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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)

RESULTS ANNOUNCEMENT FOR THE YEAR OF 2022

The board of directors (the “**Board**” or “**Board of Directors**”) of China Railway Group Limited (the “**Company**” or “**China Railway**”) is pleased to announce the audited consolidated results of the Company and its subsidiaries (the “**Group**”) for the year ended 31 December 2022.

1 CORPORATE INFORMATION

Basic Information

Stock Name:	China Railway (A Share)	China Railway (H Share)
Stock Code:	601390	390
Stock Exchange on which Shares are Listed:	Shanghai Stock Exchange	The Stock Exchange of Hong Kong Limited
Registered Address:	918, Block 1, No. 128, South 4th Ring Road West, Fengtai District, Beijing, People's Republic of China	
Postal Code:	100070	
Website:	www.crec.cn	
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Contact Details

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2 SUMMARY OF ACCOUNTING DATA

2.1 Key Accounting Data Prepared under International Financial Reporting Standard (“IFRS”)

2.1.1 Summary of consolidated income statement

	For the year ended 31 December					Change
	2022	2021	2020	2019	2018	2022 vs 2021
	<i>RMB million</i>					(%)
Revenue						
Infrastructure Construction	1,019,730	953,038	876,310	762,084	646,914	7.0
Survey, Design and Consulting Services	19,795	18,607	17,321	17,031	15,095	6.4
Engineering Equipment and Component Manufacturing	38,863	33,176	29,793	24,322	20,787	17.1
Property Development	54,082	51,300	49,763	43,662	43,991	5.4
Other Businesses	111,538	101,942	74,183	70,402	67,730	9.4
Inter-segment Eliminations and Adjustments	(89,659)	(84,791)	(72,638)	(66,658)	(54,134)	
Total	<u>1,154,349</u>	<u>1,073,272</u>	<u>974,732</u>	<u>850,843</u>	<u>740,383</u>	7.6
Gross Profit	108,890	103,386	90,189	79,864	71,658	5.3
Profit before Tax	44,692	39,636	35,612	33,187	24,945	12.8
Profit for the Year	<u>34,972</u>	<u>30,470</u>	<u>27,250</u>	<u>25,379</u>	<u>17,436</u>	14.8
Profit for the Year attributable to Owners of the Company	<u>31,276</u>	<u>27,618</u>	<u>25,188</u>	<u>23,678</u>	<u>17,198</u>	13.2
Basic and Diluted Earnings per Share (RMB)	<u>1.198</u>	<u>1.037</u>	<u>0.963</u>	<u>0.950</u>	<u>0.718</u>	15.5

2.1.2 Summary of consolidated balance sheet

	As at 31 December					Change 2022 vs 2021 (%)
	2022	2021	2020	2019	2018	
	<i>RMB million</i>					
Assets						
Current Assets	898,778	801,012	742,107	709,770	652,040	12.2
Non-current Assets	714,241	560,568	457,870	346,271	290,473	27.4
Total Assets	<u>1,613,019</u>	<u>1,361,580</u>	<u>1,199,977</u>	<u>1,056,041</u>	<u>942,513</u>	18.5
Liabilities						
Current Liabilities	873,375	787,860	705,145	676,034	622,475	10.9
Non-current Liabilities	316,734	215,526	181,786	134,679	98,057	47.0
Total Liabilities	<u>1,190,109</u>	<u>1,003,386</u>	<u>886,931</u>	<u>810,713</u>	<u>720,532</u>	18.6
Total Equity	<u>422,910</u>	<u>358,194</u>	<u>313,046</u>	<u>245,328</u>	<u>221,981</u>	18.1
Total Equity and Liabilities	<u>1,613,019</u>	<u>1,361,580</u>	<u>1,199,977</u>	<u>1,056,041</u>	<u>942,513</u>	18.5

2.2 Differences between Chinese Accounting Standard (“CAS”) and IFRS

	Net Assets as at 31 December 2022 <i>RMB million</i>	Profit for the year ended 31 December 2022 <i>RMB million</i>
In accordance with CAS	301,230	31,276
Adjustments as required by IFRS:		
– Recognition of loss on shares conversion scheme of a subsidiary	(148)	–
In accordance with IFRS	<u>301,082</u>	<u>31,276</u>

