables – bank acceptance notes of RMB670 million (31 December 2020: RMB2,142 million) were endorsed to suppliers, and RMB119 million (31 December 2020: RMB170 million) were discounted with banks. Relevant bills receivables were derecognised as the Directors are of the opinion that the substantial risks and rewards associated with those bank acceptance notes have been transferred and therefore qualified for derecognition.
- (e) As at 31 December 2021, trade receivables net of credit loss allowance, which were collectively assessed for impairment, are as follows:

Central-governmental enterprises

	As at	
	31 December 2021 RMB million	31 December 2020 RMB million
Less than 1 year	8,165	7,438
1 year to 2 years	970	975
2 years to 3 years	438	389
3 years to 4 years	195	215
4 years to 5 years	134	150
More than 5 years	123	104
Total	10,025	9,271

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

33. Trade and Other Receivables (Continued)

- (e) As at 31 December 2021, trade receivables net of credit loss allowance, which were collectively assessed for impairment, are as follows: (Continued)

Locally-administrated state-owned enterprises

	As at	
	31 December 2021	31 December 2020
	RMB million	RMB million
Less than 1 year	53,164	45,912
1 year to 2 years	8,511	6,557
2 years to 3 years	2,975	2,297
3 years to 4 years	1,195	1,266
4 years to 5 years	444	653
More than 5 years	662	509
Total	66,951	57,194

China State Railway Group Co.,Ltd.

	As at	
	31 December 2021	31 December 2020
	RMB million	RMB million
Less than 1 year	9,522	12,418
1 year to 2 years	780	1,412
2 years to 3 years	703	653
3 years to 4 years	167	225
4 years to 5 years	89	146
More than 5 years	155	108
Total	11,416	14,962

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

33. Trade and Other Receivables (Continued)

- (e) As at 31 December 2021, trade receivables net of credit loss allowance, which were collectively assessed for impairment, are as follows: (Continued)

Overseas enterprises

	As at	
	31 December 2021	31 December 2020
	RMB million	RMB million
Less than 1 year	1,723	1,864
1 year to 2 years	56	641
2 years to 3 years	12	466
3 years to 4 years	230	34
4 years to 5 years	25	8
More than 5 years	–	7
Total	2,046	3,020

Other entities

	As at	
	31 December 2021	31 December 2020
	RMB million	RMB million
Less than 1 year	17,339	16,175
1 year to 2 years	1,908	2,686
2 years to 3 years	1,345	1,375
3 years to 4 years	835	372
4 years to 5 years	207	200
More than 5 years	288	181
Total	21,922	20,989

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

33. Trade and Other Receivables (Continued)

- (e) As at 31 December 2021, trade receivables net of credit loss allowance, which were collectively assessed for impairment, are as follows: (Continued)

As at 31 December 2021, the amount of individually impaired trade receivables was RMB15,884 million (31 December 2020: RMB6,509 million) with the provision for loss allowance of RMB6,123 million (31 December 2020: RMB3,368 million).

As at 31 December 2021, bills receivables – bank acceptance notes of RMB1,108 million (31 December 2020: RMB501 million) were not impaired. Commercial acceptance notes, which were collectively assessed for impairment, were RMB1,480 million (31 December 2020: RMB5,048 million) with the provision for credit loss allowance of RMB4 million (31 December 2020: RMB12 million). The amount of individually impaired commercial acceptance notes was RMB2,832 million (31 December 2020: nil) with the provision for credit loss allowance of RMB467 million (31 December 2020: nil).

As at 31 December 2021, the amount of collectively impaired long-term trade receivables was RMB16,041 million (31 December 2020: RMB14,027 million) with the provision for loss allowance of RMB44 million (31 December 2020: RMB51 million). The amount of individually impaired long-term trade receivables was RMB3,291 million (31 December 2020: RMB4,850 million) with the provision for loss allowance of RMB3,268 million (31 December 2020: RMB3,423 million).

- (f) Movements on loss allowance of trade and other receivables are as follows:

	2021 RMB million	2020 RMB million
At 31 December in prior year	24,272	23,664
Increase in loss allowance recognised in profit or loss during the year	5,930	4,752
Amount reversed	(2,231)	(2,597)
Receivables written off during the year as non-collectible	(1,226)	(1,577)
Others	(20)	30
At 31 December	26,725	24,272

The increase and reversal in loss allowance of trade and other receivables have been included in net impairment losses on financial assets and other (losses)/gains in the consolidated income statement. Amounts charged to the allowance account are generally written off when there is no expectation of recovering additional cash.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

33. Trade and Other Receivables (Continued)

(g) The carrying amount of trade and other receivables are denominated in the following currencies:

	2021	2020
	RMB million	RMB million
RMB	264,239	220,196
USD	4,531	3,963
West African CFA Franc	318	291
Ethiopian Birr	108	174
EUR	98	217
HKD	82	3,075
Other currencies	3,167	2,746
	272,543	230,662

As at 31 December 2021, other currencies mainly comprised of Bangladesh Taka, Malaysian Ringgit and South African Rand.

(h) The maximum exposure to credit risk at the reporting date is the carrying amounts of each class of receivables mentioned above.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

34. Assets and Liabilities Related to Contracts with Customers

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

	2021 RMB million	2020 RMB million
Contract assets		
– Amount due from contract customers for contract work and Retentions	197,140	185,138
– Financial assets under concession arrangements (a)	109,694	94,809
– Primary land development	7,024	6,679
	313,858	286,626
Less: loss allowance (b)	(3,339)	(2,256)
Less: Amount due after one year included in non-current assets	161,377	138,759
Amount due within one year included in current assets	149,142	145,611
Contract liabilities		
– Sale of properties	56,551	49,530
– Infrastructure construction and engineering contracts	43,668	42,562
– Amount due to contract customers for contract work	27,801	20,026
– Sales of manufacturing products	7,049	5,466
– Design and consulting services	4,253	3,120
– Sales of materials	1,263	759
– Others	3,510	3,197
Total current contract liabilities	144,095	124,660

- (a) Financial assets under concession arrangements represent the contract assets recognised when the related projects were under construction or have been put into operations before the Group has an unconditional contractual right to receive cash from or at the direction of the granting authority.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

34. Assets and Liabilities Related to Contracts with Customers (Continued)

(b) As at 31 December 2021, the impairment of contract assets is determined as follows:

Contract assets	Expected loss rate	Gross carrying amount RMB million	Loss allowance RMB million
Amounts due from customers for contract work	1.01%	115,848	1,166
Retentions	0.50%	75,821	380
Financial assets under concession arrangements	0.50%	109,694	548
Total		301,363	2,094

The amount of individually impaired contract assets was RMB12,495 million (31 December 2020: RMB3,255 million) with the provision of RMB1,245 million (31 December 2020: RMB503 million).

(c) As at 31 December 2021, borrowings amounting to RMB29,825 million (2020: RMB28,523 million) are secured by contract assets with carrying amount of approximately RMB48,320 million (2020: RMB48,339 million) (Note 42).

35. Financial Assets/(Liabilities) at Fair Value Through Profit or Loss

The Group classifies the following financial assets at FVPL:

- Debt investments that do not qualify for measurement at either amortised cost or FVOCI (Note 29);
- Equity investments that are held for trading, and
- Equity investments for which the entity has not elected to recognise fair value gains and losses through other comprehensive income.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

35. Financial Assets/(Liabilities) at Fair Value Through Profit or Loss (Continued)

(a) Financial assets at FVPL include the following:

	2021 RMB million	2020 RMB million
Non-current assets		
Equity instruments		
Equity securities listed in Mainland China	51	1,215
Unlisted equity investments	5,066	4,177
	5,117	5,392
Debt instruments		
Unlisted entrusted products	2,712	3,169
Unlisted open-end equity funds	1,642	1,130
Others	2,823	873
	7,177	5,172
	12,294	10,564
Current assets		
Equity instruments		
Listed equity securities		
– Mainland China	1,039	68
Debt instruments		
Money-market securities investment funds	4,768	2,377
Unlisted open-end equity funds	624	1,635
Unlisted entrusted products	413	888
Others	311	90
	6,116	4,990
Derivative financial instruments		
– Option Contract	149	160
	7,304	5,218
Total	19,598	15,782

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

35. Financial Assets/(Liabilities) at Fair Value Through Profit or Loss (Continued)

(b) Financial liabilities at FVPL include the following:

	2021 RMB million	2020 RMB million
Current liabilities		
Unlisted open-end equity funds	122	65

(c) Amounts recognised in profit or loss

	2021 RMB million	2020 RMB million
Fair value (losses)/gains on financial assets at FVPL	(442)	198
Fair value gains on financial liabilities at FVPL	(73)	20
	(515)	218

(d) Risk exposure and fair value measurements

Information about the Group's exposure to price risk is provided in Note 3.1.

For information about the methods and assumptions used in determining fair value refer to Note 3.2.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

36. Restricted Cash

	2021 RMB million	2020 RMB million
Restricted bank deposits	29,255	23,389
Term deposits with initial term of over three months	1,542	5,916
	30,797	29,305

As at 31 December 2021, restricted bank deposits mainly included deposits for issuance of bank acceptance notes, performance bonds, letters of credit to customers, and mandatory reserve deposits placed with People's Bank of China.

Term deposits with initial term of over three months are excluded from cash and cash equivalents, as management are of the opinion that these term deposits are not readily convertible to known amounts of cash without significant risk of changes in value.

The carrying amount of restricted cash are denominated in the following currencies:

	2021 RMB million	2020 RMB million
RMB	30,712	29,219
USD	13	30
Other currencies	72	56
	30,797	29,305

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

37. Cash and Cash Equivalents

	2021 RMB million	2020 RMB million
Cash on hand	46	88
Bank deposits	148,070	145,376
Cash and cash equivalents	148,116	145,464

The maximum exposure to credit risk approximates the carrying amounts of the Group's cash and cash equivalents at the end of the reporting period.

The weighted average effective interest rate on bank deposits was 0.50% per annum as at 31 December 2021 (2020: 0.44% per annum).

The carrying amount of cash and cash equivalents are denominated in the following currencies:

	2021 RMB million	2020 RMB million
RMB	132,167	131,600
USD	13,067	11,355
Others	2,882	2,509
	148,116	145,464

The Group's cash and bank balances denominated in RMB are deposited with banks in the PRC. The conversion of these RMB denominated balances into foreign currencies is subject to the rules and regulation of foreign exchange control promulgated by the PRC Government.

As at 31 December 2021, less than 0.83% (2020: less than 0.94%) of the cash and cash equivalents balances denominated in currencies other than RMB was deposited in banks in certain countries which are subject to foreign exchange control and the currencies are not freely convertible into other currencies or remitted out of those countries.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

38. Share Capital and Premium

	Number of shares		Nominal value	
	2021 (thousands)	2020 (thousands)	2021 RMB million	2020 RMB million
Registered, issued and fully paid A shares of RMB1.00 each At beginning and end of year	20,363,540	20,363,540	20,364	20,364
H shares of RMB1.00 each At beginning and end of year	4,207,390	4,207,390	4,207	4,207
	24,570,930	24,570,930	24,571	24,571

As at 31 December 2021, the A Shares (20,363,540 thousands shares) and H Shares (4,207,390 thousands shares) issued are the ordinary shares in the share capital of the Company. All cash dividends in respect of the H Shares are to be declared in Renminbi and paid by the Company in Hong Kong dollars whereas all cash dividends in respect of A Shares are to be paid by the Company in Renminbi.

In addition, A Shares and H Shares are regarded as different classes of shares under the Company's Articles of Association. The differences between the two classes of shares, including provisions on class rights, the dispatch of notices and financial reports to shareholders, dispute resolution, registration of shares on different branches of the registers of shareholders, the method of share transfer and appointment of dividend receiving agents are set out in the Company's Articles of Association.

A Shares and H Shares however rank pari passu with each other in all other respects.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

39. Statutory Reserves

The statutory reserves comprise the statutory surplus reserve, trust compensation reserve and general risk reserve.

According to the PRC Company Law and the Company's article of association, the Company is required to make an appropriation at 10 percent of the profit for the year as shown in the PRC statutory financial statements, prepared in accordance with the relevant PRC accounting standards, to the statutory surplus reserve fund until the balance reached 50 percent of the registered capital of the Company. The statutory surplus reserve can only make up losses or use to increase the registered capital of the Company and is not distributable.

According to the relevant laws and regulations for financial institutions and trust management entities in the PRC, certain subsidiaries of the Company are required to set aside certain amounts to trust compensation reserve and general risk reserve to address unidentified potential impairment risks.

40. Perpetual Notes

	2020	Additions	Redemption/ Declaration	2021
	RMB million	RMB million	RMB million	RMB million
Public medium notes <i>(Note (a))</i>	15,521	–	(5,796)	9,725
Public renewable corporate bonds <i>(Note (b))</i>	30,951	11,890	(7,198)	35,643
Dividends <i>(Note (c))</i>	266	2,149	(2,159)	256
Total	46,738	14,039	(15,153)	45,624

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

40. Perpetual Notes (Continued)

- (a) In November and December 2021, the Company redeemed the public medium notes (“Medium Notes”) (category one) issued from 26 November 2018 to 27 November 2018, 11 December 2018 to 12 December 2018 and on 17 December 2018 in cash consideration of RMB1.6 billion, RMB2 billion and RMB2.2 billion, respectively.

From 26 November 2018 to 27 November 2018, 11 December 2018 to 12 December 2018 and on 17 December 2018, the Company issued three tranches of Medium Notes (category two) with an aggregate principal amount of RMB1.4 billion, RMB1 billion and RMB0.8 billion, respectively. The Medium Notes are unsecured or unguaranteed. Pursuant to the terms and conditions of the Medium Notes, the Medium Notes bear the initial interest rate of 4.8%, 4.8% and 4.8% per annum, respectively and has no maturity date. The interest rate will be reset every five years from issuance date. The interest is payable annually in arrears. As long as the compulsory interest payment events have not occurred, the Company may, at its sole discretion, elect to defer the distribution of interest, and is not subject to any restriction as to the number of times the distribution can be deferred. The Medium Notes are subject to redemption in whole, at the option of the Company, five years after the issue date, at their principal amount together with accrued interest. The Directors of the Company are of the opinion that the Group has no contractual obligation to repay the principal or to pay the distribution for the Medium Notes, the Medium Notes should be classified as equity.

From 21 November 2019 to 22 November 2019, the Company issued two tranches of Medium Notes with an aggregate principal amount of RMB2.5 billion, respectively. The Medium Notes are unsecured or unguaranteed. Pursuant to the terms and conditions of the Medium Notes, the Medium Notes bear the initial interest rate of 4.11% per annum (category one) and 4.41% per annum (category two), respectively, and has no maturity date. The interest rate will be reset every three years (category one) and every five years (category two) from issuance date. The interest is payable annually in arrears. As long as the compulsory interest payment events have not occurred, the Company may, at its sole discretion, elect to defer the distribution of interest, and is not subject to any restriction as to the number of times the distribution can be deferred. The Medium Notes are subject to redemption in whole, at the option of the Company, three years (category one) and five years (category two) after the issue date, at their principal amount together with accrued interest. The Directors of the Company are of the opinion that the Group has no contractual obligation to repay the principal or to pay the distribution for the Medium Notes, the Medium Notes should be classified as equity.

On 16 September 2020 and from 29 December 2020 to 30 December 2020, the Company issued two tranches of Medium Notes with an aggregate principal amount of RMB1.5 billion and RMB2.5 billion, respectively. The Medium Notes are unsecured or unguaranteed. Pursuant to the terms and conditions of the Medium Notes, the Medium Notes bear the initial interest rate of 4.45% per annum and 3.94% per annum, respectively, and has no maturity date. The interest rate will be reset every three years and two years, respectively, from issuance date. The interest is payable annually in arrears. As long as the compulsory interest payment events have not occurred, the Company may, at its sole discretion, elect to defer the distribution of interest, and is not subject to any restriction as to the number of times the distribution can be deferred. The Medium Notes are subject to redemption in whole, at the option of the Company, three years and two years, respectively, after the issue date, at their principal amount together with accrued interest. The Directors of the Company are of the opinion that the Group has no contractual obligation to repay the principal or to pay the distribution for the Medium Notes, the Medium Notes should be classified as equity.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

40. Perpetual Notes (Continued)

- (b) In October, November and December 2021, the Company redeemed four tranches of the public renewable corporate bonds (“Renewable Bonds”) (category one) issued on 5 November 2018, 14 November 2018, 26 November 2018, 17 December 2018 and 28 October 2020 in cash consideration of RMB2.3 billion, RMB1.2 billion, RMB1.6 billion, RMB1.2 billion and RMB0.9 billion, respectively.

On 5 November 2018, 14 November 2018, 26 November 2018 and 17 December 2018, the Company issued four tranches of Renewable Bonds (category two) with an aggregate principal amount of RMB0.7 billion, RMB1.8 billion, RMB1.4 billion and RMB0.8 billion, respectively. The Renewable Bonds are unsecured or unguaranteed and listed on the Shanghai Stock Exchange by way of bond issues to qualified investors. Pursuant to the terms and conditions of the Renewable Bonds, the Renewable Bonds bear the initial interest rate of 4.99%, 4.90%, 4.80% and 4.78% per annum, respectively, and has no maturity date. The interest rate will be reset every five years from the issuance date. The interest is payable annually in arrears. As long as the compulsory interest payment events have not occurred, the Company may, at its sole discretion, elect to defer the distribution of interest, and is not subject to any restriction as to the number of times the distribution can be deferred. The Renewable Bonds are subject to redemption in whole, at the option of the Company, five years after the issue date, at their principal amount together with accrued interest. The Directors of the Company are of the opinion that the Group has no contractual obligation to repay the principal or to pay the distribution for the Renewable Bonds, the Renewable Bonds should be classified as equity.

On 26 May 2020, 23 June 2020, 23 July 2020 and 18 August 2020, the Company issued four tranches of Renewable Bonds with an aggregate principal amount of RMB2.6 billion, RMB1 billion, RMB3.5 billion, RMB3.5 billion, respectively. The Renewable Bonds are unsecured or unguaranteed and listed on the Shanghai Stock Exchange by way of bond issues to qualified investors. Pursuant to the terms and conditions of the Renewable Bonds, the Renewable Bonds bear the initial interest rate of 3.11%, 3.60%, 3.95% and 3.95% per annum, respectively, and has no maturity date. The interest rate will be reset every three years from the issuance date. The interest is payable annually in arrears. As long as the compulsory interest payment events have not occurred, the Company may, at its sole discretion, elect to defer the distribution of interest, and is not subject to any restriction as to the number of times the distribution can be deferred. The Renewable Bonds are subject to redemption in whole, at the option of the Company, three years after the issue date, at their principal amount together with accrued interest. The Directors of the Company are of the opinion that the Group has no contractual obligation to repay the principal or to pay the distribution for the Renewable Bonds, the Renewable Bonds should be classified as equity.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

40. Perpetual Notes (Continued)

(b) (Continued)

On 15 June 2020, 16 October 2020 and 28 October 2020, the Company issued three tranches of Renewable Bonds with an aggregate principal amount of RMB3.5 billion, RMB3 billion and RMB2 billion, respectively. The Renewable Bonds are unsecured or unguaranteed and listed on the Shanghai Stock Exchange by way of bond issues to qualified investors. Pursuant to the terms and conditions of the Renewable Bonds, the Renewable Bonds bear the initial interest rate of 3.50% and 4.20% per annum (category one), respectively, and 3.99%, 4.47% and 3.94% per annum (category two), respectively, and has no maturity date. The interest rate will be reset every three years and two years (category one), respectively, and every five years, three years and two years (category two), respectively, from the issuance date. The interest is payable annually in arrears. As long as the compulsory interest payment events have not occurred, the Company may, at its sole discretion, elect to defer the distribution of interest, and is not subject to any restriction as to the number of times the distribution can be deferred. The Renewable Bond are subject to redemption in whole, at the option of the Company, three years and two years (category one), respectively and five years, three years and two years (category two), respectively after the issue date, at their principal amount together with accrued interest. The Directors of the Company are of the opinion that the Group has no contractual obligation to repay the principal or to pay the distribution for the Renewable Bond, the Renewable Bond should be classified as equity.

On 2 June 2021, 17 June 2021, 9 November 2021 and 23 November 2021, the Company issued four tranches Renewable Bonds with an aggregate principal amount of RMB3 billion, RMB3 billion, RMB3 billion and RMB2.9 billion respectively. The Renewable Bonds are unsecured or unguaranteed and listed on the Shanghai Stock Exchange by way of bond issues to qualified investors. Pursuant to the terms and conditions of the Renewable Bonds, the Renewable Bonds bear the initial interest rate of 3.63%, 3.73%, 3.15% and 3.14% per annum (category one), respectively, and 3.85%, 4.05%, 3.37% and 3.30% per annum (category two), respectively, and has no maturity date. The interest rate will be reset every three years, three years, two years and two years (category one), respectively and every five years, five years, three years and three years (category two), respectively from the issuance date. The interest is payable annually in arrears. As long as the compulsory interest payment events have not occurred, the Company may, at its sole discretion, elect to defer the distribution of interest, and is not subject to any restriction as to the number of times the distribution can be deferred. The Renewable Bonds are subject to redemption in whole, at the option of the Company, three years, three years, two years and two years (category one), respectively and five years, five years, three years and three years (category two), respectively, after the issue date, at their principal amount together with accrued interest. The Directors of the Company are of the opinion that the Group has no contractual obligation to repay the principal or to pay the distribution for the Renewable Bonds, the Renewable Bonds should be classified as equity.

- (c) For the year ended 31 December 2021, as a consequence of the compulsory interest payment event, i.e. the final dividend declared to the shareholders of the Company, the Company declared dividends to perpetual notes holders totaling RMB2,159 million, including the interest of RMB1,893 million which was generated during the period was deducted from retained earnings, and RMB266 million represented the accrued interest in the balance of perpetual notes as at 31 December 2020.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

41. Trade and Other Payables

	2021	2020
	RMB million	RMB million
Trade and bills payables (a)	405,520	384,565
Dividend payables	702	453
Accrued payroll and welfare	4,100	3,777
Other taxes	4,622	3,859
Deposit received in advance	1,048	950
Deposits (b)	3,243	3,396
Advance from customers	446	393
Other payables	112,993	98,894
	532,674	496,287
Analysed for reporting purposes:		
Non-current	10,263	7,983
Current	522,411	488,304
	532,674	496,287

The credit period on purchases of goods ranges from 180 days to 360 days. Included in trade and bills payables are retention payables of RMB10,518 million (31 December 2020: RMB10,791 million). Retention payables are interest-free and payable at the end of the retention period of the respective infrastructure construction and products manufacturing and installation contracts.

The balances of other payables mainly include payments made by the third parties on behalf of the Group, guarantee money payables and others.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

41. Trade and Other Payables (Continued)

- (a) The ageing analysis of trade and bills payables (including amounts due to related parties of trading nature), based on invoice date, is as follows:

	2021	2020
	RMB million	RMB million
Less than 1 year	370,538	354,958
1 year to 2 years	19,622	19,725
2 years to 3 years	9,274	4,933
More than 3 years	6,086	4,949
	405,520	384,565

- (b) China Railway Finance Co., Ltd. ("CREC Finance"), a subsidiary of the Company, accepted deposits from related parties and third parties. These deposits were due within one year with average annual interest rate of 1.265%.
- (c) The carrying amount of trade and other payables are denominated in the following currencies:

	2021	2020
	RMB million	RMB million
RMB	519,904	482,438
USD	7,518	7,389
Other currencies	5,252	6,460
	532,674	496,287

At 31 December 2021, other currencies mainly consist of West African Franc, Ethiopian Birr, and HKD.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

42. Borrowings

	2021	2020
	RMB million	RMB million
Bank borrowings :		
– Secured	81,976	80,127
– Unsecured	152,824	102,340
	234,800	182,467
Long-term debentures, unsecured (a)	55,007	49,443
Other borrowings:		
– Secured	1,992	262
– Unsecured	20,128	17,883
	22,120	18,145
	311,927	250,055
Analysed for reporting purposes:		
Non-current	198,503	166,997
Current	113,424	83,058
	311,927	250,055

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

42. Borrowings (Continued)

- (a) On 28 January, 23 March, and 29 April 2021, the first tranche of the corporate bond, the first tranche of the medium-term note, the second tranche of the medium-term note, issued on 28 January 2016, 22 March 2011 and 25 April 2019, of a principal amount of RMB1,135 million, RMB4,659 million, and RMB1,000 million respectively have been fully paid off.

On 12 April 2019, the Company issued the second tranche of the corporate bond of a principal amount of RMB3,500 million with a maturity date of 15 April 2022, including RMB1,300 million for category 1 with investors' put options and issuer's coupon rate adjustment options at the end of the first year and the second year and RMB2,200 million for category 2 with investors' put options and issuer's coupon rate adjustment options at the end of the second year. The interest rates are 3.40% (category 1) and 3.70% (category 2) per annum, payable annually in arrears. In March 2021, the Company exercised the coupon rate adjustment option and adjust the interest rate from 3.70% to 3.20% (category 2). In April 2021, the investors partially exercised put option. The category 1 and the category 2 of the second tranche of the corporate bond of a principal amount of RMB1,300 million and RMB1,780 million respectively was fully paid off. At 31 December 2021, the Company continued holding the rest part of the category 2 of the second tranche of corporate bond with a principal amount of RMB420 million.

On 23 April, 26 May, 9 July and 13 August 2021, the Company issued four tranches of the medium-term notes of a principal amount of RMB3,000 million, RMB2,500 million, RMB3,000 million and RMB3,000 million with a maturity date of 27 April, 28 May, 13 July and 17 August 2024, respectively. The notes bear interest at a coupon rate of 3.37%, 3.34%, 3.20% and 3.09% per annum respectively, all payable annually in arrears.

On 22 July 2021, the Company issued the first tranche of the corporate bond, including 3-year corporate bond in a principal amount of RMB2,200 million (category 1), with a maturity date of 23 July 2024, and 5-year corporate bond in a principal amount of RMB800 million (category 2), with a maturity date of 23 July 2026. The interest rates are 3.14% (category 1) and 3.40% (category 2) per annum, payable annually in arrears.

On 17 January 2022, the first tranche of the corporate bond of a principal amount of RMB2,500 million issued on 16 January 2019 has been fully paid off.

On 21 January 2022, the first tranche of the medium-term note of a principal amount of RMB1,000 million (category 1) issued on 17 January 2019 has been fully paid off.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

42. Borrowings (Continued)

- (b) Bank borrowings carry interest at rates ranging from 0.75% to 9.50% (31 December 2020: 0.75% to 9.55%) per annum.

Long-term debentures were issued at fixed rates ranging from 2.14% to 4.50% (31 December 2020: 2.14% to 4.50%) per annum.

Other borrowings carry interest at rate of 2.35% (31 December 2020: 3.85% to 7.00%) per annum.

- (c) The details of secured borrowings are set out below:

	2021		2020	
	Secured borrowings RMB million	Carrying amount of pledged assets and contract value of certain rights RMB million	Secured borrowings RMB million	Carrying amount of pledged assets and contract value of certain rights RMB million
Property, plant and equipment (Note 18)	295	1,715	367	1,022
Lease prepayments (Note 20)	–	–	197	309
Intangible assets (Note 23)	45,894	64,728	39,104	50,991
Properties under development for sale (Note 31)	7,699	30,698	11,769	37,371
Trade and bills receivables (Note 33)	221	221	310	310
Trade receivables from fellow subsidiaries of the Group	34	375	119	375
Contract assets (Note 34)	29,825	48,320	28,523	48,339
	83,968	146,057	80,389	138,717

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

42. Borrowings (Continued)

- (d) The exposure of the Group's variable rate bank borrowings to interest rate changes and the contractual repricing dates at the end of the year are as follows:

	2021 RMB million	2020 RMB million
6 months or less	30,969	47,772
6 -12 months	123,580	81,316
1-5 years	1,891	288
	156,440	129,376

- (e) The Group's borrowings were repayable as follows:

	2021 RMB million	2020 RMB million
Within 1 year	113,424	83,058
Between 1 and 2 years	31,351	46,920
Between 2 and 5 years	64,552	52,212
Over 5 years	102,600	67,865
	311,927	250,055

- (f) The carrying amounts of the borrowings are denominated in the following currencies:

	2021 RMB million	2020 RMB million
RMB	299,876	239,539
USD	11,682	10,501
EUR	13	2
Others	356	13
	311,927	250,055

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

42. Borrowings (Continued)

- (g) The carrying amounts of current portion of long-term borrowings and short-term borrowings approximate their fair values, as the impact of discounting is not significant.

The carrying amounts and fair values of the non-current borrowings are as follows:

	2021	2020
	RMB million	RMB million
Carrying amount		
– Bank borrowings	161,579	119,970
– Long-term debentures	33,563	41,705
– Other borrowings	3,361	5,322
	198,503	166,997
Fair value		
Level 3		
– Bank borrowings	168,180	121,511
– Long-term debentures	33,735	41,214
– Other borrowings	3,361	5,322
	205,276	168,047

- (h) The Group has the following undrawn borrowing facilities:

	2021	2020
	RMB million	RMB million
Expiring within one year	49,863	95,962
Expiring beyond one year	1,151,628	1,096,468
	1,201,491	1,192,430

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

43. Retirement Benefit Obligations

(a) State-managed retirement plans and supplementary defined contribution retirement schemes

The employees of the group entities established in the PRC are members of a state-managed retirement benefit scheme operated by the PRC government. These PRC companies are required to contribute a certain percentage of payroll costs, depending on the applicable local regulations to the state-managed retirement plans. The Group also participates in supplementary defined contribution retirement schemes. The only obligation of these PRC companies with respect to the state-managed retirement plans and supplementary defined contribution retirement schemes is to make the specified contributions. The total costs charged to profit or loss during the year were RMB6,273 million and RMB1,921 million respectively (2020: RMB4,186 million and RMB1,792 million respectively).

As at 31 December 2021, the amounts due in respect of the reporting period not yet paid to the state-managed retirement plans and supplementary defined contribution retirement schemes, and included in trade and other payables were RMB216 million and RMB60 million respectively (2020: RMB155 million and RMB46 million respectively).

(b) Retirement and other supplemental benefit obligations

The Group paid supplementary pension subsidies and other post-employment medical benefits to its retired employees in the PRC. In addition, the Group was committed to make periodic benefits payments to certain former employees who were terminated or early retired and the dependents of deceased employees in accordance with various employee benefit schemes adopted by the Group.

The plan exposes the Group to actuarial risks such as interest rate risk, benefit risk and average medical expense risk.

Interest rate risk	The present value of the defined benefit plan obligations is calculated using a discount rate determined by reference to government bond yields. A decrease in the bond interest rate will increase the plan liability.
Benefit risk	The present value of the defined benefit plan obligations is calculated by reference to the future benefits of plan participants. As such, an increase in the benefits of the plan participants will increase the plan liability.
Average medical cost risk	The present value of the defined benefit plan obligations is calculated by reference to the future average medical cost of plan participants. As such, an increase in the average medical cost of the plan participants will increase the plan liability.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

43. Retirement Benefit Obligations (Continued)

(b) Retirement and other supplemental benefit obligations (Continued)

No other post-retirement benefits are provided to these employees.

The most recent actuarial valuations of the present value of the defined benefit obligations as at 31 December 2021 were carried out by an independent firm of actuaries, Willis Towers Watson. The present value of the defined benefit obligations, and the related current service cost and past cost were measured using the Projected Unit Credit Method.

The principal assumptions used for the purposes of the actuarial valuations were as follows:

	2021	2020
Discount rate	2.75%	3.25%
Early-retiree's salary and supplemental benefit inflation rate	4.50%	4.50%
Average medical cost growth rate	8.00%	8.00%

Amounts recognised in the consolidated income statement and consolidated statement of comprehensive income in respect of these defined benefit plans are as follows:

	2021 RMB million	2020 RMB million
Net finance costs (<i>Note 10</i>)	85	85
Components of defined benefit costs recognised in profit or loss	85	85
Remeasurement on the net defined benefit obligations:		
Actuarial losses/(gains) arising from experience adjustments	78	(1)
Components of defined benefit costs recognised in other comprehensive income	78	(1)
Total	163	84

The current service cost and the net interest expense for the year are included in the employee benefits expense in profit or loss. The remeasurement of the net defined benefit liability is included in other comprehensive income.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

43. Retirement Benefit Obligations (Continued)

(b) Retirement and other supplemental benefit obligations (Continued)

The amount included in the consolidated balance sheet arising from the Group's obligation in respect of its defined benefit plans is as follows:

	2021	2020
	RMB million	RMB million
Present value of unfunded defined benefit obligations	2,593	2,805
Net liability arising from defined benefit obligations	2,593	2,805
Less: Amount due within one year	(300)	(323)
Amount due after one year	2,293	2,482

Movements in the present value of the retirement and other supplemental benefit obligations in the current year were as follows:

	2021	2020
	RMB million	RMB million
Opening defined benefit obligations	2,805	3,129
Finance costs	85	85
Remeasurement losses		
Actuarial losses/(gains) arising from experience adjustments	78	(1)
Benefits paid	(375)	(408)
Closing defined benefit obligations	2,593	2,805

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

43. Retirement Benefit Obligations (Continued)

(b) Retirement and other supplemental benefit obligations (Continued)

Significant actuarial assumptions for the determination of the defined benefit obligation are discount rate, benefit inflation rate and the average medical cost growth rate. The sensitivity analyses below have been determined based on reasonably possible changes of the respective assumptions occurring at the end of the reporting period, while holding all other assumptions constant.

- If the discount rate on benefit obligation increases or decreases by 0.25 percentage point, the defined benefit obligation would have been decreased by RMB43 million or increased by RMB45 million (2020: decreased by RMB46 million or increased by RMB48 million).
- If the benefit inflation rate increases or decreases by 1 percentage point, the defined benefit obligation would have been increased by RMB94 million or decreased by RMB82 million (2020: increased by RMB101 million or decreased by RMB88 million).
- If the average medical cost growth rate increases or decreases by 1 percentage point, the defined benefit obligation would have been increased by RMB6 million or decreased by RMB6 million (2020: increased by RMB8 million or decreased by RMB7 million).

The sensitivity analysis presented above may not be representative of the actual change in the defined benefit obligations as it is unlikely that the change in assumptions would occur in isolation of one another as some of the assumptions may be correlated.

Furthermore, in presenting the above sensitivity analysis, the present value of the defined benefit obligations has been calculated using the projected unit credit method at the end of the reporting period, which is the same as that applied in calculating the defined benefit obligations liability recognised in the consolidated balance sheet.

There was no change in the methods and assumptions used in preparing the sensitivity analysis from prior years.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

43. Retirement Benefit Obligations (Continued)

(b) Retirement and other supplemental benefit obligations (Continued)

The average expected future lifetime of the defined benefit obligation as at 31 December 2021 is 10 years (2020: 10.4 years). This number can be analysed as follows:

- civil retirees: 3.6 years (2020: 3.8 years);
- retired members: 10 years (2020: 10.4 years); and
- beneficiaries: 11 years (2020: 11.4 years).

The duration of the defined benefit obligation as at 31 December 2021 is 6.4 years (2020: 6.8 years).

44. Provisions

	2021	2020
	RMB million	RMB million
Forseeable losses on contracts	357	686
Lawsuits	122	116
Others	330	–
	809	802
Analysed for reporting purpose as:		
Non-current	761	562
Current	48	240
	809	802

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

44. Provisions (Continued)

Movements in each class of provision during the financial year are set out below:

	Forseeable losses on contracts RMB million	Lawsuits RMB million	Others RMB million	Total RMB million
At 1 January 2020	458	606	–	1,064
Charged/(credited) to the consolidated income statement:				
– Additional provisions	442	45	–	487
– Utilised/reversed during the year	(214)	(535)	–	(749)
At 31 December 2020	686	116	–	802
At 1 January 2021	686	116	–	802
Charged/(credited) to the consolidated income statement:				
– Additional provisions	109	50	330	489
– Utilised/reversed during the year	(438)	(44)	–	(482)
At 31 December 2021	357	122	330	809

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

45. Deferred Taxation

(a) The analysis of deferred tax assets and deferred tax liabilities is as follows:

	2021		2020	
	Deferred tax assets	Deferred tax liabilities	Deferred tax assets	Deferred tax liabilities
	RMB million	RMB million	RMB million	RMB million
The balances before offsetting	10,966	(2,241)	9,935	(2,056)
Offsetting	(594)	594	(602)	602
	10,372	(1,647)	9,333	(1,454)

(b) The gross movement on the deferred income tax account is as follows:

	2021	2020
	RMB million	RMB million
At 31 December in prior year	7,879	6,228
Recognised in the income statement (<i>Note 13</i>)	838	1,451
Recognised in other comprehensive income (<i>Note 13</i>)	(6)	65
Effect of change in tax rate charged to profit or loss (<i>Note 13</i>)	28	166
Acquisition of subsidiaries	(4)	(160)
Disposal of subsidiaries	(11)	(11)
Exchange differences	1	140
At 31 December	8,725	7,879

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

45. Deferred Taxation (Continued)

- (c) The movement in deferred tax assets and liabilities during the year, without taking into consideration the offsetting of balances within the same tax jurisdiction, is as follows:

Deferred Tax Liabilities

	Financial assets/ liabilities measured at fair value RMB million	Unrealised loss from intercompany transactions RMB million	Depreciation and amortisation RMB million	Acquisition of subsidiaries RMB million	Others RMB million	Total RMB million
At 1 January 2020	(687)	(28)	(322)	(410)	(767)	(2,214)
Credited/(charged) to the consolidated income statement	–	4	(19)	29	(6)	8
Credited to other comprehensive income	9	–	–	–	–	9
Acquisition of subsidiaries	–	–	–	(152)	(60)	(212)
Effect of change in tax rate credited to profit or loss	–	–	–	–	205	205
Exchange differences	–	–	148	–	–	148
At 31 December 2020	(678)	(24)	(193)	(533)	(628)	(2,056)
At 1 January 2021	(678)	(24)	(193)	(533)	(628)	(2,056)
Credited/(charged) to the consolidated income statement	5	1	(12)	47	(209)	(168)
Charged to other comprehensive income	(10)	–	–	–	–	(10)
Acquisition of subsidiaries	–	–	–	(9)	–	(9)
Exchange differences	–	–	–	2	–	2
At 31 December 2021	(683)	(23)	(205)	(493)	(837)	(2,241)

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

45. Deferred Taxation (Continued)

- (c) The movement in deferred tax assets and liabilities during the year, without taking into consideration the offsetting of balances within the same tax jurisdiction, is as follows: (Continued)

Deferred Tax Assets:

	Provision for impairment of assets	Depreciation and amortisation	Financial assets/ liabilities measured at fair value	Provision for employee benefits	Tax losses	Unrealised profit from intercompany transactions	Other	Total
	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million	RMB million
At 1 January 2020	3,519	23	172	457	1,839	1,958	474	8,442
Credited/(charged) to the consolidated income statement	288	28	79	(39)	340	442	305	1,443
Credited/(charged) to other comprehensive income	-	-	54	2	-	-	-	56
Acquisition of subsidiaries	46	-	-	-	4	2	-	52
Disposal of subsidiaries	-	-	-	-	(11)	-	-	(11)
Effect of change in tax rate credited to profit or loss	(8)	-	-	8	(37)	-	(2)	(39)
Exchange differences	-	-	-	-	(8)	-	-	(8)
At 31 December 2020	3,845	51	305	428	2,127	2,402	777	9,935
At 1 January 2021	3,845	51	305	428	2,127	2,402	777	9,935
Credited/(charged) to the consolidated income statement	288	8	119	(44)	208	310	117	1,006
(Charged)/credit to other comprehensive income	-	-	(10)	13	-	-	1	4
Acquisition of subsidiaries	-	-	-	-	5	-	-	5
Disposal of subsidiaries	(11)	-	-	-	-	-	-	(11)
Effect of change in tax rate credited to profit or loss	27	4	-	6	(9)	-	-	28
Exchange differences	-	-	-	-	(1)	-	-	(1)
At 31 December 2021	4,149	63	414	403	2,330	2,712	895	10,966

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

45. Deferred Taxation (Continued)

- (d) Deferred income tax assets are recognised for tax loss carry-forwards to the extent that the realisation of the related tax benefit through future taxable profits is probable. As at 31 December 2021, the Group did not recognise deferred tax assets of RMB2,893 million (2020: RMB2,491 million) in respect of tax losses amounting to RMB13,132 million (2020: RMB11,363 million) as the Directors believes it is more likely than not that such tax losses would not be utilised before they expire.

As at 31 December 2021, the tax losses with no deferred tax assets recognised carried forward are as follows:

	2021 RMB million	2020 RMB million
Year of expiry of tax losses		
2021	N/A	1,733
2022	2,645	2,651
2023	2,598	2,601
2024	726	755
2025	3,523	3,566
2026-2030	3,640	57
	13,132	11,363

- (e) As at 31 December 2021, the Group did not recognise deferred tax assets of RMB6,503 million (2020: RMB5,782 million) in respect of deductible temporary differences amounting to RMB31,006 million (2020: RMB27,346 million) as the Directors believe it is not probable that such deductible temporary differences would be utilised.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

46. Cash Generated from Operations

(a) Cash Generated from Operations

	2021 RMB million	2020 RMB million
Profit for the year	30,470	27,250
Adjustments for:		
– Income tax expense	9,166	8,362
– Interest income	(1,063)	(1,528)
– Dividends from financial assets at FVPL	(603)	(115)
– Dividends from financial assets at FVOCI	(85)	(58)
– (Gains)/losses on disposal and/or write-off of:		
Property, plant and equipment	(328)	(228)
Lease prepayments	(98)	(361)
Interests in associates	(14)	27
Interests in subsidiaries	(72)	133
Financial assets/liabilities at FVPL	(47)	(7)
– Foreign exchange losses, net	80	45
– Fair value losses/(gains) on financial assets/liabilities at FVPL	515	(218)
– Gain on debt restructuring	(135)	(180)
– Net impairment losses recognised on:		
Trade and other receivables (excluding advance to suppliers)	3,694	2,116
Other financial assets at amortised cost	560	33
Contract assets	1,224	407
– Impairment losses recognised on:		
Property, plant and equipment	132	41
Inventories	5	(64)
Properties under development for sale	770	1,727
Properties held for sale	1,533	3,657
Advance to suppliers	4	39
Investment properties	48	3
– (Decrease)/increase in provision	(371)	272
– Interest expenses	7,531	6,662
– Losses from derecognition of financial assets at amortised cost	4,595	3,302

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

46. Cash Generated from Operations (Continued)

(a) Cash Generated from Operations (Continued)

	2021	2020
	RMB million	RMB million
– Share of losses/(profits) of joint ventures	507	(164)
– Share of profits of associates	(3,809)	(2,031)
– Charge to retirement benefit obligations	85	85
– Government subsidies	86	87
– Depreciation and amortisation	10,926	10,776
Operating cash flows before movements in working capital	65,306	60,070
Changes in working capital (excluding the effects of acquisition and exchange differences on consolidation):		
– Increase in other prepayments	(145)	(220)
– Increase in properties held for sale	(17,810)	(12,783)
– Decrease in properties under development for sale	12,822	16,351
– (Increase)/decrease in inventories	(3,867)	137
– Increase in trade and other receivables	(16,998)	(29,393)
– Decrease in retirement and other supplemental benefit obligations	(375)	(389)
– Increase in trade and other payables	41,579	38,850
– Increase/(decrease) in other financial assets at amortised cost	1,168	(5,232)
– Decrease in payables arising from consolidated structured entities	(2,036)	(659)
– Increase in contract assets	(69,535)	(38,417)
– Increase in contract liabilities	18,610	13,985
– Increase/(decrease) in provisions	336	(535)
– Decrease in government grant	(70)	(40)
– Decrease in financial assets at FVPL	1,009	466
– (Decrease)/increase in deposits in CREC Finance	(153)	2,255
– Increase in restricted bank deposits	(5,871)	(5,617)
Cash generated from operations	23,970	38,829

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

46. Cash Generated from Operations (Continued)

(b) Non-cash investing and financing activities

	2021 RMB million	2020 RMB million
Additions of right-of-use assets	580	898
Bills receivables paid for purchase	2,578	4,427
Total	3,158	5,325

(c) Net debt reconciliation

This section sets out an analysis of net debt for each of the periods presented.

	2021 RMB million	2020 RMB million
Cash and cash equivalents (<i>Note 37</i>)	148,116	145,464
Restricted cash (<i>Note 36</i>)	30,797	29,305
Financial assets at FVPL – current (<i>Note 35</i>)	7,304	5,218
Borrowings – repayable within one year (<i>Note 42</i>)	(113,424)	(83,058)
Borrowings – repayable after one year (<i>Note 42</i>)	(198,503)	(166,997)
Net debt	(125,710)	(70,068)

	2021 RMB million	2020 RMB million
Cash and Financial assets at FVPL	186,217	179,987
Gross debt – fixed interest rates	(155,487)	(120,679)
Gross debt – variable interest rates	(156,440)	(129,376)
Net debt	(125,710)	(70,068)

No change in financial assets are included in cash flows of financing activities during the year of 2021.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

47. Disposal of Subsidiaries

Disposal of Guiyang Subway Line 3 Phase I Engineering Construction Management Co., Ltd. (hereinafter referred to as “Guiyang Subway Line 3”)

In December 2020, China Railway Capital Co., Ltd. (hereinafter referred to as “China Railway Capital”), a subsidiary the Company and one of the then shareholders of Guiyang Subway Line 3, entered into an equity transfer agreement with China Railway Huixin Equity Investment Fund Management Co., Ltd. (a then joint venture of the Group, hereinafter referred to as “China Railway Huixin”), pursuant to which China Railway Capital disposed of unfunded 21% equity interests in Guiyang Subway Line 3 to China Railway Huixin.