3 CHANGES IN SHARE CAPITAL AND INFORMATION ON SHAREHOLDERS

3.1 Changes in Shares Capital

3.1.1 Changes in shares

Unit: Shares

	Before the change		Increase/decrease in the change (+,-)					After the change	
	Number	Percentage (%)	Issuance of new shares	Bonus shares	Reserve converted to shares	Other	Sub-total	Number	Percentage (%)
I. Shares with selling restrictions	0	0	182,646,400	0	0	-1,379,700	181,266,700	181,266,700	0.73
1. Shares held by the State	0	0	0	0	0	0	0	0	0
2. Shares held by the State-owned legal person	0	0	0	0	0	0	0	0	0
3. Shares held by other domestic shareholders	0	0	182,646,400	0	0	-1,379,700	181,266,700	181,266,700	0.73
Including: Shares held by domestic non-State-owned legal person	0	0	0	0	0	0	0	0	0
Shares held by domestic natural person	0	0	182,646,400	0	0	-1,379,700	181,266,700	181,266,700	0.73
4. Shares held by foreign shareholders	0	0	0	0	0	0	0	0	0
Including: Shares held by foreign person	0	0	0	0	0	0	0	0	0
Shares held by foreign natural person	0	0	0	0	0	0	0	0	0
II. Tradable shares without selling restrictions	24,570,929,283	100	0	0	0	0	0	24,570,929,283	99.27
1. RMB-denominated ordinary shares	20,363,539,283	82.88	0	0	0	0	0	20,363,539,283	82.27
2. Domestically-listed foreign shares	0	0	0	0	0	0	0	0	
3. Overseas listed foreign shares	4,207,390,000	17.12	0	0	0	0	0	4,207,390,000	17.00
4. Other	0	0	0	0	0	0	0	0	0
III. Total number of shares	<u>24,570,929,283</u>	<u>100</u>	<u>182,646,400</u>	<u>0</u>	<u>0</u>	<u>-1,379,700</u>	<u>181,266,700</u>	<u>24,752,195,983</u>	<u>100</u>

3.1.2 Explanation on changes in shares

On 23 February 2022, the Company completed the first grant of the 2021 Restricted Share Incentive Scheme, with 170,724,400 restricted shares registered for the first grant, and the total share capital of the Company increased from 24,570,929,283 shares to 24,741,653,683 shares.

On 30 November 2022, the Company completed the grant of the reserved portion of the 2021 Restricted Share Incentive Scheme, with 11,922,000 restricted shares in the reserve portion registered for grant, and the total share capital of the Company increased from 24,741,653,683 shares to 24,753,575,683 shares.

On 28 December 2022, as among the participants in the first grant under the 2021 Restricted Share Incentive Scheme of the Company, 2 participants were transferred out and did not work as the previous position in the Company due to organisational arrangements, 3 participants were unqualified for the incentive scheme due to incompetence to the position, unqualification in performance appraisal, negligence, violation etc. In accordance with the 2021 Restricted Share Incentive Scheme and relevant laws and regulations, the Company repurchased and cancelled the above 5 participants of all the Restricted Shares (1,379,700 Restricted Shares in total) which were granted but not yet unlocked. The total share capital of the Company was reduced from 24,753,575,683 shares to 24,752,195,983 shares.

3.1.3 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

Unit: Yuan Currency: RMB

Financial indicator	Whole year of 2022		Fourth Quarter of 2022	
	Taking into account the Restricted Shares	Without taking into account the Restricted Shares	Taking into account the Restricted Shares	Without taking into account the Restricted Shares
Earnings per share	1.198	1.204	0.327	0.333
Net assets per share	10.33	10.40	0.34	0.34

Note 1: When calculating earnings per share, the Restricted Shares that have not yet met the unlocking conditions are deducted from the weighted average number of ordinary shares issued by the Company.

Note 2: According to relevant accounting standards, when calculating earnings per share, the net profit attributable to shareholders of a listed company should deduct dividends or interest on preferred shares, perpetual bonds and other equity instruments as well as the impact of Restricted Share.

Note 3: When calculating net assets per share, the net assets attributable to shareholders of listed companies shall deduct the impact of preferred shares, perpetual bonds and other equity instruments.