As of April 2021, the external funds amounting to RMB510 million have been injected into Guiyang Subway Line 3 through China Railway Huixin – Guiyang Subway Private Equity Investment Fund (hereinafter referred to as the “Investment Fund”), while China Railway Huixin as the fund manager. As a result of the new shareholder and the external funds injection, the Group lost the control over Guiyang Subway Line 3. Upon the completion of equity transfer, the Group retained 49% equity interests in and has joint control over Guiyang Subway Line 3. Thereafter, Guiyang Subway Line 3 has been accounted as a joint venture using the equity method.

Details of sales proceeds and gains on disposal are as follows:

	Guiyang Subway Line 3 RMB million
Sales proceeds:	
– Cash received	–
Less: net assets disposed	(10)
Gains on disposal	10

48. Contingent Liabilities

	2021 RMB million	2020 RMB million
Pending lawsuits (a)		
– arising in the ordinary course of business	5,256	3,073

(a) The Group has been involved in a number of lawsuits arising in the ordinary course of business. Provision has been made for the probable losses to the Group on those claims when the management can reasonably estimate the outcome of the lawsuits taking into account of the legal advice. No provision has been made for those pending lawsuits where the management considered that the outcome of the lawsuits cannot be reasonably estimated or management believes the outflow of resources is not probable. The aggregate sum of those unprovided claims is disclosed in the table above.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

49. Commitments

(a) Capital expenditure

Significant capital expenditure contracted for at the end of reporting period but not recognised as liabilities is as follows:

	2021 RMB million	2020 RMB million
Property, plant and equipment	2,418	3,544

(b) Investment commitment

According to relevant agreements, the Group has the following commitments:

	2021 RMB million	2020 RMB million
Investment commitment to associates, joint ventures and others	53,024	51,393

- (i) It includes the Group's investment in certain mining projects (including development and construction expenditures) of an associate in the Democratic Republic of the Congo pursuant to co-operation agreements signed between the co-operation partners. Since the signing of relevant co-operation agreements, the co-operation partners have carried out continuous negotiation on the details of the cooperation and gradually promoted the mining development and infrastructure construction. The amount of investment commitment disclosed above was based on the latest situation of the mining projects which is subject to change based on the projects progress in the future.

(c) Operating Lease Commitments – as lessor

As the lessor, the Group's undiscounted amount of lease receivables after the balance sheet date are summarized as follows:

	2021 RMB million	2020 RMB million
No later than 1 year	579	599
Later than 1 year and no later than 5 years	1,132	1,022
Later than 5 years	369	372
	2,080	1,993

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

50. Related-party Transactions

The Company is controlled by the following entity:

Name	Relationship	Place of incorporation and operation	Ownership interest	
			2021	2020
CREC	Parent and ultimate holding company	PRC	47.21%	47.21%

The Company is controlled by CREC, the parent company and a state-owned enterprise established in the PRC. CREC is controlled by the PRC government (CREC and its subsidiaries other than the Group are referred to as the "CREC Group"). The Group operates in an economic environment currently predominated by entities controlled, jointly controlled or under significant influence by the PRC government ("government-related entities").

During the year, the Group had transactions with government-related entities including, but not limited to, the provision of infrastructure construction services, survey, design and consulting services and sales of goods. The Directors consider that the transactions with these government-related entities are activities in the ordinary course of the Group's business and that the dealings of the Group have not been significantly or unduly affected by the fact that the Group and these government-related entities are ultimately controlled or owned by the PRC government. The Group has also established pricing policies for services and products, and such pricing policies do not depend on whether or not the customers are government-related entities. For the purpose of the related party transaction disclosures, management believes that meaningful information relating to related party transactions has been adequately disclosed.

The following is a summary of significant related party transactions between the Group and its related parties during the year and balances arising from related party transactions at the end of the reporting period.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

50. Related-party Transactions (Continued)

(a) Significant related party transactions

The following transactions were carried out with related parties other than government-related entities:

	2021	2020
	RMB million	RMB million
Transactions with the CREC Group		
– Service expenses paid	103	7
– Rental expense	17	17
– Interest income	55	36
– Interest expense	17	10
– Provision of borrowings	980	1,870
– Repayment of borrowings	1,927	150
Transactions with joint ventures		
– Revenue from construction contracts	42,228	35,629
– Revenue from sales of goods	333	519
– Purchase	1,804	1,539
– Rental income	2	2
– Rental expense	–	38
– Interest income	467	463
– Interest expense	5	1
– Lending funds	6,018	4,615
Transactions with associates		
– Revenue from construction contracts	15,121	24,014
– Revenue from sales of goods	2,261	1,582
– Purchase	10,958	1,104
– Rental income	3	2
– Rental expense	–	6
– Interest income	182	63
– Interest expense	–	–
– Lending funds	629	1,943

These transactions are carried out on terms agreed with the counter parties in the ordinary course of business.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

50. Related-party Transactions (Continued)

(b) Balances with related parties

	2021 RMB million	2020 RMB million
Balances with the CREC Group		
Trade and bills receivables	18	2
Other financial assets at amortised cost	980	1,840
Other payables	287	68
Deposits	748	1,307
Right-of-use assets	7	1
Lease liabilities	7	1
Contract liabilities	–	1
Balances with joint ventures		
Trade and bills receivables	3,693	2,403
Other receivables	630	1,193
Advance to suppliers	22	136
Other financial assets at amortised cost	9,030	5,245
Contract assets	801	2,978
Trade payables	869	963
Other payables	149	222
Contract liabilities	5,933	6,585
Advance from customers	131	323
Deposits	1,300	985
Balances with associates		
Trade and bills receivables	4,417	5,015
Other receivables	1,348	1,233
Contract assets	3,278	3,558
Advance to suppliers	71	71
Trade payables	1,171	501
Other payables	492	544
Contract liabilities	1,958	1,720
Advance from customers	2	3
Deposits	211	77

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

50. Related-party Transactions (Continued)

(c) Guarantees

	2021 RMB million	2020 RMB million
Outstanding loan guarantees provided by the Group to		
– Joint ventures	2,969	5,048
– Associates	4,730	2,441
– Government-related entities	480	480
Outstanding debentures guarantees provided by CREC to the Group	3,500	3,500

(d) Key management compensation

The remuneration of Directors and other members of key management during the year were as follows:

	2021 RMB'000	2020 RMB'000
Basic salaries, housing allowances and other allowances	4,767	5,137
Fees	295	260
Contributions to pension plans	614	512
Others	6,232	7,175
	11,908	13,084

Key management represents the Directors and other senior management personnel disclosed in the annual report. The remuneration of key management is determined by the remuneration committee having regard to the performance of the respective individuals and the market trends.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

51. Particulars of Principal Subsidiaries

(a) General information of principal subsidiaries

As at 31 December 2021 and 2020, the Company had the following principal subsidiaries:

Name of subsidiary	Country/ place of establishment and operation	Issued and paid in capital RMB'000	Proportion of interest and voting power held by the Group		Proportional of ordinary shares held by non-controlling interests		Principal activities
			2021	2020	2021	2020	
Listed-							
中鐵高新工業股份有限公司 China Railway Industry (i)	PRC	RMB2,221,552	49.12%	49.12%	50.88%	50.88%	Engineering Equipment and Component Manufacturing
中鐵装配式建築股份有限公司 China Railway Prefabricated Construction Co., Ltd. (ii)	PRC	RMB245,912	26.51%	26.51%	73.49%	73.49%	Installation and sales of prefabricated assembly products
Unlisted-							
中鐵一局集團有限公司 China Railway No.1 Engineering Group Co., Ltd.	PRC	RMB6,152,100	100%	100%	–	–	Infrastructure construction
中鐵二局集團有限公司 China Railway No.2 Engineering Group Co., Ltd.	PRC	RMB7,692,920	100%	100%	–	–	Infrastructure construction
中鐵三局集團有限公司 China Railway No.3 Engineering Group Co., Ltd.	PRC	RMB5,213,991	100%	100%	–	–	Infrastructure construction
中鐵四局集團有限公司 China Railway No.4 Engineering Group Co., Ltd.	PRC	RMB8,272,699	100%	100%	–	–	Infrastructure construction
中鐵五局集團有限公司 China Railway No.5 Engineering Group Co., Ltd.	PRC	RMB5,615,152	100%	100%	–	–	Infrastructure construction
中鐵六局集團有限公司 China Railway No.6 Engineering Group Co., Ltd.	PRC	RMB2,200,000	100%	100%	–	–	Infrastructure construction
中鐵七局集團有限公司 China Railway No.7 Engineering Group Co., Ltd.	PRC	RMB2,611,810	100%	100%	–	–	Infrastructure construction

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

51. Particulars of Principal Subsidiaries (Continued)

(a) General information of principal subsidiaries (Continued)

Name of subsidiary	Country/ place of establishment and operation	Issued and paid in capital RMB'000	Proportion of interest and voting power held by the Group		Proportional of ordinary shares held by non-controlling interests		Principal activities
			2021	2020	2021	2020	
中鐵八局集團有限公司 China Railway No.8 Engineering Group Co., Ltd.	PRC	RMB5,906,056	100%	100%	-	-	Infrastructure construction
中鐵九局集團有限公司 China Railway No.9 Engineering Group Co., Ltd.	PRC	RMB2,500,000	100%	100%	-	-	Infrastructure construction
中鐵十局集團有限公司 China Railway No.10 Engineering Group Co., Ltd.	PRC	RMB3,836,510	100%	100%	-	-	Infrastructure construction
中鐵大橋局集團有限公司 China Railway Major Bridge Engineering Group Co., Ltd.	PRC	RMB4,278,453	100%	100%	-	-	Infrastructure construction
中鐵電氣化局集團有限公司 China Railway Electrification Engineering Group Co., Ltd.	PRC	RMB4,409,280	100%	100%	-	-	Infrastructure construction
中鐵建工集團有限公司 China Railway Construction Group Co., Ltd.	PRC	RMB9,611,430	100%	100%	-	-	Infrastructure construction
中鐵隧道局集團有限公司 China Railway Tunnel Group Co., Ltd.	PRC	RMB2,997,688	100%	100%	-	-	Infrastructure construction
中鐵國際集團有限公司 China Railway International Group Co., Ltd.	PRC	RMB2,500,000	100%	100%	-	-	Infrastructure construction
中鐵二局建設有限公司 China Railway No.2 Construction Co., Ltd.	PRC	RMB8,263,820	100%	100%	-	-	Infrastructure construction
中鐵二院工程集團有限責任公司 China Railway Eryuan Engineering Group Co. Ltd.	PRC	RMB1,246,138	100%	100%	-	-	Survey and design

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

51. Particulars of Principal Subsidiaries (Continued)

(a) General information of principal subsidiaries (Continued)

Name of subsidiary	Country/ place of establishment and operation	Issued and paid in capital RMB'000	Proportion of interest and voting power held by the Group		Proportional of ordinary shares held by non-controlling interests		Principal activities
			2021	2020	2021	2020	
中鐵北京工程局集團有限公司 China Railway Beijing Engineering Group Co. Ltd.	PRC	RMB3,485,846	100%	100%	-	-	Infrastructure construction
中鐵廣州工程局集團有限公司 China Railway Guangzhou Engineering Group Co. Ltd.	PRC	RMB3,050,000	100%	100%	-	-	Infrastructure construction
中鐵上海工程局集團有限公司 China Railway Shanghai Engineering Group Co. Ltd.	PRC	RMB2,276,368	100%	100%	-	-	Infrastructure construction
中鐵置業集團有限公司 China Railway Real Estate Group Co., Ltd.	PRC	RMB6,508,410	100%	100%	-	-	Property development
中鐵資源集團有限公司 China Railway Resources Group Co., Ltd.	PRC	RMB5,427,127	100%	100%	-	-	Mining
中鐵交通投資集團有限公司 China Railway Communications Investment Group Co., Ltd.	PRC	RMB8,049,920	100%	100%	-	-	Build-operate-transfer service concession arrangement
中鐵南方投資集團有限公司 China Railway Southern Investment Group Co., Ltd.	PRC	RMB3,343,367	100%	100%	-	-	Infrastructure construction and asset management
中鐵投資集團有限公司 China Railway Investment Group Co., Ltd.	PRC	RMB2,698,448	100%	100%	-	-	Infrastructure construction and asset management
中鐵開發投資有限公司 China Railway Development & Investment Co., Ltd.	PRC	RMB4,094,814	100%	100%	-	-	Infrastructure construction and asset management

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

51. Particulars of Principal Subsidiaries (Continued)

(a) General information of principal subsidiaries (Continued)

Name of subsidiary	Country/ place of establishment and operation	Issued and paid in capital RMB'000	Proportion of interest and voting power held by the Group		Proportional of ordinary shares held by non-controlling interests		Principal activities
			2021	2020	2021	2020	
中鐵城市發展投資集團有限公司 China Railway City Development and Investment Group Co. Ltd.	PRC	RMB5,000,000	100%	100%	–	–	Infrastructure construction and asset management
中鐵(上海)投資集團有限公司 China Railway (Shanghai) Investment Group Co., Ltd.	PRC	RMB2,933,240	100%	100%	–	–	Infrastructure construction and asset management
中鐵信託有限責任公司 China Railway Trust (iii)	PRC	RMB5,000,000	93%	93%	7%	7%	Financial trust management
中鐵財務有限責任公司 China Railway Finance Co., Ltd.	PRC	RMB9,000,000	95%	95%	5%	5%	Comprehensive financial service
中鐵資本有限公司 China Railway Capital Co., Ltd.	PRC	RMB3,760,410	100%	100%	–	–	Asset Management
中鐵物質集團有限公司 China Railway Material Trade Co., Ltd.	PRC	RMB3,000,000	100%	100%	–	–	Trade
中鐵文化旅遊投資有限公司 China Railway Cultural and Tourism Investment Co., Ltd.	PRC	RMB1,500,000	100%	100%	–	–	Tourism, sports and cultural projects investment
中鐵第六勘察設計院集團有限公司 China Railway Liuyuan Group Co., Ltd.	PRC	RMB600,000	100%	100%	–	–	Survey and design
中鐵工程設計諮詢集團有限公司 China Railway Engineering Consulting Group Co., Ltd.	PRC	RMB730,818	70%	70%	–	–	Survey and design

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

51. Particulars of Principal Subsidiaries (Continued)

(a) General information of principal subsidiaries (Continued)

Name of subsidiary	Country/ place of establishment and operation	Issued and paid in capital RMB'000	Proportion of interest and voting power held by the Group		Proportional of ordinary shares held by non-controlling interests		Principal activities
			2021	2020	2021	2020	
中鐵大橋勘測設計院集團有限公司 China Railway Major Bridge Reconnaissance & Design Institute Co., Ltd. (iv)	PRC	RMB148,337	100%	100%	-	-	Survey and design
中鐵科學研究院有限公司 China Railway Academy Co., Ltd.	PRC	RMB600,000	100%	100%	-	-	Survey and design
中鐵華鐵工程設計集團有限公司 China Railway Huatie Engineering Designing Group Co., Ltd.	PRC	RMB217,084	100%	100%	-	-	Survey and design
中鐵貴陽投資發展有限公司 China Railway Guiyang Investment & Development Co., Ltd. (v)	PRC	NA	NA	100%	NA	-	Infrastructure construction and asset management
中鐵人才交流諮詢有限責任公司 China Railway Talent Exchange Consulting Co., Ltd.	PRC	RMB500	100%	100%	-	-	Talent information network service
中鐵東方國際集團有限公司 China Railway Oriental International Group Co., Ltd.	Malaysia	-	100%	100%	-	-	Infrastructure construction and real estate development
鐵工(香港)財資管理有限公司 CR (Hong Kong) Treasury Management Co., Ltd.	Hongkong	RMB69	100%	100%	-	-	asset management
中鐵(廣州)投資發展有限公司 China Railway (Guangzhou) Investment Development Co., Ltd.	PRC	RMB780,000	100%	100%	-	-	Infrastructure construction

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

51. Particulars of Principal Subsidiaries (Continued)

(a) General information of principal subsidiaries (Continued)

Name of subsidiary	Country/ place of establishment and operation	Issued and paid in capital RMB'000	Proportion of interest and voting power held by the Group		Proportional of ordinary shares held by non-controlling interests		Principal activities
			2021	2020	2021	2020	
中鐵武漢電氣化局集團有限公司 China Railway Wuhan Electrification Bureau Group Co., Ltd.	PRC	RMB902,960	100%	100%	–	–	Infrastructure construction
中鐵北方投資有限公司 China Railway North Investment Co., Ltd.	PRC	RMB1,525,997	100%	100%	–	–	Infrastructure construction and asset management
中鐵發展投資有限公司 China Railway Development Investment Co., Ltd.	PRC	RMB4,734,839	100%	100%	–	–	Infrastructure construction and asset management
中鐵雲網信息科技有限公司 China Railway Cloud Network Information Technology Co., Ltd.	PRC	RMB200,000	100%	100%	–	–	Software and information technology services
中國鐵工投資建設集團有限公司 China Tiegong Investment and Construction Co., Ltd.	PRC	RMB4,749,147	100%	100%	–	–	Infrastructure construction
中國中鐵匈牙利有限責任公司 China Railway Hungary Co., Ltd.	Hungary	–	100%	100%	–	–	Infrastructure construction
中鐵站城融合投資發展有限公司 China Railway Station City Integration Investment Development Co., Ltd.	PRC	RMB100,000	100%	100%	–	–	Infrastructure construction and asset management
中鐵水利水電規劃設計研究院集團有限公司 China Railway Water Conservancy & Hydropower Planning and Design Group Co., Ltd.	PRC	RMB300,000	65%	65%	35%	35%	Research, design and construction of water conservancy and hydropower

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

51. Particulars of Principal Subsidiaries (Continued)

(a) General information of principal subsidiaries (Continued)

Name of subsidiary	Country/ place of establishment and operation	Issued and paid in capital RMB'000	Proportion of interest and voting power held by the Group		Proportional of ordinary shares held by non-controlling interests		Principal activities
			2021	2020	2021	2020	
中鐵長江交通設計集團有限公司 China Railway Changjiang Transport Design Group Co., Ltd.	PRC	RMB147,059	66%	66%	34%	34%	Survey, design and management of communications
中國海外工程有限責任公司 China Overseas Engineering Group Co., Ltd.	PRC	RMB2,000,000	100%	100%	-	-	Infrastructure construction

All the above subsidiaries were established as limited liability companies in the PRC, which have similar characteristics of limited liability company incorporated under the Hong Kong Companies Ordinance.

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.

Unless otherwise stated, above subsidiaries have share capital consisting solely of ordinary shares that are held directly by the Group.

- (i) At 31 December 2021, 28.57% (2020: 28.57%) of ordinary shares of China Railway Industry is indirectly held by the Group.
- (ii) At 31 December 2021, the Company directly held 26.51% (2020: 26.51%) of ordinary shares of China Railway Prefabricated Construction Co., Ltd. ("CRPC"). In addition, as the then controlling shareholder waived his voting rights which accounted for 30.62% of the total shares of CRPC, the Company has 38.21% of the voting rights and has the ability to control CRPC.
- (iii) At 31 December 2021, 14% (2020: 14%) of ordinary shares of China Railway Trust is indirectly held by the Group.
- (iv) At 31 December 2021, 35% (2020: 35%) of ordinary shares of China Railway Major Bridge Reconnaissance & Design Institute Co., Ltd. is indirectly held by the Group.
- (v) The subsidiary of the Company, China Railway Guiyang Investment & Development Co., Ltd. was cancelled in December 2021.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

51. Particulars of Principal Subsidiaries (Continued)

(b) Information of debt securities

As at 31 December 2021, the Group had outstanding issued debt securities as follows:

Name	Face value of debt securities RMB Million	Maturity date
China Railway Group Limited	3,500	19/10/2025
	2,120	28/01/2026
	2,500	17/01/2022
	1,000	21/01/2022
	1,000	27/01/2024
	420	15/04/2022
	1,500	29/04/2022
	2,500	18/06/2022
	500	18/06/2024
	1,900	16/07/2022
	1,100	16/07/2024
	1,500	10/04/2023
	1,500	10/04/2023
	3,000	24/04/2023
	3,000	15/05/2023
	3,000	05/06/2023
	3,000	27/04/2024
	2,500	28/05/2024
	3,000	13/07/2024
	2,200	23/07/2024
800	23/07/2026	
3,000	17/08/2024	
China Railway Resources Huitung Limited	3,488	05/02/2023
China Railway Xunjie Co. Limited	3,488	25/07/2022
	3,488	28/07/2026

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

51. Particulars of Principal Subsidiaries (Continued)

(b) Information of debt securities (Continued)

As at 31 December 2020, the Group had outstanding issued debt securities as follows:

Name	Face value of debt securities RMB Million	Maturity date
China Railway Group Limited	3,500	19/10/2025
	4,659	23/03/2021
	1,135	28/01/2021
	2,120	28/01/2026
	2,500	17/01/2022
	1,000	21/01/2022
	1,000	27/01/2024
	147	15/04/2022
	2,200	15/04/2022
	1,000	29/04/2021
	1,500	29/04/2022
	2,500	18/06/2022
	500	18/06/2024
	1,900	16/07/2022
	1,100	16/07/2024
	1,500	10/04/2023
1,500	10/04/2023	
3,000	24/04/2023	
3,000	15/05/2023	
3,000	05/06/2023	
China Railway Resources Huitung Limited	3,488	05/02/2023
China Railway Xunjie Co. Limited	3,488	25/07/2022
	3,488	28/07/2026

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

52. Events Occurring after the Balance Sheet Date

Subsequent to 31 December 2021, the following significant event took place:

- (a) As approved by the Board meeting on 30 March 2022, the Company declared a dividend in respect of the year ended 31 December 2021 of RMB0.196 per ordinary share, amounting to a total dividend of RMB4,849 million. The dividend is to be approved at the 2021 annual general meeting in 2022.
- (b) On 30 December 2021 and 12 January 2022, the Proposal on the 2021 Restricted Share Incentive Scheme (Draft) (the "Scheme") and its Summary was considered and approved at the Company's 2021 second extraordinary general meeting, the 2021 first A Share class shareholders' meeting and the 2021 first H Share class shareholders' meeting respectively.

On 17 January 2022, the Proposal on the First Grant of Restricted Shares to the Incentive Recipients was considered and approved by the Board meeting of the Company. The first grant date of the restricted shares was determined to be 17 January 2022. The number of the first grant is 171 million restricted shares and the number of incentive recipients of the first grant is 697. As of 28 January 2022, the Company had received RMB606 million from 697 incentive recipients, of which RMB171 million was added to the share capital and the remaining RMB435 million was credited to capital surplus (share premium). On 23 February 2022, the Company completed the registration of shares at China Securities Depository and Clearing Company Limited Shanghai Branch.