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

Not applicable

3.2 Changes in Shares with Selling Restrictions

Unit: Shares

Category of grantees	Number of shares with selling restrictions at the beginning of the year	Number of shares released from selling restrictions during the year	Number of shares with selling restrictions granted during the reporting period	Number of shares with selling restrictions at the end of the year	Date of grant	Price of grant (RMB)	Closing price immediately prior to the date of grant (RMB)	Reasons for selling restrictions	Date of releasing selling restrictions
692 incentive participants (employees) (excluding 5 participants whose restricted shares have been repurchased and cancelled)	0	0	169,344,700	169,344,700	17 January 2022	3.55RMB/share	5.94RMB/share	Restricted Share Incentive Scheme	24 months, 36 months, 48 months
50 incentive participants (employees)	0	0	11,922,000	11,922,000	2 November 2022	3.68RMB/share	5.06RMB/share	Restricted Share Incentive Scheme	24 months, 36 months, 48 months

Shares held by five incentive participants were repurchased and cancelled. The repurchase price of the restricted shares repurchased from 3 participants was RMB3.354 per share. The repurchase price of the restricted shares repurchased from 2 participants was RMB3.354 per share, plus interests calculated according to the benchmark deposit interest rate published by the People's Bank of China for the same period.

Category of grantees	Number of shares with selling restrictions at the beginning of the year	Number of shares released from selling restrictions during the year	Number of shares with selling restrictions granted during the reporting period	Number of shares with selling restrictions repurchased during the year	Date of grant	Price of grant (RMB)	Closing price immediately prior to the date of grant (RMB)	Reasons for selling restrictions	Date of releasing selling restrictions	Date of repurchase for cancellation
5 incentive participants (employees)	0	0	1,379,700	1,379,700	17 January 2022	3.55RMB/share	5.94RMB/share	Restricted Share Incentive Scheme	24 months, 36 months, 48 months	28 December 2022

As at the respective dates of grants of restricted shares, the weighted average closing price immediately before the dates on which the restricted shares were granted during the year ended 31 December 2022 is RMB5.88/share. The total number of granted restricted shares represents 0.88% of the weighted average number of A shares of the Company in issue during the reporting period.

Details of shares granted to senior management under the 2021 Restricted Share Incentive Scheme during the reporting period

Unit: share

Name	Title	Number of shares with selling restrictions held at the beginning of the year	Number of shares with selling restrictions granted during the reporting period	Price of grant of shares with selling restrictions (RMB)	Unlocked shares	Locked shares	Number of shares with selling restrictions held at the end of the year	Market price at the end of the reporting period (RMB)
KONG Dun	Standing member of the CPC committee, Vice President, Chief Engineer	0	400,000	3.55 RMB/share	0	400,000	400,000	2,224,000
MA Jiangqian	Standing member of the CPC committee, Vice President	0	400,000	3.55 RMB/share	0	400,000	400,000	2,224,000
LI Xincheng	Standing member of the CPC committee, Vice President	0	400,000	3.55 RMB/share	0	400,000	400,000	2,224,000
HE Wen	Secretary to the Board	0	400,000	3.55 RMB/share	0	400,000	400,000	2,224,000
ZHAO Bin	Chief Economist	0	223,200	3.55 RMB/share	0	223,200	223,200	1,240,992
GENG Shubiao	Assistant to President	0	223,200	3.55 RMB/share	0	223,200	223,200	1,240,992
Total	/	<u>0</u>	<u>2,046,400</u>	<u>/</u>	<u>0</u>	<u>2,046,400</u>	<u>2,046,400</u>	<u>/</u>

3.3 Issuance and Listing of Securities

3.3.1 Issuance of securities as at the reporting period

Not applicable

3.3.2 Changes in respect of the total number of shares and the shareholder structure of the Company and changes in respect of the asset and liability structure of the Company

Unit: Million; Currency: RMB

Financial Indicator	Taking into account the restricted shares	Without taking into account the restricted shares
Total Assets	1,613,019	1,612,407
Total Liabilities	1,190,109	1,189,502
Owners' Equity	422,910	422,905
Total Liabilities to Total Assets Ratio (%)	<u>73.78</u>	<u>73.77</u>