According to the Scheme, the unlocking periods of the restricted shares of the Scheme are divided into three phases, 24-month, 36-months and 48-month period from the date of completion of registration of the restricted shares being granted respectively. The percentage of restricted shares to be unlocked is one-third each phase. The Company estimated that the total expenses to be amortised under the Scheme would be RMB415 million.

- (c) On 11 January 2022, the Company issued the first tranche of the corporate bond, including 3-year corporate bond in a principal amount of RMB2,000 million (category 1), with a maturity date of 12 January 2025, and 5-year corporate bond in a principal amount of RMB1,000 million (category 2), with a maturity date of 12 January 2027. The interest rates are 2.93% (category 1) and 3.28% (category 2) per annum, both payable annually in arrears.

53. Reclassification

Certain comparative information has been reclassified to conform with the presentation of the consolidated financial statements for the current year.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

54. Balance Sheet and Reserve Movement of the Company

	2021 RMB million	2020 RMB million
ASSETS		
Non-current assets		
Other non-current assets	55,759	51,575
Investments in subsidiaries	246,825	227,365
	302,584	278,940
Current assets		
Amounts due from subsidiaries	98,928	89,658
Other current assets	15,536	11,830
Bank balances and cash	12,893	47,486
	127,357	148,974
Total assets	429,941	427,914
EQUITY		
Share capital	24,571	24,571
Perpetual notes	45,624	46,738
Share premium and reserves	149,481	137,720
Total equity	219,676	209,029
LIABILITIES		
Non-current liabilities		
Borrowings	27,844	35,600
Other non-current liabilities	18,928	19,917
	46,772	55,517
Current liabilities		
Amounts due to subsidiaries	116,257	130,985
Other current liabilities	47,236	32,383
	163,493	163,368
Total liabilities	210,265	218,885

The balance sheet of the Company was approved by the Board of Directors on 30 March 2022 were signed on its behalf.

Director
Chen Yun

Director
Chen Wenjian

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

54. Balance Sheet and Reserve Movement of the Company (Continued)

(a) Reserve movement of the Company

	Share premium RMB million	Capital reserves RMB million	Statutory reserve RMB million	Retained earnings RMB million	Total RMB million
At 31 December 2019	53,109	7,587	9,065	55,667	125,428
Profit and total comprehensive income for the year	–	19	–	17,987	18,006
Redemption of perpetual notes	(42)	–	–	–	(42)
Transfer to reserves	–	–	1,847	(1,847)	–
Dividends recognised as distribution	–	–	–	(4,152)	(4,152)
Dividends declared to perpetual notes holders	–	–	–	(1,520)	(1,520)
At 31 December 2020	53,067	7,606	10,912	66,135	137,720
Profit and total comprehensive income for the year	–	(4)	–	18,343	18,339
Redemption of perpetual notes	(6)	–	–	–	(6)
Transfer to reserves	–	–	1,838	(1,838)	–
Dividends recognised as distribution	–	–	–	(4,423)	(4,423)
Dividends declared to perpetual notes holders	–	–	–	(2,149)	(2,149)
At 31 December 2021	53,061	7,602	12,750	76,068	149,481

SIGNIFICANT EVENTS

I. The Plan for Profit Distribution on Ordinary Shares or Capitalisation of Capital Reserves

1. Formulation, Implementation or Adjustment of the Cash Dividend Policy

(1) Specific policies for profit distribution

According to the Articles of Association of the Company, the specific policies for profit distribution of the Company are as follows:

- (i) Form of profit distribution: The Company distributes profits in cash, share or a combination of cash and share. The Company can make interim profit distributions when conditions permit.
- (ii) Specific conditions, proportion and interval of the Company's cash dividends: Under the premise of ensuring the Company's continuous operation and long-term development, if the Company is profitable in the year and the accumulated undistributed profit is positive and there are no major investment plans or other major cash expenditures, the Company will distribute the profits in cash after appropriation to the statutory reserves and other reserves in full. In any three consecutive years, the Company's accumulated profits distributed in cash shall not be less than 30% of the annual average distributable profits realized in the three years; the annual profits distributed in cash shall generally not be less than 10% of the distributable profits realized in the year. The Company may not distribute cash dividends under the following special circumstances:
 - ① The auditors issue a non-standard unqualified audit report on the Company's financial report for the year.
 - ② The operating net cash flow is negative in the year.

If the abovementioned conditions for cash dividends are met, the Company in principle shall distribute cash dividends once a year, and the Company's Board of Directors can propose the Company to make interim cash dividends based on the Company's profitability and capital demand.

(iii) Specific conditions for the Company to issue stock dividends:

The Company can propose a share dividend distribution plan when the Company is in good operating condition, and the Board of Directors believes that the Company's share price does not match the Company's share capital and that issuing share dividends is beneficial to the overall interests of all shareholders of the Company, under the premise that the abovementioned conditions for cash dividends are met.

SIGNIFICANT EVENTS

I. The Plan for Profit Distribution on Ordinary Shares or Capitalisation of Capital Reserves (Continued)

1. Formulation, Implementation or Adjustment of the Cash Dividend Policy (Continued)

(2) Implementation of the cash dividend policy during the reporting period

Profits are distributed in cash under the profit distribution plan of the Company for 2020. Pursuant to the profit distribution plan considered and passed at the 2020 annual general meeting convened on 23 June 2021, a cash dividend of RMB0.18 (tax inclusive) per share based on the total share capital of 24,570,929,283 shares before the implementation of the plan (the Company's total share capital has not changed since 31 December 2020) was declared by the Company, totalling RMB4,422,767,270.94 (tax inclusive) and representing 17.5% of net profit attributable to the listed company's shareholders under the consolidated financial statements for the year of 2020 of the Company. The announcement on the profit distribution of H shares was published on 8 July 2021 on the website of Hong Kong Stock Exchange and the website of the Company. The announcement on the profit distribution of A shares was published on 23 July 2021 on China Securities Journal, Shanghai Securities News, Securities Times, Securities Daily and the website of Shanghai Stock Exchange. As at 5 August 2021, the implementation of the profit distribution plan of the Company for 2020 has been completed.

(3) Profit distribution plan for 2021

Pursuant to the relevant provisions of the Company Law and the Articles of Association, taking into account factors such as shareholder returns and the capital requirements of the Company for its business development, and in accordance with the "Resolution on the Profit Distribution Plan for 2021 of the Company" which was adopted at the fourteenth meeting of the fifth session of the Board, the details of the profit distribution plan are set out below: the retained profits of the Company at the beginning of 2021 were RMB68,438,633,510.55 based on the audited financial report prepared in accordance with the CAS of the Company for 2021. After taking into account the added net profit realized by the Company of RMB18,379,491,824.03 during the year and deducting the cash dividends for 2021 and interest payments on perpetual notes amounting to RMB6,572,031,983.27, and with 10% of the net profit of the Company, i.e. RMB1,837,949,182.40, being appropriated to its surplus reserve, the distributable profit of the Company to shareholders amounted to RMB78,408,144,168.91 for the year. Based on the Company's total share capital of 24,741,653,683 shares as at 30 March 2022, a cash dividend of RMB1.96 per 10 shares (tax inclusive) is proposed to be distributed, and the total amount of such dividend is RMB4,849,364,121.87 (tax inclusive), representing 17.5% of net profit attributable to the Company's shareholders under the consolidated financial statements for the current year of the Company. Upon the distribution, the remaining retained profit of the Company amounting to RMB73,558,780,047.04 will be carried forward to the next year. The profit distribution will be based on the total share capital on the record date for payment of the cash dividend. In the event of change in total share capital of the Company before the record date for payment of the cash dividend, the total distribution amount will be kept unchanged and the rate will be adjusted accordingly. The Company will make a further announcement on the details of the adjustment.

SIGNIFICANT EVENTS

I. The Plan for Profit Distribution on Ordinary Shares or Capitalisation of Capital Reserves (Continued)

1. Formulation, Implementation or Adjustment of the Cash Dividend Policy (Continued)

(3) Profit distribution plan for 2021 (Continued)

The independent directors of the Company have expressed their opinions on the plan, and the above plan is still subject to the approval of the 2021 annual general meeting of the Company. Minority shareholders will be offered sufficient opportunities to express their views and requests at the 2021 annual general meeting of the Company through the combination of on-site open voting and online voting to ensure that their legal rights are fully safeguarded.

(4) Information on the profit distribution for 2021

In 2021, the Company intends to make a cash dividend at 17.5% of net profit attributable to the listed company's shareholders under the consolidated financial statements for the current year of the Company, which is lower than the proportion in the guidelines, mainly based on the following considerations:

(1) *Situation and characteristics of the industry of the Company*

The industry in which the Company operates is the construction industry, which is a fully competitive industry. The market competition is becoming increasingly fierce, and the gross profit margin of the industry is generally low. Emerging fields such as clean energy and green infrastructure will become a new direction for the development of the industry. According to the 14th Five-Year Plan, a series of major national strategies will form new growth points in the field of infrastructure construction and bring new development momentum to the construction industry. At the Economic Working Conference at the beginning of the year, the government clearly stated that it will carry out infrastructure investment moderately ahead of schedule, which will benefit the field of infrastructure construction in an all-round way. The Company is still in a period of promising opportunities.

(2) *The listed company's development stage and its own business model*

The Company actively implements the national strategy, actively builds a new development pattern, deeply implements the "Belt and Road" initiative, seizes opportunities in overseas markets, and accelerates the establishment of a world-class enterprise with "excellent products, outstanding brands, leading innovation, and modern governance". In 2021, the amount of new contracts, revenue and net profit of the Company hit a new record high. The Company jumps to No. 35 among the "Fortune Global 500" enterprises, and its market competitiveness and brand influence continued to improve. The Company is at a stage of strategic opportunities and strategic upgrade. It will accelerate the transformation from debt-driven development to accumulati on-driven development, and accelerate the transformation from contractors to "investors + builders + operators", which requires a lot of capital investment.

SIGNIFICANT EVENTS

I. The Plan for Profit Distribution on Ordinary Shares or Capitalisation of Capital Reserves (Continued)

1. Formulation, Implementation or Adjustment of the Cash Dividend Policy (Continued)

(4) Information on the profit distribution for 2021 (Continued)

(3) Profitability level and demands on the funds of the Company

For the year of 2021, the Company's net profit attributable to shareholders of the Company increased by 9.65% year on year, and the basic earnings per share after deducting non-recurring profit and loss increased by 17.65% year on year, the best level in history. However, as the Company strengthens structural adjustment, transformation and upgrading, actively cultivates and expands new businesses, and actively starts the "second curve" in growth, it requires a lot of financial support. The Company will rationally arrange fund requirements according to business development needs, improve the efficiency of fund use to ensure the Company's sustainable and healthy development, so as to create greater returns for shareholders.

(4) Reasons for the listed company's low level of cash dividends

At present, the downward pressure on the world economy continues to increase, and the international situation is changing rapidly. Objectively speaking, it is necessary for the Company to preserve retained earnings to enhance its ability to resist risks. At the same time, in order to meet the daily needs in the production and operations, project investment and strategic development of the Company, it is necessary for the Company to retain sufficient funds to ensure its production and operation capabilities and promote its stable operation and high-quality development. As the Company accelerates the transformation from high-speed development to high-quality development, its profitability will steadily increase, which will help provide investors with more returns in the future.

(5) The exact purpose of the listed company's retained undistributed profits and estimated earnings

The Company's retained undistributed profits will be used to support the Company to seize development opportunities, continue to deepen the Company's strategic transformation, enhance structural adjustment and transformation and upgrading, and seek new growth points. On the basis of consolidating the advantages of traditional businesses, the Company will incubate and cultivate new advantageous businesses according to the main businesses and market demand, increase capital investment, cultivate and expand new businesses, promote the optimization and upgrading of business structure, focus on improving value creation capabilities, and reward shareholders with excellent business performance.

SIGNIFICANT EVENTS

I. The Plan for Profit Distribution on Ordinary Shares or Capitalisation of Capital Reserves (Continued)

1. Formulation, Implementation or Adjustment of the Cash Dividend Policy (Continued)

(4) Information on the profit distribution for 2021 (Continued)

(6) All the independent directors of the Company express the following independent opinions on the reasonability of the above 2021 profit distribution plan:

- ① The 2021 profit distribution plan proposed by the Company complies with the Company Law of the People's Republic of China, the Regulatory Guidelines for Listed Companies No. 3 – Cash Dividend Distribution of Listed Companies and other laws, regulations and normative documents, and it is also in line with the Shareholders' Return Plan for the Next Three Years (2021-2023) of the Company 《公司未來三年（2021-2023年度）股東回報規劃》 formulated by the Company and the requirements on profit distribution policies in the Articles of Association.
- ② In the 2021 profit distribution plan, the Company fully considers the external macroeconomic situation, its future development, financial status, cash flow status, profitability, shareholders' return on investment and other factors, which is in line with the actual situation of the Company.
- ③ The cash dividend ratio of the Company in 2021 is slightly higher than that in 2020. The net profit of the Company keeps increasing every year. The distribution base of the Company continues to increase, and the dividend per share increases year by year.

Therefore, we believe that the 2021 profit distribution plan of the Company is reasonable. We agree on the plan, and agree to submit it to the Company's general meeting of shareholders for deliberation.

2. Special explanation of the cash dividend policy

Was it in compliance with the provisions of the Articles of Association and the resolutions of the general meeting?	Yes
Were the dividend distribution criteria and proportion well-defined and clear?	Yes
Were the related decision-making process and mechanism in place?	Yes
Did independent directors fulfill their duties and play their role?	Yes
Were the minority shareholders given opportunities to sufficiently voice their opinion and make requests and were the legal interests of the minority shareholders fully protected?	Yes

3. If profits for the reporting period and the distributable profit of the parent Company to ordinary shareholders are positive and no profit distribution plan in cash for the ordinary shares is proposed, the Company should disclose the reasons as well as the use and intended use of the retained profits in details

Not applicable

SIGNIFICANT EVENTS

II. Share Incentive Scheme, Employee Stock Ownership Plan and Other Incentive Measures and the Impacts Thereof

1. Incentives which were disclosed in announcement without subsequent progress or changes

Matter overview	Query index
<p>At the eleventh meeting of the fifth session of the Board of Directors and the seventh meeting of the fifth session of the Supervisory Committee of China Railway Group Limited on 22 November 2021, the Proposal on the 2021 Restricted Share Incentive Scheme (Draft) and its Summary of China Railway Group Limited, the Proposal on the Management Measures of the 2021 Restricted Share Incentive Scheme of China Railway Corporation Limited, the Proposal on the Management Measures for the Implementation and Assessment of the 2021 Restricted Share Incentive Scheme of China Railway Group Limited, the Proposal on Requesting the Shareholders' Meeting to Authorize the Board of Directors to Handle Matters Relating to the Company's Restricted Share Incentive Scheme and other proposals were considered and approved.</p>	<p>For details, please refer to the Announcement on Resolutions of the Eleventh Meeting of the Fifth Session of the Board of Directors of China Railway, the Announcement on Resolutions of the Seventh Meeting of the Fifth Session of the Supervisory Committee of China Railway, the 2021 Restricted Share Incentive Scheme (Draft) of China Railway, the Announcement on the Summary of the 2021 Restricted Share Incentive Scheme (Draft) of China Railway, the Independent Opinion of Independent Directors of China Railway on the Company's 2021 Restricted Share Incentive Scheme (Draft) and the Summary, the Verification Opinion of the Supervisory Committee of China Railway on the Company's 2021 Restricted Share Incentive Scheme (Draft) and Related Matters, the Management Measures for the Implementation and Assessment of the 2021 Restricted Share Incentive Scheme of China Railway, the Management Measures for the 2021 Restricted Share Incentive Scheme of China Railway, and the List of Incentive Recipients of the 2021 Restricted Share Incentive Scheme of China Railway, which were disclosed on 23 November 2021.</p>

SIGNIFICANT EVENTS

II. Share Incentive Scheme, Employee Stock Ownership Plan and Other Incentive Measures and the Impacts Thereof (Continued)

1. Incentives which were disclosed in announcement without subsequent progress or changes (Continued)

Matter overview	Query index
<p>The number of restricted shares to be granted to no more than 732 incentive recipients by way of directed issue of A shares shall not exceed 200.0000 million shares, accounting for 0.98% of the total A share capital of the Company of 20,363,539,283.00 shares at the time of the announcement of the draft scheme. Among them, 180,000,000 shares were granted for the first time, representing 90.00% of the total number of shares granted under the schemes and 0.88% of the total A share capital of the Company at the time of announcement of the draft schemes; 20,000,000 shares were reserved, representing 10.00% of the total number of shares granted under the schemes and 0.10% of the total A share capital of the Company at the time of announcement of the draft schemes.</p>	
<p>According to the Approval on the Implementation of Restricted Share Incentive Scheme of China Railway Group Limited (SASAC No. 597 [2021]) issued by the State-owned Assets Supervision and Administration Commission of the State Council (SASAC), the SASAC approved in principle the implementation of the Restricted Share Incentive Scheme. The Restricted Share Incentive Scheme and related matters of the Company shall be submitted to the general meeting of the Company for consideration and approval before implementation.</p>	<p>For details, please refer to the Announcement of China Railway on the Restricted Share Incentive Scheme Approved by the State-owned Assets Supervision and Administration Commission of the State Council disclosed on 14 December 2021.</p>

SIGNIFICANT EVENTS

II. Share Incentive Scheme, Employee Stock Ownership Plan and Other Incentive Measures and the Impacts Thereof (Continued)

1. Incentives which were disclosed in announcement without subsequent progress or changes (Continued)

Matter overview	Query index
<p>According to the requirements of the regulatory documents of the CSRC such as the Measures for the Administration of Share Incentives of Listed Companies and the Measures for the Administration of Information Disclosure of Listed Companies as well as the relevant provisions of the Company's Management System for Registration of Insider Information, the Company has adopted sufficient and necessary confidentiality measures for and registered the insiders of the 2021 Restricted Share Incentive Scheme. The Company also conducted a self-examination on the trading of shares by the insiders of the incentive plan during the six months (from 23 May 2021 to 22 November 2021) before the announcement of the draft incentive plan was made. After verification, during the six months before the announcement of the draft incentive plan, the Company did not find any insider of the incentive plan using the insider information related to the incentive plan for share trading or leaking the insider information related to the incentive plan.</p>	<p>For details, please refer to the Announcement of China Railway Group Limited on the Results of Inquiry on Stock Trading by Insiders of the 2021 Restricted Share Incentive Scheme disclosed on 24 December 2021.</p>

SIGNIFICANT EVENTS

II. Share Incentive Scheme, Employee Stock Ownership Plan and Other Incentive Measures and the Impacts Thereof (Continued)

1. Incentives which were disclosed in announcement without subsequent progress or changes (Continued)

Matter overview	Query index
<p>The 2021 second extraordinary general meeting and 2021 first A share class shareholders' meeting considered and approved the Proposal on the 2021 Restricted Share Incentive Scheme (Draft) and its Summary of China Railway Group Limited, the Proposal on the Management Measures for the Implementation and Assessment of the 2021 Restricted Share Incentive Scheme of China Railway Group Limited, the Proposal on the Management Measures of the 2021 Restricted Share Incentive Scheme of China Railway Corporation Limited, the Proposal on Requesting the Shareholders' Meeting to Authorize the Board of Directors to Handle Matters Relating to the Company's Restricted Share Incentive Scheme, and the Proposal for the Grant of Restricted Shares to Connected Persons of the Company under the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited under the 2021 Restricted Share Incentive Scheme of China Railway Group Limited.</p>	<p>For details, please refer to the 2021 Second Extraordinary General Meeting of China Railway Group Limited and the Announcement on the Resolution of the 2021 First A Share Class Shareholders' Meeting disclosed on 31 December 2021.</p>

SIGNIFICANT EVENTS

II. Share Incentive Scheme, Employee Stock Ownership Plan and Other Incentive Measures and the Impacts Thereof (Continued)

1. Incentives which were disclosed in announcement without subsequent progress or changes (Continued)

Matter overview	Query index
<p>The 2021 first H share class shareholders' meeting of the Company considered and approved the Proposal on the 2021 Restricted Share Incentive Scheme (Draft) and its Summary of China Railway Group Limited, the Proposal on the Management Measures for the Implementation and Assessment of the 2021 Restricted Share Incentive Scheme of China Railway Group Limited, the Proposal on the Management Measures of the 2021 Restricted Share Incentive Scheme of China Railway Corporation Limited, and the Proposal on Requesting the Shareholders' Meeting to Authorize the Board of Directors to Handle Matters Relating to the Company's Restricted Share Incentive Scheme.</p>	<p>For details, please refer to the Announcement on the Resolution of the 2021 First H Share Class Shareholders' Meeting disclosed on 13 January 2022.</p>
<p>The thirteenth meeting of the fifth session of the Board of Directors and the tenth meeting of the fifth session of the Supervisory Committee of the Company considered and approved the Proposal on the First Grant of Restricted Shares to the Incentive Recipients of the Company's 2021 Restricted Share Incentive Scheme, and independent directors expressed their independent opinion on the proposal.</p>	<p>For details, please refer to the Announcement on Resolutions of the Thirteenth Meeting of the Fifth Session of the Board of Directors of China Railway Group Limited, the Announcement on Resolutions of the Tenth Meeting of the Fifth Session of the Supervisory Committee of China Railway Group Limited, and the Independent Opinion of Independent Directors of China Railway Group Limited on the First Grant of Restricted Shares to the Incentive Recipients of the Company's 2021 Restricted Share Incentive Scheme disclosed on 18 January 2022.</p>

SIGNIFICANT EVENTS

II. Share Incentive Scheme, Employee Stock Ownership Plan and Other Incentive Measures and the Impacts Thereof (Continued)

1. Incentives which were disclosed in announcement without subsequent progress or changes (Continued)

Matter overview	Query index
<p>The conditions for the grant of restricted shares under the 2021 Restricted Share Incentive Scheme (Draft) and its Summary of China Railway Group Limited were fulfilled. According to the authorization of the 2021 second extraordinary general meeting, the 2021 first A share class shareholders' meeting and the 2021 first H share class shareholders' meeting of China Railway Group Limited, the thirteenth meeting of the fifth session of the Board of Directors held by the Company on 17 January 2022 considered and approved the Proposal on the First Grant of Restricted Shares to the Incentive Recipients of the Company's 2021 Restricted Share Incentive Scheme, determining the first grant date of restricted shares as 17 January 2022. Number of initial grant: 180.0000 million shares. Initial grant price: RMB3.55/share. The Supervisory Committee of the Company verified the matters such as the incentive recipients, grant date and first grant arrangement determined for the first time in the incentive scheme. Jia Yuan Law Offices issued a legal opinion on the grant.</p>	<p>For details, please refer to the Announcement of China Railway Group Limited on the First Grant of Restricted Shares to the Incentive Recipients of the Company's 2021 Restricted Share Incentive Scheme and the Verification Opinion of the Supervisory Committee of China Railway Group Limited on the List of Incentive Recipients on the Grant Date of the Company's 2021 Restricted Share Incentive Scheme, which were disclosed on 18 January 2022.</p>

SIGNIFICANT EVENTS

II. Share Incentive Scheme, Employee Stock Ownership Plan and Other Incentive Measures and the Impacts Thereof (Continued)

1. Incentives which were disclosed in announcement without subsequent progress or changes (Continued)

Matter overview

Query index

According to the provisions of the Measures for the Administration of Share Incentives of Listed Companies and as required by Shanghai Stock Exchange and the CSDC Shanghai Branch, the Company completed the registration of the first grant of the Company's 2021 Restricted Share Incentive Scheme at the CSDC Shanghai Branch on 23 February 2022.

For details, please refer to the Announcement on Results of the First Grant of the 2021 Restricted Share Incentive Scheme of China Railway, which was disclosed on 25 February 2022.

2. Incentives which were undisclosed in announcement or might have had subsequent progress 2021 First Share Incentive Scheme

Incentive method: restricted share

Source of subject shares: A-share ordinary shares issued by the Company to incentive recipients in a targeted manner

Measurement method, parameter selection criteria and results of fair value of equity instruments

Measurement method The A-share market price on the grant date (17 January 2022) is used as the fair value of restricted shares, and the difference between the A-share market price on the grant date and the grant price is used as the share-based payment cost per restricted share.

Parameter name Grant price, and market price of A shares on the grant date

Measurement result RMB414.8603 million

Note: The above result does not represent the final accounting cost. The accounting cost is related to the grant date, grant price and number of grants, in addition to the number of effective and lapsed interests. The above impact on the Company's operating results shall be subject to the annual audit report issued by the accounting firm.

SIGNIFICANT EVENTS

II. Share Incentive Scheme, Employee Stock Ownership Plan and Other Incentive Measures and the Impacts Thereof (Continued)

2. Incentives which were undisclosed in announcement or might have had subsequent progress (Continued)

Other explanations

The conditions for the grant of restricted shares under the 2021 Restricted Share Incentive Scheme (Draft) of China Railway Group Limited have been fulfilled. According to the authorization of the 2021 second extraordinary general meeting, the 2021 first A share class shareholders' meeting and the 2021 first H share class shareholders' meeting of China Railway Group Limited, the thirteenth meeting of the fifth session of the Board of Directors and the tenth meeting of the fifth session of the Supervisory Committee of the Company held on 17 January 2022 considered and approved the Proposal on the First Grant of Restricted Shares to the Incentive Recipients of the Company's 2021 Restricted Share Incentive Scheme, determining the first grant date of restricted shares as 17 January 2022, and on that date 180.00 million restricted shares were granted to 732 incentive recipients at the price of RMB3.55 per share. The independent directors of the Company expressed their independent opinions of agreement. The Supervisory Committee verified the list of incentive recipients on the grant date and issued the verification opinion. The details of the first grant are as follows:

1. The first grant date is 17 January 2022.
2. The number of the first grant is 170.7244 million shares.
3. The number of incentive recipients of the first grant is 697.
4. The first grant price is RMB3.55 per share.
5. Stock source: The Company has issued A-share ordinary shares to the incentive recipients in a targeted manner.
6. Explanation of the difference between the actual number of grant and the proposed number of grant: In payment of funds after the grant date, 35 incentive recipients of the first grant of restricted shares voluntarily gave up the subscription for all the restricted shares to be granted by the Company for personal reasons, totaling 9.2756 million shares. Therefore, the actual number of incentive recipients was changed from 732 to 697, the actual number of restricted shares granted was changed to 170.7244 million shares, and the reserved 20 million restricted shares remained unchanged.

SIGNIFICANT EVENTS

II. Share Incentive Scheme, Employee Stock Ownership Plan and Other Incentive Measures and the Impacts Thereof (Continued)

2. Incentives which were undisclosed in announcement or might have had subsequent progress (Continued)

Other explanations (Continued)

According to the provisions of the Measures for the Administration of Share Incentives of Listed Companies and as required by Shanghai Stock Exchange and the CSDC Shanghai Branch, China Railway Group Limited completed the registration of the first grant of the Company's 2021 Restricted Share Incentive Scheme at the CSDC Shanghai Branch on 23 February 2022. After the completion of this restricted share grant, the total share capital of the Company increased from 24,570.929283 million shares to 24,741.653683 million shares. Prior to the grant, the controlling shareholder of the Company was China Railway Engineering Group Co., Ltd., with a shareholding of 47.21%; after the grant, the controlling shareholder of the Company was still China Railway Engineering Group Co., Ltd., with a shareholding of 46.88%. The restricted share grant will not change the control of the controlling shareholder of the Company.

(For details, please refer to the Announcement on Results of the First Grant of the 2021 Restricted Share Incentive Scheme of China Railway Group Limited, which was disclosed on 25 February 2022, with the Announcement No.: Pro 2022-010)

Stock ownership plan

Not applicable

Other incentive measures

Not applicable

3. Share incentives granted to directors and senior management during the reporting period

Not applicable

4. Appraisal mechanism for senior management during the reporting period, and the establishment and implementation of the incentive mechanism

The remuneration of the Company's senior management is rooted in the economic benefits of the Company. The Remuneration Committee of the Board of Directors is responsible for organizing and implementing the remuneration and appraisal of the senior management. The annual performance appraisal index for the senior management is divided into three parts: overall performance index, individual KPI and individual competency index, with the weights being 50%, 40% and 10%, respectively. The annual remuneration of the senior management is composed of basic annual salary and performance annual salary, which is based on the results of their individual performance appraisal to make a reasonable gap. The appraisal mechanism of the senior management unifies incentives and restraints while taking into account efficiency and fairness. Insisting that the remuneration is closely linked with the appraisal results and risks match responsibilities, the appraisal mechanism arouses the enthusiasm of the senior management and boosts the high-quality development of the Company.

SIGNIFICANT EVENTS

III. Performance Status of Undertakings

1. Undertakings made by undertaking parties, including the ultimate controller, shareholders, related parties, acquirers of the Company and the Company given or subsisting in the reporting period

Undertaking background	Type of undertaking	Undertaking party	Content of the undertaking	Timing and duration of undertaking	Whether there is a deadline for performance	Whether duly complied	If not duly complied, describe the specific reasons	If not duly complied, describe future plans
IPO-related undertakings	Non-competition	CREC	Upon the establishment of China Railway in accordance with the law, CREC and its subsidiaries (other than China Railway) will not in any form, directly or indirectly, engage in or participate in or assist in the engagement or participation in any business that competes, or is likely to compete with the core businesses of China Railway and its subsidiaries. If CREC or its subsidiaries (other than China Railway) become(s) aware of any new business opportunity which directly or indirectly competes, or is likely to compete, with the core businesses of China Railway, it shall notify China Railway in writing of such business opportunity immediately upon becoming aware of it, and undertakes that priority and a preemptive right of first refusal in respect of the business opportunity shall be available to China Railway or its subsidiaries. If CREC or any of its subsidiaries intends to transfer, sell, lease or license or otherwise assign to any third parties or permit them any new business opportunity, assets or interests that it may acquire in future and which may compete or is likely to compete, directly or indirectly, with the core businesses of China Railway, CREC warrants that such business opportunity, assets or interests will first be offered to China Railway or its subsidiaries.	No	No	Yes	/	/
Undertakings related to refinancing	Other	CREC	If China Railway is subject to administrative penalties or currently under formal investigation due to any undisclosed violation of laws and regulations in respect of the delay in developing acquired land, land speculation, hoarding of properties and driving up of property prices by price-rigging, which cause losses to China Railway and its investors, CREC shall bear the liability for compensation according to the requirements of the relevant laws and administrative regulations and as required by the securities regulatory authorities.	Long term	No	Yes	/	/

SIGNIFICANT EVENTS

III. Performance Status of Undertakings (Continued)

1. Undertakings made by undertaking parties, including the ultimate controller, shareholders, related parties, acquirers of the Company and the Company given or subsisting in the reporting period (Continued)

Note 1: For details of the relevant undertakings made by the Company and CREC during the material asset restructuring of China Railway Erju Co., Ltd. (renamed as CRHIC in March 2017, stock code: 600528), a subsidiary of the Company, please refer to the Report on the Material Asset Swap and Share Issuance for Asset Acquisition, Fundraising and Related Party Transaction of China Railway Erju Co., Ltd. (Revision) disclosed on the website of the Shanghai Stock Exchange (<http://www.sse.com.cn>) on 21 September 2016. The Company and CREC are currently duly complying with all the undertakings.

Note 2: The Company issued the Letter of CREC on Changing Undertakings on Certain Contingencies to CRHIC on 25 November 2020, pursuant to which, the performance term of the original undertaking in relation to apply for ownership certificates for defective real estate was changed to long-term undertaking. The Letter was considered and approved by the 2020 first extraordinary general meeting of CRHIC on 25 December 2020. For details, please refer to the Announcement of CRHIC on Changing the Performance Term of Undertakings on Certain Contingencies by the Controlling Shareholder of the Company disclosed on the website of the Shanghai Stock Exchange (<http://www.sse.com.cn>) on 8 December 2020. The Company is currently duly complying with the relevant undertaking.

Note 3: For details of the relevant undertakings made by the Company and CREC during the share issuance for asset acquisition, please refer to the Report on the Share Issuance for Asset Acquisition of China Railway Group Limited (Revision) disclosed on the website of the Shanghai Stock Exchange (<http://www.sse.com.cn>) on 31 May 2019. The Company and CREC are currently duly complying with all the undertakings.

Note 4: In the course of acquiring the control over China Railway Prefabricated Construction, the Company and CREC issued the Letter of Undertaking to Avoid Horizontal Competition with Beijing Hengtong Innovation Luxwood Technology Co., Ltd., Letter of Undertaking to Regulate Related Party Transactions with Beijing Hengtong Innovation Luxwood Technology Co., Ltd., and Letter of Undertaking to Safeguard the Independence of Beijing Hengtong Innovation Luxwood Technology Co., Ltd. respectively. The above undertakings are continuously effective during the period in which the Company has control over Beijing Hengtong Innovation Luxwood Technology Co., Ltd. The Company and CREC are currently duly complying with the undertakings.

Note 5: In the course of spinning off CRHEEC to go listing on the STAR Market, the Company and CREC issued the Letter of Undertaking to Avoid Horizontal Competition, Letter of Undertaking to Reduce and Regulate Related Party Transactions, Letter of Undertaking to Make up for Diluted Immediate Returns, and other letters of undertakings. For details, please refer to the Plan for China Railway Group Limited on the Spin-off of Its Subsidiary China Railway High-speed Electrification Equipment Corporation Limited to Go Listing on the STAR Market (Revision) disclosed on the website of the Shanghai Stock Exchange on 30 September 2020. The Company and CREC are currently duly complying with all the undertakings.

SIGNIFICANT EVENTS

III. Performance Status of Undertakings (Continued)

2. **If the Company has made a profit forecast to its assets or projects, and the profit estimate period is within the reporting period, the Company's explanation on whether its assets or projects would meet its profit forecast and the reasons thereof**

Not applicable

3. **Fulfillment of undertakings and its impact on goodwill impairment test**

Not applicable

IV. Non-operating Appropriation of Funds by the Controlling Shareholder and Other Related Parties during the Reporting Period

Not applicable

V. Illegal Guarantee

Not applicable

VI. Explanation of the Company on the "Modified Audit Report" from Auditors

Not applicable

VII. Analysis and Explanation of the Company on the Reasons for and Impacts of the Changes in Accounting Policies or Accounting Estimates or Correction of Material Accounting Errors

1. **Analysis and explanation of the company on the reasons for and impacts of the changes in accounting policies or accounting estimates**

Note on changes in accounting policies: The Ministry of Finance issued in 2021 the Interpretation No. 14 of Accounting Standards for Business Enterprises (Cai Kuai [2021] No. 1), Implementation Q&As on Accounting Treatment of Social Capital Parties to PPP Project Contracts ("Interpretation No. 14 and Implementation Q&As"), Interpretation No. 15 of Accounting Standards for Business Enterprises (Cai Kuai [2021] No. 35), Notice on Adjustment of the Scope of Application of the Regulations on Accounting for Rent Reduction Related to the COVID-19 (Cai Kuai [2021] No. 9), Notice on the Strict Implementation of Accounting Standards for Business Enterprises and Implementation of the 2021 Annual Report of Enterprises (Cai Kuai [2021] No. 32) ("Notice on the 2021 Annual Report"), and Implementation Q&As on Accounting Standards for Business Enterprises ("Interpretations, Notices and Implementation Questions and Answers"). The Company has adopted the Interpretations, Notices and Implementation Q&As to prepare the 2021 financial statement, and the impact on the Company's financial statement is presented below:

SIGNIFICANT EVENTS

VII. Analysis and Explanation of the Company on the Reasons for and Impacts of the Changes in Accounting Policies or Accounting Estimates or Correction of Material Accounting Errors (Continued)

1. Analysis and explanation of the company on the reasons for and impacts of the changes in accounting policies or accounting estimates (Continued)

1. Interpretation No. 14 and Implementation Q&As

- (1) In accordance with the relevant provisions of Interpretation No. 14 and Implementation Q&As, the Company adjusted the amount of relevant items in the financial statements at the beginning of 2021 for the cumulative impact of relevant PPP project contracts that commenced before 31 December 2020 but have not yet been completed, and the comparative financial statements for 2020 have not been restated. The impact on the relevant items of the Company's financial statements is presented below.

Content of and reasons for the change in accounting policies	Name of the affected statement items	Amount of impact
		(RMB'000) 1 January 2021
Contract assets formed during the construction phase of PPP contracts that have entered into operation are presented in the balance sheet under "contract assets" or "other non-current assets", depending on whether they are expected to be realized within one year from the balance sheet date. Those that have entered into operation and meet the condition of qualifying for a definite amount of cash are presented in the balance sheet under "accounts receivable".	Other non-current assets	27,549,003
	Long-term receivables	-27,549,003
	Contract assets	1,707,060
	Non-current assets due within one year – Long-term receivables due within one year	-1,707,060
	Accounts receivable	700,803
	Non-current assets due within one year – Long-term receivables due within one year	-700,803

Interpretation No. 14 and Implementation Q&As had no impact on the Company's cashflow statement.

SIGNIFICANT EVENTS

VII. Analysis and Explanation of the Company on the Reasons for and Impacts of the Changes in Accounting Policies or Accounting Estimates or Correction of Material Accounting Errors (Continued)

1. Analysis and explanation of the company on the reasons for and impacts of the changes in accounting policies or accounting estimates (Continued)

1. Interpretation No. 14 and Implementation Q&As (Continued)

- (2) The impact of the implementation of Interpretation No. 14 and Implementation Q&As on the relevant items in the Company's 2021 financial statement is presented below:

Affected balance sheet items	Amount of impact (RMB'000) 31 December 2021
Other non-current assets	31,774,499
Long-term receivables	-31,774,499
Contract assets	1,956,802
Non-current assets due within one year	
– Long-term receivables due within one year	-1,956,802
Accounts receivable	964,394
Non-current assets due within one year	
– Long-term receivables due within one year	-964,394

Affected income statement items	Amount of impact (RMB'000) 2021
Revenue from main business	-908,069
Cost of main business	908,069
Impairment loss on assets	22,489
Impairment loss on credit	-22,489

- (3) Accounting for changes in the basis for determining cash flows from financial assets or financial liabilities contracts due to the reform of benchmark interest rate: The adoption of the regulation did not have a material impact on the Company's financial statements.

2. Interpretation No. 15 of Accounting Standards for Business Enterprises

The Company's 2021 financial statements have been prepared in accordance with the requirement on fund centralization management under Interpretation No. 15 and adjustments have been made to financial statements of comparative periods accordingly.

Interpretation No. 15 of Accounting Standards for Business Enterprises had no impact on the Company's 2021 financial statement.

SIGNIFICANT EVENTS

VII. Analysis and Explanation of the Company on the Reasons for and Impacts of the Changes in Accounting Policies or Accounting Estimates or Correction of Material Accounting Errors (Continued)

1. Analysis and explanation of the company on the reasons for and impacts of the changes in accounting policies or accounting estimates (Continued)

3. Accounting for Rent Reduction Related to the COVID-19

As a lessee, the Company has adopted the simplified method for the rent reduction directly arising from the COVID-19 that occurred from 1 January 2020 to 30 June 2022, and the amount of the related rent reduction charged to the current year's profit has no material impact on the Company's 2021 financial statement.

4. Presentation of contract assets to be realised with one year

The Company has prepared its 2021 financial statement in accordance with the Notice on Work of 2021 Annual Report and the financial statements for the comparative period have been adjusted accordingly. The impact on the relevant items of the Company's financial statements is presented below.

Content of and reasons for the change in accounting policies	Name of the affected statement items	Amount of impact (RMB'000)	
		31 December 2020	1 January 2020
The Company reclassifies contract assets that are expected to be realized within one year from the balance sheet date from non-current assets due within one year to contract assets.	Contract assets	18,861,929	14,226,195
	Non-current assets due within one year – Contract assets due within one year	-18,861,929	-14,226,195

5. Presentation of transportation costs

The Company has prepared its 2021 financial statement in accordance with Implementation Q&As on Accounting Standards for Business Enterprises and the financial statements for the comparative period have been adjusted accordingly. The impact on the relevant items of the Company's financial statements is presented below.

Content of and reasons for the change in accounting policies	Name of the affected statement items	Amount of impact (RMB'000)
		2020
For transportation costs incurred prior to the transfer of control of goods to customers and for the performance of sales contracts, the Group reclassifies them from selling expenses to operating costs.	Operating cost	163,036
	Selling expense	-163,036

SIGNIFICANT EVENTS

VII. Analysis and Explanation of the Company on the Reasons for and Impacts of the Changes in Accounting Policies or Accounting Estimates or Correction of Material Accounting Errors (Continued)

2. Analysis and explanation of the company on the reasons for and impacts of the correction of material accounting errors

Not applicable

3. Communications with former auditors

Not applicable

4. Others

Not applicable

VIII. Appointment and Removal of Auditors

Unit: '0,000 Currency: RMB

Current engagement	
Name of domestic accounting firm	PricewaterhouseCoopers Zhong Tian LLP
Remuneration of domestic accounting firm	3,310
Term of domestic accounting firm	5 years
Name of international accounting firm	PricewaterhouseCoopers
Remuneration of international accounting firm	220
Term of international accounting firm	5 years

	Name	Remuneration
Accounting firm for internal control audit	PricewaterhouseCoopers Zhong Tian LLP	180
Financial advisor	/	/
Sponsor	/	/

Explanation on the appointment and removal of auditors

On 30 March 2021, two resolutions, namely the Resolution on the Appointment of Auditors for 2021 and Resolution on the Appointment of Internal Control Auditors for 2021 were considered and adopted at the second meeting of the fifth session of the Board of Directors. For details of the appointment of auditors, please refer to the Announcement of China Railway Group Limited on Renewal of Appointment of Auditors disclosed on the website of the Shanghai Stock Exchange on 31 March 2021. These resolutions were then considered and passed at the 2020 annual general meeting of the Company on 23 June 2021. The Company has engaged PricewaterhouseCoopers Zhong Tian LLP and PricewaterhouseCoopers as the auditors of the Company for 2021 and engaged PricewaterhouseCoopers Zhong Tian LLP as the internal control auditors for 2021. For details, please refer to the Announcement of China Railway Group Limited on Resolutions of Annual General Meeting of 2020 disclosed by the Company on the website of the Shanghai Stock Exchange on 24 June 2021.

SIGNIFICANT EVENTS

IX. Risk of Suspension of Listing

1. Reason for Suspension of Listing

Not applicable

2. Response Measures to be Adopted by the Company

Not applicable

3. Delisting and the Reasons Thereof

Not applicable

X. Matters Relating to Insolvency or Restructuring

Not applicable

XI. Material Litigation and Arbitration

The Company had no material litigation or arbitration during the year.

XII. Penalty and Rectification Order against the Company and its Directors, Supervisors, Senior Management, Controlling Shareholders, Ultimate Controller and Acquirer

Not applicable

XIII. Integrity of the Company and its Controlling Shareholders and Ultimate Controllers during the Reporting Period

During the reporting period, the Company and its controlling shareholder and ultimate controller operated legally by strictly following the provisions of the laws and regulations and normative documents, such as the Company Law and the Securities Law, and duly fulfilled all the undertakings without committing any default. The Company was on the Credit List of Top 500 Listed Companies in China in 2021 as accredited by the China Cooperative Trade Enterprises Association and China Enterprise Reform and Development Society.

SIGNIFICANT EVENTS

XIV. Significant Related Party Transactions

1. Related party transactions in ordinary course of business

(1) Matters which were disclosed in announcement without subsequent progress or changes

Not applicable

(2) Matters which were disclosed in announcement with subsequent progress or changes

Unit: RMB'000 Currency: RMB

Related parties	Related relationship	Type of related party transaction	Particulars of the related party transaction	Pricing method of related party transaction	Price of related party transaction	Amount of related party transaction	Percentage of transaction value to the same type of transactions (%)
China Railway State Assets Management Co., Ltd.	Wholly-owned subsidiary of parent company	Receipt of labor services	Lease of office premises, etc.	Contract price	16,848	16,848	Less than 1%
China Railway State Assets Management Co., Ltd.	Wholly-owned subsidiary of parent company	Receipt of labor services	Receipt of comprehensive services	Contract price	17,727	17,727	Less than 1%
Total					34,575	34,575	

Description of related party transactions

The above two transactions resulted from the implementation during the reporting period of the Premises Leasing Agreement and Comprehensive Services Agreement renewed by the Company and CREC on 27 December 2018. Each of the two agreements has a term of three years. The total transaction amount involved was within the decision-making authority of the Board of Directors and was considered and approved at the 18th meeting of the fourth session of the Board of Directors, which complied with the relevant requirements of The Rules Governing the Listing of Stock on Shanghai Stock Exchange. Meanwhile, the Premises Leasing Agreement and Comprehensive Services Agreement were exempted from the requirements of reporting, annual review, announcement and independent shareholders' approval as the annual caps of such transactions were within the de minimis exemption under the Hong Kong Listing Rules. In addition, the interest expense on lease liabilities recognized by the company's subsidiaries arisen from the housing lease with China Railway State Assets Management Co., Ltd. was RMB 958,000.