3.3.3 Existing shares held by internal employee

Not applicable

3.4 Information of Shareholders and Ultimate Controller

3.4.1 Number of Shareholders

Total number of shareholders of ordinary shares as at the end of the reporting period	501,128
Total number of shareholders of ordinary shares at the end of the month preceding the date of the annual report	495,843
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 annual report	0

3.4.2 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 Conditions of shares	Number	Nature of shareholder
1	China Railway Engineering Group Company Limited (“CREC”) (Note 1)	24,355,500	11,623,119,890	46.96	0	Nil	0	State-owned legal person
2	HKSCC Nominees Limited (Note 2)	430,292	4,009,592,922	16.20	0	Nil	0	Other
3	China Securities Finance Corporation Limited	0	619,264,325	2.50	0	Nil	0	State-owned legal person
4	Hong Kong Securities Clearing Company Limited	192,878,843	548,029,771	2.21	0	Nil	0	Other
5	China Reform Holdings Corporation Ltd.	0	387,050,131	1.56	0	Nil	0	State-owned legal person
6	Central Huijin Asset Management Ltd.	0	230,435,700	0.93	0	Nil	0	State-owned legal person
7	China Great Wall Asset Management Co., Ltd	-195,388,472	176,804,035	0.71	0	Nil	0	State-owned legal person
8	China Orient Asset Management Co., Ltd.	-51,551,620	171,720,124	0.69	0	Nil	0	State-owned legal person
9	Boshi Fund – Agricultural Bank of China – Boshi China Securities Financial Asset Management Plan	0	131,135,600	0.53	0	Nil	0	Other
10	Yifangda Fund – Agricultural Bank of China – Yifangda China Securities Financial Asset Management Plan	0	131,135,600	0.53	0	Nil	0	Other

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 Conditions of shares	Number	Nature of shareholder
10	Dacheng Fund – Agricultural Bank of China – Dacheng China Securities Financial Asset Management Plan	0	131,135,600	0.53	0	Nil	0	Other
10	Jiashi Fund – Agricultural Bank of China – Jiashi China Securities Financial Asset Management Plan	0	131,135,600	0.53	0	Nil	0	Other
10	Guangfa Fund – Agricultural Bank of China – Guangfa China Securities Financial Asset Management Plan	0	131,135,600	0.53	0	Nil	0	Other
10	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
10	Huaxia Fund – Agricultural Bank of China – Huaxia China Securities Financial Asset Management Plan	0	131,135,600	0.53	0	Nil	0	Other
10	Yinhua Fund – Agricultural Bank of China – Yinhua China Securities Financial Asset Management Plan	0	131,135,600	0.53	0	Nil	0	Other
10	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 largest shareholder, does not have related relations or acting-in-concert relationship with the other above shareholders. The Company is not aware of any related relationships or acting-in-concert relationship among the other above 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)	11,458,725,890	RMB-denominated ordinary shares	11,458,725,890
		164,394,000	Overseas listed foreign shares	164,394,000
2	HKSCC Nominees Limited (Note 2)	4,009,592,922	Overseas listed foreign shares	4,009,592,922
3	China Securities Finance Corporation Limited	619,264,325	RMB-denominated ordinary shares	619,264,325
4	Hong Kong Securities Clearing Company Limited	548,029,771	RMB-denominated ordinary shares	548,029,771
5	China Reform Holdings Corporation Ltd.	387,050,131	RMB-denominated ordinary shares	387,050,131
6	Central Huijin Asset Management Ltd.	230,435,700	RMB-denominated ordinary shares	230,435,700
7	China Great Wall Asset Management Co., Ltd.	176,804,035	RMB-denominated ordinary shares	176,804,035
8	China Orient Asset Management Co., Ltd.	171,720,124	RMB-denominated ordinary shares	171,720,124
9	Boshi Fund – Agricultural Bank of China – Boshi China Securities Financial Asset Management Plan	131,135,600	RMB-denominated ordinary shares	131,135,600
10	Yifangda Fund – Agricultural Bank of China – Yifangda China Securities Financial Asset Management Plan	131,135,600	RMB-denominated ordinary shares	131,135,600
10	Dacheng Fund – Agricultural Bank of China – Dacheng China Securities Financial Asset Management Plan	131,135,600	RMB-denominated ordinary shares	131,135,600
10	Jiashi Fund – Agricultural Bank of China – Jiashi China Securities Financial Asset Management Plan	131,135,600	RMB-denominated ordinary shares	131,135,600
10	Guangfa Fund – Agricultural Bank of China – Guangfa China Securities Financial Asset Management Plan	131,135,600	RMB-denominated ordinary shares	131,135,600