(3) Matters undisclosed in announcement

Not applicable

SIGNIFICANT EVENTS

XIV. Significant Related Party Transactions (Continued)

2. Related party transactions in relation to acquisition and disposal of assets

(1) **Matters which were disclosed in announcement without subsequent progress or changes**
Not applicable

(2) **Matters which were disclosed in announcement with subsequent progress or changes**
Not applicable

(3) **Matters undisclosed in announcement**
Not applicable

(4) **If agreement upon performance is involved, the performance achievements during the reporting period shall be disclosed**
Not applicable

3. Significant related party transactions in relation to joint external investment

(1) **Matters which were disclosed in announcement without subsequent progress or changes**
Not applicable

(2) **Matters which were disclosed in announcement with subsequent progress or changes**
Not applicable

(3) **Matters undisclosed in announcement**
Not applicable

4. Amounts due from/to related parties

(1) **Matters which were disclosed in announcement without subsequent progress or changes**
Not applicable

(2) **Matters which were disclosed in announcement with subsequent progress or changes**
Not applicable

(3) **Matters undisclosed in announcement**
Not applicable

SIGNIFICANT EVENTS

XIV. Significant Related Party Transactions (Continued)

5. Financial business between the Company and the finance company with which there is a related relationship, and between the Company's controlling finance company and related parties

China Railway Finance Co., Ltd. provides financial services to the Company's controlling shareholder, CREC and its subsidiaries, which enables the Company to use part of its financing funds to improve the efficiency of capital utilization and increase the benefits through the net interest and service fees earned by the finance company. The Proposal on the Financial Services Framework Agreement between China Railway Finance Co., Ltd. and China Railway Engineering Group Co., Ltd. was considered and adopted at the 18th meeting of the fourth session of the Board convened by the Company on 7 December 2018, in which it was agreed that China Railway Finance Co., Ltd., a subsidiary of the Company, would renew the Financial Services Framework Agreement (the agreement would expire on 31 December 2021) with CREC, the controlling shareholder of the Company, and provide deposits, loans and other financial services to CREC and its subsidiaries pursuant to the agreement. For details, please refer to the relevant announcement of the Company dated 28 December 2018 disclosed on the website of the Shanghai Stock Exchange. During the reporting period, the daily loan balance (including interest accrued) obtained by CREC from China Railway Finance Co., Ltd. did not exceed the maximum amount stipulated in the Financial Services Framework Agreement; and the maximum daily balance of deposits (including interest accrued) of the deposit service provided by China Railway Finance Co., Ltd. to CREC and its subsidiaries did not exceed the maximum amount stipulated in the Financial Services Framework Agreement.

1. Deposit business

Unit: RMB'000 Currency: RMB

Related parties	Related relationship	Maximum daily deposit limit	Deposit rate range	Opening balance	Amount of the current period		Ending balance
					Total amount deposited during the period	Total amount withdrew during the period	
CREC	Parent company		1.265%	1,132,021	3,794,341	4,799,215	127,147
China Railway State Assets Management Co., Ltd.	Wholly-owned subsidiary of parent company	20,000,000	1.265%	175,004	779,066	362,874	591,196
CREC Party School	Wholly-owned subsidiary of parent company		1.265%	256	68,660	38,944	29,972
Total				1,307,281	4,642,067	5,201,033	748,315

SIGNIFICANT EVENTS

XIV. Significant Related Party Transactions (Continued)

5. Financial business between the Company and the finance company with which there is a related relationship, and between the Company's controlling finance company and related parties (Continued)

2. Loan business

Unit: RMB'000 Currency: RMB

Related parties	Related relationship	Loan amount	Loan interest rate range	Opening balance	Amount of the current period		Ending balance
					Total loan amount during the period	Total repayment amount during the period	
CREC	Parent company	3,500,000	3.6%-3.7%	1,870,000	980,000	1,870,000	980,000
Total				1,870,000	980,000	1,870,000	980,000

3. Credit business or other financial business

Unit: RMB'000 Currency: RMB

Related parties	Related relationship	Business type	Total amount	Actual amount
CREC	Parent company	Comprehensive credit line	3,500,000	980,000
Total			3,500,000	980,000

SIGNIFICANT EVENTS

XIV. Significant Related Party Transactions (Continued)

5. Financial business between the Company and the finance company with which there is a related relationship, and between the Company's controlling finance company and related parties (Continued)

4. Others

Unit: RMB'000 Currency: RMB

Item	Related parties	Amount of the current period	Amount of the corresponding period last year
Interest income	CREC	54,652	35,529
Interest expense	CREC	12,705	8,031
Interest expense	China Railway State Assets Management Co., Ltd.	3,935	1,893
Interest expense	CREC Party School	66	3

Note: The interest income represents the interest receivable by China Railway Finance Co., Ltd., a subsidiary of the Company, from CREC for the loans to CREC. The interest expenses represent the interest payable by China Railway Finance Co., Ltd. to CREC, China Railway State Assets Management Co., Ltd. and CREC Party School for deposit-taking.

6. Others

Related party guarantees

Unit: RMB'000 Currency: RMB

Guarantor	Guarantee	Guarantee amount	Commencement date of guarantee	Expiry date of guarantee	Guarantee fully fulfilled
CREC	China Railway	3,500,000	October 2010	April 2026	No

Note: These are unconditional and irrevocable joint and several liability guarantees provided by CREC for the entire amount of the 15-year 2010 Corporate Bonds (Tranche 2) issued in October 2010. According to the guarantee period specified in the Company's Prospectus on Public Offering of Corporate Bonds, the guarantee period for the guarantor shall be from the first day of bond offering to six months after the bond maturity date. As at 31 December 2021, the guarantee responsibility of CREC as the guarantor of 15-year 2010 Corporate Bonds (Tranche 2) has not yet expired. As at 31 December 2021, the remaining payable amount of abovementioned bonds was RMB3,524,444,000 (31 December 2020: RMB3,522,859,000).

SIGNIFICANT EVENTS

XV. Material Contracts and Their Performance

1. Trusteeship, Contracting and Leasing

(1) Trusteeship

Not applicable

(2) Contracting

Not applicable

(3) Leasing

Not applicable

2. Guarantees

Unit: RMB0'000 Currency: RMB

Guarantee provided by the Company (excluding those provided to subsidiaries)															
Guarantor	Relationship between guarantor and listed company	Guarantee	Guarantee amount	Commencement date of guarantee			Type of guarantee	Principal debt	Guaranty (if any)	Guarantee fully fulfilled	Overdue	Overdue amount	Counter-guarantee available	Guarantee provided to related parties	Related relationship
				(agreement execution date)	Commencement date of guarantee	Expiry date of guarantee									
China Railway	The Company	Linha Railway Co., Ltd.	41,789.00	2008/6/30	2008/6/30	2027/6/20	Suretyship of joint and several liability	Performance of contracts	No	No	No	/	No	No	/
China Railway	The Company	Shaanxi Yulin Shen-jia-mi Expressway Co., Ltd.	127,925.00	2015/7/31	2015/7/31	2037/8/1	Suretyship of joint and several liability	Performance of contracts	No	No	No	/	No	No	/
China Railway No.4 Engineering Group Co., Ltd.	Wholly-owned subsidiary	Xuzhou Yingbin Expressway Construction Co., Ltd.	119,000.00	2018/10/22	2018/10/30	2028/10/29	Suretyship of joint and several liability	Performance of contracts	Pledge of stock rights	No	No	/	No	No	/
China Railway No.5 Engineering Group Co., Ltd.	Wholly-owned subsidiary	Qinghai Minmetals China Railway Highway Construction Management Co., Ltd. (青海五礦中鐵公路建設管理有限公司)	14,850.00	2020/1/14	2020/1/14	2045/12/30	Suretyship of joint and several liability	Performance of contracts	Pledge of stock rights	No	No	-	No	No	/
China Railway No.5 Engineering Group Co., Ltd.	Wholly-owned subsidiary	Jiangxi Chengke Yunchuang Real Estate Co., Ltd. (江西省城科雲創置業有限公司)	3,000.00	2021/9/22	2021/9/22	2029/9/21	Suretyship of joint and several liability	Performance of contracts	No	No	No	-	No	No	/
China Railway No.10 Engineering Group Co., Ltd.	Wholly-owned subsidiary	Chongqing CREC Renzhi Pension Industry Co., Ltd. (重慶中鐵任之養老產業有限公司)	50,000.00	2017/1/12	2017/1/12	2024/11/30	Suretyship of joint and several liability	Performance of contracts	No	No	No	-	No	No	/
China Railway Major Bridge Engineering Group Co., Ltd.	Wholly-owned subsidiary	Wuhan Yangsigang Bridge Co., Ltd.	179,454.37	2015/12/24	2015/12/24	2023/6/27	Suretyship of joint and several liability	Performance of contracts	No	No	No	/	No	No	/
China Railway Major Bridge Engineering Group Co., Ltd.	Wholly-owned subsidiary	Shantou Niutianyang Expressway Investment Development Co., Ltd.	4,800.03	2019/11/11	2019/11/11	2039/8/23	Suretyship of joint and several liability	Performance of contracts	Pledge of stock rights	No	No	/	No	No	/
China Railway Tunnel Group Co., Ltd.	Wholly-owned subsidiary	China Shanghai (Group) Corporation for Foreign Economic & Technological Cooperation	5,691.75	2012/12/29	2012/12/29	2022/6/30	Suretyship of joint and several liability	Performance of contracts	No	No	No	/	No	No	/

SIGNIFICANT EVENTS

XV. Material Contracts and Their Performance (Continued)

2. Guarantees (Continued)

Guarantee provided by the Company (excluding those provided to subsidiaries)															
Guarantor	Relationship between guarantor and listed company	Guarantee	Guarantee amount	Commencement date of guarantee		Expiry date of guarantee	Type of guarantee	Principal debt	Guaranty (if any)	Guarantee fully fulfilled	Overdue	Overdue amount	Counter-guarantee available	Guarantee provided to related parties	Related relationship
				(agreement execution date)	date of guarantee										
China Railway Shanghai Engineering Group Co. Ltd.	Wholly-owned subsidiary	Fangchenggang China Railway Diluyuan Investment Development Co., Ltd.	500.00	2019/5/8	2019/5/8	2030/12/31	Suretyship of joint and several liability	Performance of contracts	Pledge of stock rights	No	No	/	No	No	/
China Railway International Group Co., Ltd.	Wholly-owned subsidiary	MontagProp Proprietary Limited	6,006.00	2015/7/3	2015/7/3	2023/11/3	Suretyship of joint and several liability	Performance of contracts	No	No	No	/	No	No	/
China Southern Investment Group Co., Ltd.	Wholly-owned subsidiary	Shantou Niutianyang Expressway Investment Development Co., Ltd.	264,932.17	2019/8/30	2019/8/30	2039/8/23	Suretyship of joint and several liability	Performance of contracts	Pledge of stock rights	No	No	/	No	No	/

Total guarantee incurred during the reporting period (excluding those provided to subsidiaries) 21,019.81

Total balance of guarantee as at the end of the reporting period (A) (excluding those provided to subsidiaries) 817,948.32

Guarantee provided by the Company to its subsidiaries

Total guarantee to subsidiaries incurred during the reporting period 4,982,058.31

Total balance of guarantee to subsidiaries as at the end of the reporting period (B) 15,107,208.50

Aggregate guarantee of the Company (including those provided to subsidiaries)

Aggregate guarantee (A+B) 15,925,156.82

Percentage of aggregate guarantee to net assets of the Company (%) 44.44

Representing:

Amount of guarantee provided to shareholders, ultimate controller and their related parties (C) 0.00

Amount of debts guarantee directly or indirectly provided to guaranteed parties with gearing ratios over 70% (D) 13,552,846.49

Excess amount of aggregate guarantee over 50% of net assets (E) 0.00

Aggregate amount of the above three categories (C+D+E) 13,552,846.49

Statement on the contingent joint and several liability in connection with unexpired guarantee Not applicable

Statement on guarantee

- As at 31 December 2021, the aggregate guarantee of China Railway Group Limited (consolidated) included the commitment to make up the difference of RMB93,897.6456 million provided to its subsidiaries;
- As at 31 December 2021, the aggregate guarantee of China Railway Group Limited (consolidated) in relation to real estate mortgage was RMB51,312.7324 million.

SIGNIFICANT EVENTS

XV. Material Contracts and Their Performance (Continued)

3. Management of Cash Assets Entrusted to Third Parties

(1) Entrusted wealth management

(i) Overview of entrusted wealth management

Unit: '0,000 Currency: RMB

Type	Source of funds	Amount incurred	Unexpired balance	Overdue outstanding amount
Trust financial product	Self-owned funds	66,234.66	65,234.66	1,000.00

(ii) Breakdown of entrusted wealth management

Unit: '0,000 Currency: RMB

Trustee	Type of entrusted wealth management	Amount of entrusted wealth management	Commencement date	Termination date	Source of funds	Investment target	Determination of returns	Annualized yield rate (%)	Expected gains (if any)	Actual gains or losses	Actual recovery	Whether followed the statutory procedures	Future entrusted wealth management plan available	Amount of impairment provision (if any)
CCB Trust Co., Ltd.	Trust financial product	1,000.00	2015/12/18	2022/6/18	Self-owned funds	BT project of roadwork in Zhaoqing	By agreement	10.00	100.00	-	-	Yes	No	-
CCB Trust Co., Ltd.	Trust financial product	9,200.00	2018/6/12	2037/9/15	Self-owned funds	Phase three of PPP project of roadwork in Zhaoqing	By agreement	6.10	561.20	-	-	Yes	No	-
CCB Trust Co., Ltd.	Trust financial product	4,390.00	2020/6/21	2025/6/21	Self-owned funds	PPP project of Hancheng National Highway 327	By agreement	6.80	161.09	161.09	161.09	Yes	No	-
China Railway Trust Co., Ltd.	Trust financial product	20,000.00	2016/8/3	2022/8/3	Self-owned funds	Shandong Tai'an-Dong'e Expressway project	By agreement	4.75	13,007.64	1,543.97	1,758.06	Yes	No	-502.78
CITIC Trust Co., Ltd.	Trust financial product	100.00	2014/11/1	2022/5/31	Self-owned funds	BT project of Jiangxi Nanchang Jiulong Lake Tunnel	By agreement	2.00	-	-	-	Yes	No	-
CCB Trust Co., Ltd.	Trust financial product	8,750.00	2016/4/1	2028/4/1	Self-owned funds	PPP project of infrastructure in the Huzhou Economic & Technological Development Zone in Zhejiang Province	By agreement	-	-	-	-	Yes	No	-
CITIC Trust Co., Ltd.	Trust financial product	13,763.11	2019/5/20	2022/5/20	Self-owned funds	Shanghai Chunfeng Project in Kunming	By agreement	9.50	-	4,492.96	4,492.96	Yes	No	-
CCB Trust Co., Ltd.	Trust financial product	330.00	2016/12/28	2031/12/27	Self-owned funds	PPP project of Liuzhou Guantang Bridge	By agreement	5.50	3,520.00	54.68	54.68	Yes	No	-
Bainui Trust Co., Ltd.	Trust financial product	100.00	2016/9/18	2026/09/17	Self-owned funds	Study on trust theory	By agreement	-	-	1.50	1.50	Yes	No	-
Zhonghai Trust Co., Ltd.	Trust financial product	300.00	2011/4/6	2016/4/7	Self-owned funds	Capital contribution to a joint venture	By agreement	-	-	-	-	Yes	No	-

SIGNIFICANT EVENTS

XV. Material Contracts and Their Performance (Continued)

3. Management of Cash Assets Entrusted to Third Parties (Continued)

(1) Entrusted wealth management (Continued)

(ii) Breakdown of entrusted wealth management (Continued)

Trustee	Type of entrusted wealth management	Amount of entrusted wealth management	Commencement date	Termination date	Source of funds	Investment target	Determination of returns	Annualized yield rate (%)	Expected gains (if any)	Actual gains or losses	Actual recovery	Whether followed the statutory procedures	Future entrusted wealth management plan available	Amount of impairment provision (if any)
Zhonghai Trust Co., Ltd.	Trust financial product	700.00	2011/4/6	2016/4/7	Self-owned funds	Capital contribution to a joint venture	By agreement	-	-	-	-	Yes	No	-
CITIC Trust Co., Ltd.	Trust financial product	6,881.55	2019/5/24	2022/5/24	Self-owned funds	Investment in Kunming China Railway Nuode Real Estate Development Co., Ltd. (昆明中鐵諾德房地產開發有限責任公司) to support the development and construction of Lot KCXS2017-24-A11, 12, 13 and 14 of the Kunming Caohai Dong'an project	By agreement	9.50	7,733.41	-	-	Yes	No	-
CCB Trust Co., Ltd.	Trust financial product	720.00	2020/9/18	2026/10/18	Self-owned funds	Investment cooperation projects such as the road project of the Yanhua Road (East Ezhou Avenue-Wudu Avenue) in Ezhou City, Hubei Province, and the infrastructure project in the industrial park area on the west side of Huama Lake	By agreement	-	-	-	-	Yes	No	-

SIGNIFICANT EVENTS

XV. Material Contracts and Their Performance (Continued)

3. Management of Cash Assets Entrusted to Third Parties (Continued)

(1) Entrusted wealth management (Continued)

- (iii) Impairment provision of entrusted wealth
Not applicable

(2) Entrusted loans

- (i) Overview of entrusted loans

Unit: '0,000 Currency: RMB

Type	Source of funds	Amount incurred	Unexpired balance	Overdue outstanding amount
Entrusted loan	Self-owned funds	405,300.00	405,300.00	0.00

SIGNIFICANT EVENTS

XV. Material Contracts and Their Performance (Continued)

3. Management of Cash Assets Entrusted to Third Parties (Continued)

(2) Entrusted loans (Continued)

(ii) Breakdown of entrusted loans

Unit: '0,000 Currency: RMB

Trustee	Type of entrusted loan	Entrusted loan amount	Commencement date	Termination date of funds	Source of funds	Investment target	Determination of returns	Annualized yield rate (%)	Expected gains (if any)	Actual gains or losses	Actual recovery	Whether followed the statutory procedures	Future entrusted loan plan available	Amount of impairment provision (if any)
Industrial and Commercial Bank of China	Entrusted loan	86,800.00	2021/1/1	2041/12/30	Self-owned funds	Inner Mongolia Jitong Railway (Group) Co., Ltd. (內蒙古集通鐵路(集團)有限責任公司)	By agreement	4.02	3,489.36	-	-	Yes	No	-
China Railway Finance Co., Ltd.	Entrusted loan	7,500.00	2020/3/10	2023/3/9	Self-owned funds	Payment of principal and interest by Cenxi-Cangwu Expressway	By agreement	4.75	1,068.75	340.75	340.75	Yes	No	-55.07
China Railway Finance Co., Ltd.	Entrusted loan	16,500.00	2020/3/11	2023/3/10	Self-owned funds	Payment of principal and interest by Yulin-Shenmu highway	By agreement	4.75	2,351.25	749.66	749.66	Yes	No	-121.16
China Railway Finance Co., Ltd.	Entrusted loan	21,700.00	2020/3/11	2023/3/10	Self-owned funds	Payment of principal and interest by Pingzheng	By agreement	4.75	3,092.25	985.91	985.91	Yes	No	-159.35
China Railway Finance Co., Ltd.	Entrusted loan	67,000.00	2020/3/10	2023/3/9	Self-owned funds	Payment of principal and interest by Miansui Expressway	By agreement	4.75	9,547.50	3,044.06	3,044.06	Yes	No	-492.00
China Railway Finance Co., Ltd.	Entrusted loan	7,500.00	2020/3/10	2023/3/9	Self-owned funds	Payment of principal and interest by the Qianzhou-Xing'an Expressway	By agreement	4.75	1,068.75	340.75	340.75	Yes	No	-55.07
China Railway Finance Co., Ltd.	Entrusted loan	19,350.00	2020/3/11	2023/3/10	Self-owned funds	Proceeds from the acquisition of the Yulin-Shenmu Highway by Guangxi Expressway	By agreement	4.75	2,757.38	879.14	879.14	Yes	No	-142.09
China Railway Finance Co., Ltd.	Entrusted loan	151,750.00	2020/3/10	2023/3/9	Self-owned funds	Gap of capital dividends from Guangxi Expressway	By agreement	5.23	23,786.81	7,584.02	7,584.02	Yes	No	-1,116.85
China Railway Finance Co., Ltd.	Entrusted loan	27,200.00	2021/3/8	2024/3/7	Self-owned funds	Payment of principal and interest by the Zhong Xian-Dianjiang Expressway	By agreement	4.79	3,904.56	1,019.80	1,019.80	Yes	No	19.16

SIGNIFICANT EVENTS

XV. Material Contracts and Their Performance (Continued)

3. Management of Cash Assets Entrusted to Third Parties (Continued)

(2) Entrusted loans (Continued)

(iii) Impairment provision of entrusted loans

Not applicable

(3) Others

Not applicable

4. Other Material Contracts

(1) Material contracts signed during the reporting period

(i) Infrastructure construction business

No.	Signatory	Name of contract	Date of contract	Contract sum (RMB'0,000)	Construction period
Railway					
1	China Railway No. 4 Engineering, China Railway Tunnel, China Railway Major Bridge Engineering, China Railway No.10 Engineering, China Railway No.3 Engineering, China Railway No.2 Engineering, China Railway No.8 Engineering, China Railway No.1 Engineering	Sections CZXZZQ-6, CZXZZQ-9, CZXZZQ-10, CZXZZQ-12, CZXZZQ-13 and CZSCZQ-11 – the before-station project of the middle of the Ya'an-Linzhi section of the new Sichuan-Tibet Railway	2021.11-12	5,766,824	131 months
2	China Railway No. 5 Engineering, China Railway Major Bridge Engineering, China Railway No.2 Engineering, China Railway Shanghai Engineering, China Railway No.3 Engineering, China Railway No.8 Engineering	Unit cost contracting of sections YKYGZQ-2, YKYGZQ-3, YKYGZQ-7, YKCYZQ-6 and YKCYZQ-7 of the new Chongqing-Kunming High-Speed Railway	2021.09	2,248,182	72 months
3	China Railway No. 2 Engineering, China Railway Shanghai Engineering, China Railway Major Bridge Engineering, China Railway No. 9 Engineering, China Railway No. 3 Engineering	SBJL-TJ-2, SBJL-TJ-5, SBJL-TJ-7, SBLN-TJ-3 and SBLN-TJ-5 of the Shenyang-Changbaishan High-speed Railway	2021.07	1,437,208	1,553 calendar days

SIGNIFICANT EVENTS

XV. Material Contracts and Their Performance (Continued)

4. Other Material Contracts Parties (Continued)

(1) Material contracts signed during the reporting period (Continued)

(i) Infrastructure construction business (Continued)

No.	Signatory	Name of contract	Date of contract	Contract sum (RMB'0,000)	Construction period
Highway					
1	China Railway Major Bridge Engineering, China Railway No.1 Engineering	Sections TJ3 and TJ4 of EPC of design, procurement and construction of the new project of West Ring Road (Houtian to Lehua section) of Nanchang Belt Highway	2021.12	412,189	36 months
2	China Railway Communications, China Railway Consulting, China Railway No.7 Engineering, China Railway No.9 Engineering, China Railway Shanghai Engineering	Project of West Ring Road (Houtian to Lehua section) of Nanchang Belt Highway and its connecting line (Jingkai to Yongxiu section)	2021.11	322,215	730 calendar days
3	China Railway No.1 Engineering, China Railway No. 4 Engineering	Sections TJ6 and TJ11 of civil engineering bidding of the reconstruction and extension project (K0+000~K71+288.003 section) of Shanwei Lufeng to Shenzhen Longgang segment of the Shenyang-Haikou Expressway	2021.03	265,802	30 months

SIGNIFICANT EVENTS

XV. Material Contracts and Their Performance (Continued)

4. Other Material Contracts Parties (Continued)

(1) Material contracts signed during the reporting period (Continued)

(i) Infrastructure construction business (Continued)

No.	Signatory	Name of contract	Date of contract	Contract sum (RMB'0,000)	Construction period
Municipal works					
1	China Railway Construction, China Railway Huatie	EPC of urban renewal unit of Guangyayuan Village, Bantian Street, Longgang District, Shenzhen	2021.06	1,300,000	1,825 calendar days
2	China Railway Southern, China Railway No. 1 Engineering, China Railway No. 2 Engineering, China Railway No. 3 Engineering, China Railway No. 4 Engineering	EPC of Phase III of Shenzhen Metro Line 8	2021.09	807,794	1,793 calendar days
3	China Railway, China Railway Development, China Railway No. 1 Engineering, China Railway No. 2 Engineering, China Railway No. 3 Engineering, China Railway No. 4 Engineering, China Railway No. 5 Engineering, China Railway No. 10 Engineering, China Railway Tunnel, China Railway Shanghai Engineering	Section 2 under civil construction of Qingdao Metro Line 5, without sub-section	2021.12	677,221	75 months

SIGNIFICANT EVENTS

XV. Material Contracts and Their Performance (Continued)

4. Other Material Contracts (Continued)

(1) Material contracts signed during the reporting period (Continued)

(ii) Survey, Design and Consulting Services Business

No.	Signatory	Name of contract	Date of contract	Contract sum (RMB' 0,000)	Construction period
1	China Railway Eryuan, China Railway Liuyuan, China Railway Major Bridge Design Institute	Engineering survey and design of the Yunnan-Guizhou section of the new Chongqing-Kunming High-Speed Railway	2021.12	112,237	Accept upon completion of the project
2	China Railway Eryuan, China Railway Consulting	Sections NO1-1 and NO1-2 under survey and design of the Liuzhou-Wuzhou segment of the new Liuzhou-Guangzhou Railway	2021.02	33,515	Accept upon completion of the project
3	China Railway Consulting	Feasibility study of east Chaozhou-Shantou section of the East of Guangdong Intercity Railway, and survey and design of the Shantou-Chaoshan Airport section, the east Chaozhou-Chaoshan Airport section, the Chaoshan Airport-south Jieyang section	2021.02	28,307	Accept upon completion of the project

SIGNIFICANT EVENTS

XV. Material Contracts and Their Performance (Continued)

4. Other Material Contracts (Continued)

(1) Material contracts signed during the reporting period (Continued)

(iii) Engineering Equipment and Component Manufacturing Business

No.	Signatory	Name of contract	Date of contract	Contract sum (RMB '0,000)	Contract period
Steel structures					
1	China Railway Baoji Bridge, China Railway Shanhaiguan Bridge	Sections CT-A5 and A6 of the manufacturing project of steel truss beam and steel tower of the principal part of the Changtai Yangtze River Bridge (cross-river section)	2021.02	385,446	2021.01-2023.12
2	China Railway Shanhaiguan Bridge, China Railway Baoji Bridge	Sections LT-B4 and B9 of the steel structure manufacturing project of Longtan River Crossing Bridge	2021.04	95,154	2021.04-2023.6.30
3	China Railway Baoji Bridge	Section G3 of the steel structure manufacturing project of Huangmao Sea Cross-sea Channel	2021.12	88,728	2021.12-2023.12
Turnout					
1	China Railway Shanhaiguan Bridge	Newly-Built Intercity Railway along the South Yangtze River in Jiangsu Province	2021.05	24,900	As required by Party A
2	China Railway Shanhaiguan Bridge	Shanghai Metro renovation project and spare parts	2021.06	19,517	As required by Party A
3	China Railway Baoji Bridge	Procurement and supply contract of materials supplied by Party A, under the management of State Railway Group, of Jiande-Quzhou section of the New Hangzhou-Quzhou Railway	2021.08	12,672	From December 2021 to the project completion
Engineering machinery					
1	China Railway Engineering Equipment	TBM project contract of the Shergyla Mountain Tunnel of the Sichuan-Tibet Railway	2021.02	39,016	As required by Party A
2	China Railway Engineering Equipment	Purchase contract of shield tunneling machines	2021.02	27,257	4 months
3	China Railway Engineering Equipment	Lease contract of shield tunneling machines and supporting equipment for section 2 of the principal part of the Lianghu Tunnel (Donghu) and auxiliary projects undertaken by China Construction Third Engineering Bureau Group Co., Ltd.	2021.06	15,792	22 months

SIGNIFICANT EVENTS

XV. Material Contracts and Their Performance (Continued)

4. Other Material Contracts (Continued)

(1) Material contracts signed during the reporting period (Continued)

(iv) Real estate development business

No.	Project name	Project location	Project type	Planned area (0'000 square meters)
1	New industry city of the Northeast Asia International Expo Center in Changchun	Jilin	Industry-city integration (exhibition + commercial + residential)	324.24
2	Huanggang plot of the Binhai New District, Tianjin	Tianjin	Residential	62.77
3	AB plot of Phase I project of Shilihetan, Huaxi District, Guiyang	Guizhou	Residential + commercial	58.24

(2) Material infrastructure investment projects (BOT and PPP projects) signed during the reporting period

No.	Name of contract	Signatory	Contract sum (RMB100 million)	Shareholding of the project company	Construction period (Number of years)	Concession period (Number of years)	Signing date
1	PPP project contract of the Beijing-Xiongan Expressway (Beijing section)	China Railway and other parties (project companies)	122.12	China Railway and Beijing Capital Highway Development Group Co., Ltd. hold 51% and 49% of the equity interest respectively	2	27	2021-01
2	PPP project contract of the infrastructure of North and South mountains areas under the strategy of rural vitalization of Tianshui city	China Railway City Development and Investment Group Co., Ltd. and other parties (project companies)	109.16	China Railway and Tianshui Urban Rail Transit Investment, Construction and Operation Co., Ltd. (天水市城市轨道交通投资建设经营有限责任公司) hold 65% and 35% of the equity interest respectively	3	30	2021-01

SIGNIFICANT EVENTS

XV. Material Contracts and Their Performance (Continued)

4. Other Material Contracts (Continued)

(2) Material infrastructure investment projects (BOT and PPP projects) signed during the reporting period (Continued)

No.	Name of contract	Signatory	Contract sum (RMB100 million)	Shareholding of the project company	Construction period (Number of years)	Concession period (Number of years)	Signing date
3	Supplementary contract to the PPP project contract (franchise agreement) of the Ruoqiang-Minfeng Highway, the Luntai-Minfeng Highway and State-owned agriculture, forestry and pasture road project (package A) in the Bayingolin Mongol Autonomous Prefecture	China Railway City Development and Investment Group Co., Ltd. and other parties (project companies)	138.28	China Railway and Bazhou Transportation Investment Co., Ltd. (巴州交通投資有限公司) hold 70% and 30% of the equity interest respectively	3	33	2021-03
4	PPP project contract (franchise agreement) of the operating highways of G577 Jingyi Line and G577 Tezhao Line in the Xinjiang Yili Kazak Autonomous Prefecture	China Railway City Development and Investment Group Co., Ltd. and other parties (project companies)	111.28	China Railway holds 84.18% of the equity interest, and government representatives and Xinjiang local state-owned enterprises hold 15.82% of the equity interest	5	35	2021-03

SIGNIFICANT EVENTS

XV. Material Contracts and Their Performance (Continued)

4. Other Material Contracts (Continued)

(3) Investment projects (BOT and PPP projects) that were operating during the reporting period

No.	Name of contract	Signatory	Contract sum (RMB100 million)	Signing date	Time of entering the operation period	Operation period
1	Yinchuan tap water equity transfer project (merged with the west line water supply project)	China Railway No.1 Engineering and other parties	73.8	2010-08	2011-05	30
2	PPP project of Phase I of Hohhot Metro Line 1	China Railway and other parties	146.79	2016-09	2019-12	25
3	PPP project of the Xundian-Zhanyi Expressway (Kunming section)	China Railway and other parties	61.1	2018-08	2020-01	30
4	PPP project of the Dongchuan-Gele section of the S25 Kunming-Qiaojia Expressway	China Railway and other parties	56.9	2017-04	2020-01	30
5	Section 2 of the PPP project of Shijiazhuang Hutuo River ecological restoration (Zhonghua Street to east Gaocheng city)	China Railway and other parties	23.9	2019-02	2020-06	13
6	Phase I (section B) of Taiyuan Metro Line 2	China Railway Electrification Engineering Group Co., Ltd. and other parties	60.9	2019-09	2020-12	25

(4) Strategic framework agreements signed during the reporting period

No.	Signing date	Agreement name	Agreed investment amount (if any)	Main content of agreements
1	2021.6	Strategic cooperation framework agreement between the People's Government of Yichang Municipality and China Railway Group Limited	It is planned that the amount of cooperation projects between the two parties during the 14th Five-Year Plan period will not be less than RMB50 billion.	Accelerate the promotion of existing cooperation projects; strengthen cooperation in planning and design; strengthen cooperation in infrastructure and related industries.

SIGNIFICANT EVENTS

XV. Material Contracts and Their Performance (Continued)

4. Other Material Contracts (Continued)

(4) Strategic framework agreements signed during the reporting period (Continued)

No.	Signing date	Agreement name	Agreed investment amount (if any)	Main content of agreements
2	2021.9	Strategic cooperation framework agreement between the People's Government of Yunnan Province and China Railway Group Limited	During the 14th Five-Year Plan period, Party B will plan to invest no less than RMB300 billion in Yunnan Province	Build the economic industry chain of headquarters; invest in the development of health care projects; boost the implementation of the "Belt and Road" initiative; deeply participate in the strategy of "Xingshui Rundian (興水潤滇)"; deepen cooperation with state-owned enterprises; strengthen infrastructure construction; carry out green intelligent manufacturing, and cooperation in prefabricated construction industry.
3	2021.9	Strategic cooperation agreement between the People's Government of Hubei Province and China Railway Group Limited	During the 14th Five-Year Plan period, CREC's investment in Hubei will exceed RMB100 billion.	Set up CREC's regional headquarters in Hubei Province; increase efforts to plan industrial layout and project investment in Hubei; give full play to design advantages to contribute to Hubei Province's comprehensive transportation construction; actively contribute to the rail transit and municipal infrastructure construction of Hubei Province; actively participate in the ecological environmental protection projects, urban development projects and other projects in Hubei Province; actively participate in the reform and development of local state-owned enterprises.

SIGNIFICANT EVENTS

XV. Material Contracts and Their Performance (Continued)

4. Other Material Contracts (Continued)

(4) Strategic framework agreements signed during the reporting period (Continued)

No.	Signing date	Agreement name	Agreed investment amount (if any)	Main content of agreements
4	2021.9	Strategic cooperation framework agreement between the People's Government of Xinjiang Uygur Autonomous Region and China Railway Group Limited	Strive to invest RMB200 billion in Xinjiang during the 14th Five-Year Plan period	Promote local economic and social development; strengthen cooperation between central enterprises and local governments; strengthen cooperation in planning, design and scientific research field; strengthen cooperation in finance field; strengthen cooperation in railway transportation construction; strengthen cooperation in highway and municipal infrastructure construction; strengthen cooperation in the fields of ecological environment protection and water resources development; strengthen cooperation in rural revitalization and new urbanization; strengthen cooperation in cultural tourism projects; strengthen cooperation in emerging industries.
5	2021.9	Comprehensive deepening strategic cooperation agreement between the People's Government of Guizhou Province and China Railway Group Limited during the 14th Five-Year Plan period	The two parties will strive to achieve an amount of over RMB450 billion of cooperation projects in Guizhou during the 14th Five-Year Plan period, including over RMB200 billion in investment projects.	Strengthen infrastructure investment and construction; assist in the new urbanization; create high-end cultural tourism and health care projects; deeply participate in the Five-Year Action for Strengthening the Development of Provincial Capital; deepen cooperation with state-owned enterprises; establish a government-enterprise cooperation mechanism; build a collective economic industrial chain.

SIGNIFICANT EVENTS

XV. Material Contracts and Their Performance (Continued)

4. Other Material Contracts (Continued)

(4) Strategic framework agreements signed during the reporting period (Continued)

No.	Signing date	Agreement name	Agreed investment amount (if any)	Main content of agreements
6	2021.9	Strategic cooperation agreement between the People's Government of Shanxi Province and China Railway Group Limited	Strive to invest no less than RMB150 billion in cooperation projects in Shanxi Province during the 14th Five-Year Plan period	According to their respective plans, both parties will cooperate in the fields of highways, railways, urban rail transit, airports, ecological governance, urban complexes, smart cities.
7	2021.10	Strategic cooperation agreement between the People's Government of Henan Province and China Railway Group Limited	During the 14th Five-Year Plan period, the amount of cooperation projects in key areas and major infrastructure construction in Henan Province shall not be less than RMB350 billion.	The parties will jointly promote the investment and construction of infrastructure, public services and other projects. The parties will carry out comprehensive cooperation in the fields of new infrastructure, rail transit and comprehensive land development along the route of rail transit, expressways, airports, ports, water conservancy, environmental protection, industrial parks, culture, tourism and health care, industrial manufacturing, smart cities, and resilient cities.

SIGNIFICANT EVENTS

XV. Material Contracts and Their Performance (Continued)

4. Other Material Contracts (Continued)

(4) Strategic framework agreements signed during the reporting period (Continued)

No.	Signing date	Agreement name	Agreed investment amount (if any)	Main content of agreements
8	2021.12	Strategic cooperation framework agreement between the People's Government of Chengdu Municipality and China Railway Group Limited during the 14th Five-Year Plan period	It is planned to invest RMB400 billion in Chengdu during the 14th Five-Year Plan period.	Promote local economic and social development; strengthen cooperation between central enterprises and local enterprises; strengthen cooperation in planning, design and scientific research fields; strengthen cooperation in high-end equipment R&D and manufacturing; strengthen cooperation in finance field; strengthen cooperation in centralized procurement and supply of materials; strengthen cooperation in rail transit construction; strengthen cooperation in highway and municipal infrastructure construction; strengthen cooperation in TOD comprehensive development field; strengthen cooperation in urban area development; strengthen cooperation in ecological environmental protection and water resources development; strengthen cooperation in cultural tourism and health care projects; strengthen cooperation in emerging industries; strengthen cooperation in the field of rural revitalization and development.

SIGNIFICANT EVENTS

XV. Material Contracts and Their Performance (Continued)

5 Particulars of Material Properties

(1) Property held for development

Name of building or project	Address	Current land use	Area <i>(square meters)</i>	Floor area <i>(square meters)</i>	State of completion	Expected completion date	Interests of the Company and its subsidiaries
Sichuan Heilongtan International Eco Tourism Resort Project	Renshou County, Meishan, Sichuan	Comprehensive	2,266	1,418	Under construction	2027	100%
Guiyang China Railway Yueshan Lake	Guanshan Lake District, Guiyang, Guizhou	Commercial, residential	236	266	Under construction	2024	80%
Qingdao West Coast Project	West Coast Central Vitality Zone, Qingdao	Comprehensive	86.39	148.3	Under construction	2029	100%
Taiyuan China Railway Nuode Mall	Chaoyang Street, Yingze District, Taiyuan	Commercial, residential	27.66	125	Under construction	2024	100%
Guiyang Qingzhen Project	Xiangchou Residential Quarters, Vocational Education Area, Qingzhen, Guiyang City, Guizhou	Commercial, residential	45.47	104.8	Under construction	2027	90%

SIGNIFICANT EVENTS

XV. Material Contracts and Their Performance (Continued)

5 Particulars of Material Properties (Continued)

(2) Property held for investment

Name	Location	Use	Tenure	Interests of the Company and its subsidiaries
Beijing Nuode Center Phase III Building S1, S2, 16 and 19	No. 1 South Yuren Road, Fengtai District, Beijing	Commercial	2054-11	100%
Tianjin Nuode Center No. 1 Building, No. 2 Building and equipped facilities	No. 50 Lwwei Road, Hebei District, Tianjin	Commercial	2054-1	100%
Beijing China Railway Mansion	No. 3 Yard, South Automobile Museum Road, Fengtai District, Beijing	Commercial	2065-11	100%
Chengdu Nuode No. 1	Intersection of Guangxi Road and Huanhu Road, Shuangliu District, Chengdu, Sichuan	Commercial	2065-1	100%
Guangzhou Nuode Center	No. 477 East Hanxi Avenue, Nancun Town, Panyu District, Guangzhou City, Guangdong	Commercial	2053-5	100%
Shanghai Nuode International Plaza	3/5 Block, 219 Lane, Xinzhuang Town, Minhang District, Shanghai	Commercial	2064-3	100%
China Railway Real Estate Qingdao Center	No. 8 Hong Kong Middle Road, South City District, Qingdao, Shandong	Commercial	2046-7	100%
Reeda Plaza	No. 46 South Shengli Road, Heping District, Shenyang, Liaoning	Commercial	2051-4	100%
China Railway South Headquarters Building	No. 3333 Houhai Center Road, Nanshan District, Shenzhen, Guangdong	Commercial	2046-12	100%
Lot AT090904, Starting Area, Financial City, Tianhe District	Site AT090904, Starting Area, Financial City, Huangpu Avenue, Tianhe District, Guangzhou City, Guangdong	Commercial	2068-12	100%

XVI. Description of Other Significant Matters That Have a Significant Impact on the Value Judgments and Investment Decisions Made by Investors

Not applicable

ENVIRONMENTAL AND SOCIAL RESPONSIBILITY

1. Environmental Information

(1) Description of environmental protection efforts of the highly polluting companies and their subsidiaries as announced by the environmental protection authorities

Not applicable

(2) Description of environmental protection efforts of companies other than highly polluting companies

(i) Administrative penalties due to environmental issues

In 2021, due to the failure to strictly implement measures to control the dust, sewage discharge and construction environment noise generated in certain construction projects during construction, the Company's subsidiaries were subject to administrative penalties by local environmental protection regulatory authorities. The penalty totaled approximately RMB16.5234 million and involved 69 construction project departments. At present, all the penalties have been rectified and accepted by local regulatory authorities. The Company will further strengthen the Company's ecological and environmental protection. By identifying and evaluating the environmental factors of projects under construction and workplaces, the Company will strengthen the control over the risk sources and emissions of ecological and environmental pollution during production, to effectively protect and improve the living and ecological environment.

(ii) Disclosure of other environmental information with reference to highly polluting companies

Not applicable

(iii) Reasons for not disclosing other environmental information

Not applicable

ENVIRONMENTAL AND SOCIAL RESPONSIBILITY

1. Environmental Information (Continued)

(3) Information on ecological protection, pollution prevention and fulfilment of environmental responsibilities

The Company has strictly implemented the Environmental Protection Law of the People's Republic of China and the Energy Conservation Law of the People's Republic of China, thoroughly implemented Xi Jinping's thoughts on ecological civilization under the guidance of Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, strove to achieve the goal of "3060" in CO₂ emission, insisted on the concept of lucid waters and lush mountains are invaluable assets, and taken the fresh development stage into full consideration by following an innovative development philosophy and following new development patterns. The Company has solidly advanced the construction of ecological civilization, strove to overcome the challenges brought by peak carbon dioxide emissions and carbon neutral by focusing on the strategic positioning of "China Railway in Five Types", "123456" development strategy and strategic goals of "Four Strong Capabilities and Five Excellent Aspects" and "World Class", and brought green development concept into all aspects and stages of its development. The Company, taking energy-saving technology innovation as support, and energy-saving management and energy resources utilization as focus, has improved risk prevention and pollution emergency response capability, steadfastly followed the high-quality, green and low-carbon development path by putting ecology first, and improved its green construction level.

Energy/ resource type	Indicators	Data in 2021	Year-on-Year Increase/ Decrease
Direct energy consumption	Gasoline (ten-thousand tonnes)	46.07	5.9%
	Gasoline (ton/RMB ten-thousand)	0.0045	-2.2%
	Diesel (ten-thousand tonnes)	155.8	4.4
	Diesel (ton/RMB ten-thousand)	0.015	-6.3%
	Natural gas (ten-thousand standard)	6,770.5	6.6%
	Natural gas (m ³ /RMB ten-thousand)	0.67	-1.4%
Indirect energy consumption	Electricity (ten-thousand kwh)	1,045,300	6.5%
	Electricity (ten-thousand kwh/RMB ten-thousand)	0.0103	-2%
Comprehensive energy consumption	Comprehensive energy consumption (ten-thousand tonnes of standard coal)	448.5213	5%
	Comprehensive energy consumption (tons of standard coal/RMB ten-thousand income)	0.0441	-4.3%
	Comprehensive energy consumption (ten-thousand kwh)	3,649,481	5%
	Comprehensive energy consumption (kwh/RMB ten-thousand income)	359	-3%
Water	Total new water consumption (ten-thousand tonnes)	46,094.546	2.9%

Note: Based on business characteristic of the Company, it is not applicable to calculate energy consumption density using unit of production (UOP) or per facility. Therefore, the Company adopts comprehensive energy consumption (comparable price) per RMB ten-thousand operating income to calculate and disclose energy consumption density.

ENVIRONMENTAL AND SOCIAL RESPONSIBILITY

1. Environmental Information (Continued)

(4) Measures taken to reduce carbon emissions during the reporting period and their effects

Climate change is a major global challenge for mankind today. China has put forward the targets of peak carbon dioxide emissions and carbon neutral to respond to the climate change. The Company has developed China Railway "14th Five-Year Plan" for energy conservation and environmental protection as per the "14th Five-Year Plan" of the State and the general requirements of the SASAC, and determined its overall goal as making significant progress in the construction of green China Railway system which satisfies the requirements of ecological civilization construction, continuously increasing energy efficiency, and significantly improving energy consumption structure by 2025. By 2025, the emissions of CO₂ per ten-thousand yuan output value and the comprehensive energy consumption per ten-thousand yuan operating income shall be decreased simultaneously. The comprehensive energy consumption per ten-thousand yuan operating income shall be decreased by 15% compared to that of 2020 and by 3.2% on an average annual basis, while the emissions of CO₂ per ten-thousand yuan output value shall be decreased by 18% compared to that of 2020 and by 3.89% on an average annual basis.