No.	Name of shareholder	Number of shares held without selling restrictions	Type and number of shares	
			Type	Number
10	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
10	Huaxia Fund – Agricultural Bank of China – Huaxia China Securities Financial Asset Management Plan	131,135,600	RMB-denominated ordinary shares	131,135,600
10	Yinhua Fund – Agricultural Bank of China – Yinhua China Securities Financial Asset Management Plan	131,135,600	RMB-denominated ordinary shares	131,135,600
10	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 largest shareholder, does not have related relations or acting-in-concert relationship with the other above shareholders. The Company is not aware of any related relationships or acting-in-concert relationship among the other above shareholders.

Statement on shareholders of preference shares with reinstated voting rights and the number of shares held Nil

Note 1: During the period from 31 March 2022 and 30 September 2022, CREC acquired additional 24,355,500 A shares of the Company through the trading system on Shanghai Stock Exchange. Following the increase in shareholding, CREC held 11,623,119,890 shares of the Company (including 11,458,725,890 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 2022.

3.4.3 Shareholdings of top ten shareholders of shares with selling restrictions and terms of selling restrictions

Not applicable

3.4.4 Strategic investors or general legal persons becoming the top ten Shareholders by placing new shares

Not applicable

3.5 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 2022, 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	11,458,725,890	Long position	55.77	46.29

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	247,978,335	Long position	5.89	1.00
		9,988,000	Short position	0.24	0.04
Deutsche Bank Aktiengesellschaft	(Note 1)	229,803,271	Long position	5.46	0.93
		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	0.85
		94,560,550	Short position	2.25	0.38

Note:

- 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 derivative	Listed equity derivatives settled in cash	Non-listed equity derivatives payment in kind	Non-listed equity derivatives settled in cash	Listed equity derivatives payment in kind	Listed equity derivatives settled in cash	Non-listed equity derivatives payment in kind	Non-listed equity derivatives settled in cash
	payment in kind	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 2022, 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.

3.6 Information on Controlling Shareholder and Ultimate Controller

3.6.1 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

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



3.6.3 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 SASAC is authorised by the State Council to perform its duties as an investor on behalf of the State. The scope of supervision of the SASAC 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

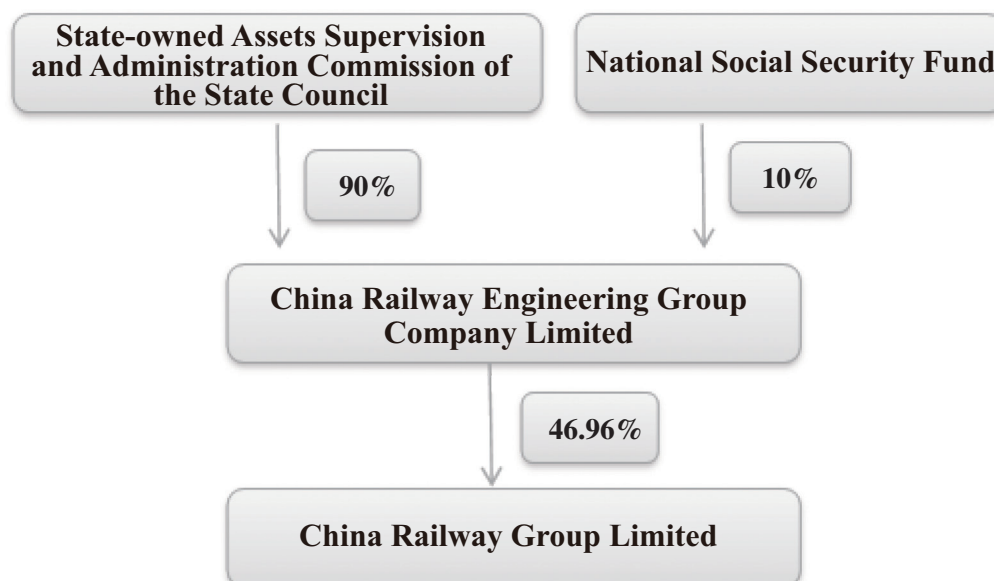
(3) *Special explanation that the Company does not have any controlling shareholder*

Not applicable

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

Not applicable

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



3.6.5 Ultimate controller control the Company through trust or other asset management methods

Not applicable

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

Not applicable

3.8 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%.