In 2021, to implement the national guidelines and policies regarding energy conservation and emission reduction, the Company thoroughly implemented the concept of green development, promoted green planning and design, introduced a full life cycle green design mode, controlled energy consumption at the source, and instilled the concept of green, low-carbon, and ecological design into the entire process of engineering planning and design. **First, the Company strengthens green design, achieves green construction, and gives priority to planning.** In the survey, design and consulting services business undertaken by the Company, the Company implements a full life-cycle green design model to ensure the lowest energy consumption level of construction projects from the source. **Second, the Company intensifies efforts in clean energy development.** The Company has actively participated in clean energy development projects, and has signed strategic cooperation agreements with the Tibet Autonomous Region Government, the Three Gorges Group, and Huadian Corporation to jointly develop clean energy. Meanwhile, in the Company's main construction projects, the Company has actively developed and promoted the use of ground source heat pump (GSHP), photovoltaic power generation, combined cooling heat and power, and other clean energy technologies. China Railway Major Bridge Engineering Group Co., Ltd., a wholly-owned subsidiary of the Company, and the Three Gorges Group jointly constructed the first phase of the Fuqing Xinghua Bay Offshore Wind Farm Project, being the first high-power offshore wind turbine project in China. The 400 MW offshore wind farm construction in Shengdong Rudong County, Jiangsu Province undertaken by China Railway Major Bridge Engineering Group Co., Ltd. was ongoing. **Third, the Company explores a new energy saving model for green real estate and green buildings.** The Company taps into the full potential of conserving energy of buildings and explores a new model for green real estate development. The Company works to achieve green development of real estate by taking measures like the design of green buildings and the promotion of prefabricated buildings. Through cooperation with related enterprises, the complementary advantages of clean energy technology and resource use platforms are achieved to ensure that the regions and projects developed by China Railway reach the world's advanced level in the fields of clean energy development and utilization, energy-saving and environmental protection, intelligent urban buildings, central heating and cooling, etc. Currently, all projects of Beijing Branch of China Railway Real Estate adopt green prefabricated construction. **Fourth, the Company advocates green office.** In 2021, the Company continued the application and promotion of the paperless conference system. The paperless system supports the parallel access of hardware devices such as computer terminals, mobile phones, and tablets. It supports the holding of paperless meetings with technical methods such as display on the same screen, handwritten signing and approval, and data distribution and sharing. With the paper system, the Company achieves the goal of full-process digitization that enables preparation before meetings, control during meetings, and filing and statistical analysis after meetings.

ENVIRONMENTAL AND SOCIAL RESPONSIBILITY

1. Environmental Information (Continued)

(4) Measures taken to reduce carbon emissions during the reporting period and their effects (Continued)

As of the end of the reporting period, the comprehensive energy consumption (comparable price) per ten-thousand yuan operating income in 2021 of the Company was 0.0441 ton of standard coal/ten-thousand yuan, 4.3% lower than the same period last year; and the emissions of CO₂ per ten-thousand yuan was 0.1563 ton/ten-thousand yuan, 13.6% lower than the same period last year, successfully completing the established work goals in annual energy conservation and environmental protection.

Indicators	Data in 2021	Year-on-year increase/decrease
Total amount of CO ₂ emission (ten-thousand tonnes)	1,588.2154	5.4%
CO ₂ emission density (ton/RMB ten-thousand)	0.1563	-13.6%
NO _x emission (ton)	2.94	-41.31%
Smoke (powder) emission (ton)	23.18	5.5%
VOC emission (ton)	1.254	-37.3%
SO ₂ (ton)	0	0
Total amount of hazardous waste (ton)	1,305	-1.5%
Discharge of hazardous waste per RMB ten-thousand (kg/RMB ten-thousand)	0.013	-6.5%
Total amount of non-hazardous waste (ten-thousand tonnes)	497.13	4.0%
Discharge of non-hazardous waste per RMB ten-thousand (kg/RMB ten-thousand)	0.05	-2%

Note: 1. The Company is a construction enterprise, and its CO₂ emissions are indirect greenhouse gas emissions.

2. Emissions of NO_x, SO₂, smoke (powder) and VOC are calculated based on the emissions permits.

3. Due to rounding, the numbers of individual items may differ slightly from the total.

For details about the Company's fulfilment of ecological protection, pollution prevention and control, and environmental responsibilities, please refer to the 2021 Social Responsibility Report and the Environmental, Social and Governance Report of China Railway Group Limited published by the Company on the website of Shanghai Stock Exchange at the same time as this announcement.

ENVIRONMENTAL AND SOCIAL RESPONSIBILITY

2. Social responsibility commitments

As a leader in the construction industry, the Company never forgets its mission of becoming a practitioner, promoter and pioneer of corporate social responsibility. The Company started to construct a scientific, standardized, systematic and effective management system of corporate social responsibilities in 2008, planning social responsibilities in ten aspects, namely governance in accordance with the law, quality services, efficiency creation, employee development, safety supervision, scientific and technological progress, environmental protection, public welfare undertakings, win-win cooperation, and overseas responsibility, and rolling out a series of social responsibility management activities covering its headquarters and subsidiaries in order to achieve the goals of comprehensive coverage, down-to-earth implementation, steady perfection and industrial leading, and make continuous and irreplaceable contributions to the society.

For details about the Company's fulfilment of social responsibilities, please refer to the 2021 Social Responsibility Report and the Environmental, Social and Governance Report of China Railway Group Limited published by the Company on the website of Shanghai Stock Exchange at the same time as this announcement.

3. Work of consolidating and expanding poverty alleviation results and rural revitalization

(1) Targeted assistance plan

In 2021, China Railway thoroughly learned and implemented the General Secretary Xi Jinping's important instructions and comments on consolidating and expanding poverty alleviation results and linking poverty alleviation with rural revitalization, and gave full play to its own advantages as an enterprise as per relevant arrangements and requirements of the Central Committee, the State Council and the SASAC to advance the process of consolidating and expanding poverty alleviation results and linking poverty alleviation with rural revitalization, and strive to make its own contributions to the implementation of rural revitalization strategy. **First, the Company sets up a leading group for targeted assistance.** China Railway established a leading group for targeted assistance with major leaders of the Company being leaders, the full-time deputy secretary to the CPC Committee, general accountant, secretary to the Discipline Inspection Committee being deputy leaders, and heads of 13 departments including the HR Department being members. On 12 April and 31 August, the leading group for targeted assistance held two special conferences successively. CHEN Yun, Secretary to the CPC Committee and Chairman of the Board of the Company, and CHEN Wenjian, President and Deputy Secretary to the CPC Committee of the Company, arranged and deployed target assistance work in person, learned and conveyed the newest spirit of the Central Committee on targeted assistance, and discussed and arranged matters including cadre selection, assistance plan, implementation of key assistance projects, ensuring to carry out targeted assistance in a targeted, scientific and efficient way. The group also considered and adopted the China Railway's Poverty Alleviation Summary and Commendation Implementation Plan 《中國中鐵脫貧攻堅總結表彰實施方案》, and appraised and selected 10 advanced individuals and 5 advanced units in poverty alleviation. **Second, the Company publishes targeted assistance plan.** After discussion, the leading group for targeted assistance of China Railway considered and adopted the 2021 Targeted Assistance Plan of China Railway 《中國中鐵2021年定點幫扶工作計劃》, clarified the tasks of the annual assistance plan, and put consolidating and expanding poverty alleviation results and preventing massive returning to poverty as priority. **Third, major leaders of the Company carries out on-the-spot investigation.** On 25 and 26 October, CHEN Wenjian, President and Deputy Secretary to the CPC Committee of the

ENVIRONMENTAL AND SOCIAL RESPONSIBILITY

3. Work of consolidating and expanding poverty alleviation results and rural revitalization (Continued)

(1) Targeted assistance plan (Continued)

Company, took a team to carry out investigation and supervision in Baode County, Shanxi Province to learn about the work on consolidating poverty alleviation results and implementing rural revitalization. The investigation group held a signing ceremony for key aid projects in Baode County, visited and extended its regards to registered impoverished households, held a symposium with the County Party Committee and the County Government on consolidating poverty alleviation results and rural revitalization, and conveyed the new spirits and new requirements of the Central Committee, the State Council and the SASAC. The investigation group also made in-depth exchanges with local government officials on how to consolidate poverty alleviation results and effectively link poverty alleviation with rural revitalization, and put forward targeted opinions and suggestions. From 10 to 12 November, WANG Shiqi, Deputy Secretary to the CPC Committee, Chairman of the Labour Union and Executive Director of the Company, took a team to carry out investigation and supervision in Rucheng County and Guidong County in Hunan Province to learn about the work on consolidating poverty alleviation results and implementing rural revitalization, and put forward practical solutions towards issues such as difficulty in employment and relatively single industrial development.

(2) Summary and results of annual targeted assistance

In 2021, China Railway had the courage to take the burden and increased investment with high sense of political responsibility and mission, accurately understood the major decisions and arrangement of the Central Committee, the State Council and the SASAC on advancing rural revitalization, coordinated the links among work tasks as well as policies and measures, and implemented a series of supporting measures that fit local situation and show its own characteristics in targeted assistance to achieve fruitful results. **First, the Company eliminates the root of poverty via assistance by education to create hardcore support for rural alleviation.** China Railway insisted on taking “blood-making” assistance by education as an important focus for long-term stability, and integrating a development path blocking the inter-generational passing of poverty. In 2021, the Company invested RMB20 million of assistance funds in Guidong County for the construction of stage II project of the Hope School in Zhaiqian Town to further improve teaching conditions; invested RMB20 million of assistance funds in Rucheng County for the construction of the Sports and Art Stadium of Rucheng Vocational High School to improve the situation of less venue and inefficient area for sports activities; and invested RMB20 million of assistance funds in Baode County for the construction of study dormitory of Baode No.11 Primary School to solve school accommodation issue in remote towns and villages. While continuing to invest in Rucheng Vocational High School to improve teaching conditions, The Company also gave full play to its own advantages and invited internal skilled talent representatives to the school. BAI Zhiyong, Representative of the 19th National Congress of the CPC, national model worker, and model of central enterprise, and ZHANG Hui, National Youth Position Expert and Master of Skills, were invited to serve as the visiting senior lecturer and teacher of the school respectively to carry out in-depth exchange and improve faculty level. Now, Rucheng Vocational High School has become one of the best vocational schools in Hunan Province. **Second, the Company increases incomes via assistance by employment to create special brands for rural alleviation.** China Railway donated RMB22.5 million in Guidong County to build three standard plants in Datang Area, Guidong Industrial Park. Now, the three plants have been put into use, and attracted 6 enterprises, solving the employment issue of over 300 relocated

ENVIRONMENTAL AND SOCIAL RESPONSIBILITY

3. Work of consolidating and expanding poverty alleviation results and rural revitalization (Continued)

(2) Summary and results of annual targeted assistance (Continued)

masses. For projects in Rucheng County, the entities under China Railway hired Rucheng people to build Rucheng, and employed over 100 local labors. The Company continued to carry out the training project of "Everyone Has A Skill", and directly invested RMB350,000 in 2021 to carry out 10 training courses in chef of Hunan cuisine specialty and practical technologies for technical commissioner, having 605 participants in total get trained. The Company carried out "1+X" skill training pilots to fully improve the professional skills of grass-root cadres, agricultural technical personnel and those who take the lead in becoming prosperous. The training project of "Everyone Has A Skill" in Rucheng County was elected as national "Lifelong Education & Learning Brand Program". In Baode County, the Company invested a total of more than RMB3.20 million (RMB200,800 in 2021) for the employment training of "Baode Good Driver" by way of reward and reimbursement of tuition. **Third, the Company activates sources of incomes via assistance by industry to create multiple engines for rural revitalization.** In Guidong County, following the good development momentum of homestay, the Company, joining hands with the Tourism and Homestay Association of the County, carried out homestay training classes to help make the homestay industry bigger, stronger and better. The Company invested materials worth RMB200,000 to co-build roads among mountains and forest with Guangming Village, Oujiang Town to boost the development of the bamboo industry therein and increase the incomes of local people. The Company also helped build tea brand for Guidong County to promote the intangible cultural heritage of Guidong handmade tea, and invested RMB350,000 in Qingquan Town, a tea planting and manufacturing center, to build a "Tea History House of Intangible Cultural Heritage" covering 240 square meters. In Baode County, the Company introduced its subsidiary China Railway No.1 Taiping Property Company, and cooperated with the government of Baode County to build the labor service brand of "Baode Good Property", providing a good solution for households lifted out of poverty, creating a new way for increasing incomes and solving the employment issue of relocated people. **Fourth, the Company promotes prosperity via assistance by consumption to create a long-term mechanism for rural revitalization.** The Company actively mobilizes subordinate units and the vast number of cadres and employees to intensify purchase and consumption efforts, and sets up a special section on its internal e-commerce platform to display and sell the agricultural products from targeted assistance counties for a long time. At the Mid-Autumn Festival and the New Year's Day, the Company issued a special notice for all employees on strengthening consumption assistance efforts, and encouraged labor unions at all levels to exert their advantages to significantly promote the sales of agricultural products from targeted assistance counties. Meanwhile, cadres assuming a temporary post actively took measures such as live video streaming or subscription mode to boost sales of local agricultural products. The Company organized agricultural enterprises in Rucheng County to promote products in subsidiaries of China Railway for several times, and helped them sell products via shopping platforms such as the central enterprise assistance website, China Railway Huiyuan App, China Railway Luban Website and Ruwei Zhenxiang mini program, truly building confidence in the public and increasing their income. In 2021, the Company purchased RMB9.1141 million of agricultural products from targeted assistance counties, and RMB5.7434 million of agricultural products from other impoverished counties, totaling RMB14.8575 million. **Fifth, the Company sets up a new atmosphere via assistance by culture to create a beautiful picture of rural revitalization.** The Company carried out the improvement action of "6 Messes" in Baode County to improve rural living environment, and concentrated on improving key areas such as in-village roads, courtyard and fields based

ENVIRONMENTAL AND SOCIAL RESPONSIBILITY

3. Work of consolidating and expanding poverty alleviation results and rural revitalization (Continued)

(2) Summary and results of annual targeted assistance (Continued)

on the actual situation of local villages, truly solving the matters of random construction, stacking and littering, beautifying the overall appearance of villages, and significantly improving the living environment. The Company took efforts to enrich the spiritual and cultural life of villagers, and invited the art squad of Baode County Cultural Center to perform in Tuanwo Village under the theme of “Our Chinese Dreams”, to inherit and carry forward the excellent traditional Chinese culture, advocate rural culture and civilization and support rural revitalization. In Rucheng County, the Company carried out actions to beautify the living environment in Rucheng County by setting up bamboo fences, adding green belts, and implementing concentrated captive breeding for poultry in designated areas. China Railway Guangzhou Engineering Group Co., Ltd., the subsidiary of the Company, organized personnel and equipment to help demolish 6 dangerous and old houses, and 3 traditional bathrooms, cleaned construction wastes of over 500 square meters, and paved and widened roads for over 800m, laying a solid foundation for a clean, tidy, and orderly beautiful countryside.

During the whole year, the Company dispatched 6 cadres assuming a temporary post; directly invested RMB64.90 million of assistance funds; attracted RMB3.272 million of assistance funds; trained grass-root cadres of 184 person times, leaders in rural revitalization of 42 person times, and professional technical personnel of 719 person times; purchased RMB9.1141 million of agricultural products, and helped sell RMB604,000 of agricultural products, surpassing the targets as set forth in the annual work plan.

(3) Subsequent target poverty alleviation plan

In 2022, China Railway will thoroughly learn and implement General Secretary Xi Jinping’s important instructions and comments on consolidating and expanding poverty alleviation results and linking poverty alleviation with rural revitalization, ensure the overall stability of assistance policies and strength during the transition period without disconnection or interruption as per the arrangement and requirements of the Central Committee, the State Council and the SASAC, actively innovate measures for assistance, and continue to promote the consolidating and expanding poverty alleviation results and linking poverty alleviation with rural revitalization. **First**, the Company will convene a meeting of the leading group for targeted assistance as early as possible to discuss and arrange annual assistance work. The Company is planning to hold the meeting of the leading group for targeted assistance in the first quarter of 2022, fully summarize previous assistance results and typical experiences, create assistance brand, discuss and develop a key plan of annual assistance work as per the new spirits of the Central Committee on assistance, and arrange annual assistance tasks. **Second**, the Company will strengthen the audit and inspection of key projects and ensure the dedicated use of assistance funds. In 2022, the Company will continue to employ a third party audit institute to carry out independent audit on key assistance infrastructure construction projects aided by the Company in 2021, and ensure that the assistance project can withstand the test of the masses, history and practice, handing in a satisfactory answer to the Party Central Committee and the local people. Meanwhile, the Company will join hands with the Discipline Inspection Committee of the CPC Committee, Production Supervision Center and other departments thereof to carry out special inspection on projects under construction, summary relevant issues into a checklist through the inspection of policy implementation, work style, assistance funds and results and other aspects, and timely feedback such issued to the County Party Committee, the County

ENVIRONMENTAL AND SOCIAL RESPONSIBILITY

3. Work of consolidating and expanding poverty alleviation results and rural revitalization (Continued)

(3) Subsequent target poverty alleviation plan (Continued)

Government, the construction units and the cadres assuming a temporary post face to face. **Third**, the Company will fully and thoroughly implement the requirements of the Central Committee, and do a solid job in advancing key assistance work. As per the new requirements of the Central Committee on target assistance, the Company will deeply discuss and study the new ideas and new ways for central enterprises to carry out targeted assistance under the new situation of building a moderately prosperous society in an all-round way. Apart from key work of assistance by education, consumption and employment, the Company will broaden mind and innovate measures to fully consolidate and expand poverty alleviation results and create a beautiful picture of rural revitalization. **Fourth**, the Company will continue to carry out the targeted assistance in Karuo District, Chamdo Prefecture, Tibet Autonomous Region. In 2022, the Company will provide pairing-assistance for the Karuo District, Chamdo Prefecture, Tibet Autonomous Region. Besides, the Company will connect with the Aluminum Corporation of China on its own initiative to carry out in-depth on-the-spot investigation, put forward assistance plans as per local actual situation, invest assistance funds no less than that in current 3 targeted assistance counties, and dispatch excellent cadres from training class for young and middle-aged cadres to assume a temporary post; will continue to do a good job in the construction of well-off demonstration villages and ensure the timely completion of the New Village Project of the Aluminum Corporation of China by satisfying the quality and quantity requirements; continue to carry out the construction of beautiful village demonstration points for rural revitalization and implement centralized water supply project to support the economic and social development in the Karuo District with actual deeds and boost rural revitalization in the local.

China Railway will earnestly practice its original mission with a strong sense of political responsibility and a lofty sense of political mission, continue to strengthen responsibility and undertakes, and do well from start to end with successful measures, making greater contributions to the full implementation of rural revitalization strategy.

DEFINITION AND GLOSSARY OF TECHNICAL TERMS

1	the Company, China Railway	China Railway Group Limited
2	the Group	the Company and its subsidiaries
3	CREC	China Railway Engineering Group Company Limited
4	CRHIC	China Railway Hi-Tech Industry Co., Ltd. (stock code: 600528.SH)
5	China Railway Prefabricated Construction	China Railway Prefabricate Construction Co., Ltd.(stock code: 300374.SZ)
6	CREG	China Railway Engineering Equipment Group Co., Ltd.
7	CRHEEC	China Railway High-Speed Electrification Equipment Corporation Limited (stock code: 688285.SH)
8	Four Strong Capabilities and Five Excellent Aspects	Strong innovation capability, strong competitiveness, strong risk resistance capability, strong development capability, and excellent talents, excellent assets, excellent industries, excellent performance, excellent culture
9	"123456" Work Strategy	Focus on "one big task", emphasize "two principles", stick to "three bottom lines", achieve "Four Strong Capabilities and Five Excellent Aspects", and coordinate "six keys"
10	"2468" Main Points on Management	"2" means fulfilling the "two" responsibilities (clearly breaking down and implementing the two responsibilities of "management" and "supervision" of the organizational command system, technical support system, resource allocation system and settlement & supervision system); "4" means advancing the "four modernizations" (professional organization, standardized operation, mechanized construction, and information application); "6" means improving the "six major" systems (organizational protection system, institutional protection system, risk control protection system, scientific & technological protection system, education & training security protection, and emergency security system); "8" means strengthening the "eight" implementations (safety awareness, team building, safety investment, rigid disclosure, red line control, hidden danger investigation, safety rewards and punishments, and cultural leading)

DEFINITION AND GLOSSARY OF TECHNICAL TERMS

11	BOT	“Build-Operate-Transfer” mode
12	PPP	“Public-Private-Partnership” mode
13	TOD	Transit-Oriented Development
14	Shield Tunneling Machine	a full-section tunneling excavator which can complete tunneling, slag discharging, pipe segments assembling and other operations under the protection of a rigid shield
15	TBM	Tunnel Boring Machine
16	Turnout	a component used for changing the route of a train where a single track splits into two tracks. Turnout is applied in railway tracks
17	Engineering Method	an integrated construction method with application of systematic construction principles to combine advanced technology and scientific management, under which certain engineering practices will be applied to the construction in line with technology
18	Three Transformations	Promotion on the transformation of Chinese manufacturing to Chinese creation, Chinese speed to Chinese quality, and Chinese products to Chinese brands
19	One Belt, One Road	the “Silk Road Economic Belt” and the “21st Century Maritime Silk Road”
20	Three-year Action of State-owned Enterprise Reform	The “1+N” policy system for the reform of state-owned enterprises and top-level design action

COMPANY INFORMATION

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CHEN Yun (*Chairman*)
CHEN Wenjian
WANG Shiqi

Non-executive director

WEN Limin

Independent non-executive directors

CHUNG Shui Ming Timpson
ZHANG Cheng
XIU Long

Supervisors

JIA Huiping (*Chairman*)
YUAN Baoyin
LI Xiaosheng
WANG Xinhua
WAN Ming

Joint company secretaries

HE Wen
TAM Chun Chung *CPA, FCCA*

Authorized representatives

WANG Shiqi
TAM Chun Chung *CPA, FCCA*

Audit and risk management committee

CHUNG Shui Ming Timpson (*Chairman*)
WEN Limin
ZHANG Cheng

Remuneration committee

XIU Long (*Chairman*)
WEN Limin
ZHANG Cheng

Strategy committee

CHEN Yun (*Chairman*)
CHEN Wenjian
WANG Shiqi
CHUNG Shui Ming Timpson
XIU Long

Nomination committee

CHEN Yun (*Chairman*)
CHEN Wenjian
CHUNG Shui Ming Timpson
ZHANG Cheng
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Safety, health and environmental protection committee

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Stock code: 601390

H Shares

Place of listing: The Stock Exchange of Hong Kong Limited
Stock name: China Railway
Stock code: 390

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