3.9 Information on the Restrictions on Reduction of Shareholdings

Not applicable

3.10 Details of Repurchase of Shares during the Reporting Period

The details are set out in the "Repurchase, Sale or Redemption of Securities" on page 129 of this announcement.

4 MANAGEMENT DISCUSSION AND ANALYSIS

4.1 Review and Outlook

Starlight guides those on the right journey, and it is the dedication and determination that inspires people the most. In 2022, China Railway, under the guidance of Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, earnestly studied and implemented the spirit of the Party's 20th National Congress. With the goal of building China Railway into a world-class enterprise, we balanced the qualitative and quantitative growth, pursued development while ensuring safety, seized opportunities, reformed and innovated, worked hard and overcame difficulties. Consequently, new achievements were made in promoting high-quality corporate development, with all economic indicators reaching new historical highs and contributing to the drive and strength of China Railway for the Chinese path to modernization.

Over the past year, China Railway strived for great success. Keeping in mind the “two big pictures”, we continued to consolidate the advantages of our core business. The total amount of new contracts signed in the year reached RMB3 trillion for the first time. The market share in the railway sector ranked first in China, the market share in urban rail, road, long-span bridges, long tunnels and electrification ranked high, and the market share in full-section shield ranked first in China for 11 consecutive years and first in the world for six years. We made outstanding achievements in overseas market development, the business areas in the “second curve”, such as water conservancy and hydropower, clean energy, ecological protection, urban operations, and airport and runway, accelerated momentum building, with efficient advancement in construction and production, and steady economic returns. General Secretary Xi Jinping inspected the Erqi Factory Training Base for the ice and snow sports, a key project of the Beijing Winter Olympics designed by China Railway, and personally observed the test run of the Jakarta-Bandung High Speed Railway during the G20 Summit, demonstrating the power of “Constructed by China” to the world. We deeply advanced stability on the six fronts and security in the six areas to help keep the overall economic performance stable, relocated multiple subordinate companies to Xiong'an New Area in the first relocation by an industrial cluster of the centrally state-owned enterprise, hired more than 21,000 fresh college graduates, participated in pandemic prevention and control, and earthquake and flood relief, which shows both our loyalty and courage. Bearing in mind the country's most fundamental interests, we made every effort to secure a decisive victory in the three-year undertaking to reform state-owned enterprises, with continuously improved governance system, and more mature and established modern corporate governance suitable for state-owned enterprises with Chinese characteristics. We intensified industrial transformation and upgrading, pushed ahead with the reform of the “three systems” by resolutely overcoming challenges, introduced restricted share incentives for key personnel for the first time, and improved the market-based operation mechanism. The Company was rated as A for nine consecutive years in the annual operational performance assessment of state-owned enterprises, and A for five consecutive years in the operating results during the tenure.

Over the past year, China Railway forged ahead. We focused on efficiency improvement and value creation, adhered to the principle of “ensuring the successful completion of each project down to every last detail”, deployed and implemented the three-year action plan for project management efficiency improvement, built a large business management system and indicator assessment system with “cash flow, net profit, operating income” as the focus. We acted to increase income and reduce expenditure, solidly performed “double collections”, “pressure reduction” and “loss management”, continuously strengthened rigid budget management, reduced the scale of sustainable debts in an orderly manner, and effectively controlled the scale of financing and guarantee. We strengthened risk prevention and control and compliance management, deeply promoted the transformation of a qualitatively safe enterprise to “synergy of management and supervision”, intensified the application of audit results to promote management improvement, advocated the rule of law in China Railway to form a “four-pronged” supervision pattern, and construct a safety barrier for the high-quality development of the Company in all aspects. We actively practiced the “three transformations” to build the core strength of intelligent manufacturing in China, upheld the principle of application-oriented research and collaborative innovation, vigorously carried out cutting-edge original technology research, and accelerated practical and pursuant technology research. We set up a professional R&D center for intelligent construction and “double carbon”, increased the construction of “First-class Engineering Bureau”, optimized the evaluation standard of “Top 20 Engineering Companies of Grade 3”, clearly established the orientation of “development priority and quality first”, and continuously enhanced the endogenous momentum to promote the high-quality development of the Company. The Company was awarded the title of Excellent Performance Enterprise and Enterprise with Outstanding Contribution to Scientific and Technological Innovation, and selected as a model state-owned enterprise for governance.

Over the past year, China Railway vigorously leaped forward. Bearing in mind the instructions of General Secretary Xi Jinping, we strengthened the Party’s leadership and construction in all aspects to ensure the high-quality corporate development as guided by high-quality Party building. We successfully completed the test run of the world’s first permanent magnet maglev rail transportation project “Red Rail”, the world’s first pile-beam integrated bridge erecting machine we developed was included in the “Top Ten Tools with Great Significance Developed by Central State-owned Enterprises”, and we developed China’s first motorized hard rock tunnel boring machine (TBM) and the country’s first magnetic levitation air track vehicle, amongst others. Zangmu Yarlung Zangbo River Double-track Bridge on the Lalin Section of the Sichuan-Tibet Railway and the V-shaped giant columns of the Huangmugang Transportation Hub won the highest award at the International Bridge Conference and ITA Tunnelling and Underground Space Awards. Thirty-nine projects were selected among “China’s Top 100 Buildings in the New Era 2022”. China Railway brand won the “China Brand Festival Award” and was named the “National Business Card of the World”. We moved up to 34th place in the latest Fortune Global 500 list and ranked 2nd among the top 250 global contractors by Engineering News-Record (“ENR”).

We will continue to strive for the future and reboot with a consolidated effort. The year 2023 is the opening year for the full implementation of the spirit of the 20th Party Congress, and it is also a critical year for the implementation of the 14th Five-year Plan strategy. Under the guidance of Xi Jinping Thought on Socialism with Chinese Characteristics in the New Era, we will anchor on the primary task of high-quality development, set the development goals of “three increases, two controls and four upgrades” according to the assessment index system of “one profit and five ratios” by the State-owned Assets Supervision and Administration Commission of the State Council in consideration of the situation of China Railway, focus on improving efficiency and value creation, accelerate the construction towards a world-class enterprise, accumulate strength in terms of management, reform, technology, talent and Party building in all aspects, build a modernized industrial system, prevent and resolve major risks, achieve effective improvement in quality and reasonable growth in quantity, continuously improve our core competitiveness, and strengthen our core functions, so as to play a leading role in promoting the overall improvement in economic performance, and contribute the wisdom and power of China Railway to make a positive start to building a modernized socialist country in all aspects.

4.2 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, 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.

4.2.1 Industry Development Overview

(1) Infrastructure construction business

(1) Domestically

In 2022, the CPC Central Committee and the State Council made decisive decisions and plans, and promptly rolled out a package of policies and follow-up measures to stabilize the economy. In particular, efforts were put on infrastructure development, which played a positive role in expanding effective investment, stabilizing the overall economy, and promoting high-quality economic development. Throughout the year, traditional infrastructure sectors, such as railways, highways, urban rails, water conservancy and underground space development enjoyed a steady growth momentum, and the market for the construction of new types of infrastructure developed rapidly. According to the data released by the National Bureau of Statistics, in 2022, the fixed assets investments nationwide amounted to RMB57.2 trillion, representing a year-on-year increase of 5.1%, 2.1 percentage points higher than the growth rate of GDP. The growth rate of infrastructure investment increased rapidly from 0.4% in 2021 to 9.4% in 2022. The added value of the construction industry increased by 4.1% year on year, accounting for 6.9% of GDP, which fully embodies the position of the construction industry as a pillar industry in the national economy. In 2022, China's investments in fixed assets in transportation exceeded RMB3.8 trillion, an increase of more than 6% year on year. In terms of railways, in 2022, China's investments in fixed assets of railways amounted to RMB710.9 billion, decreased 5.1% year on year. New lines of 4,100 kilometres were put into operation, including 2,082 kilometres of high-speed railways. The length of railways in operation nationwide reached over 155,000 kilometres (among which, the length of high-speed railways reached 42,000 kilometres) as of the end of 2022. In terms of highways, in 2022, China's investments in highway construction amounted to RMB2.9 trillion, increased 9.7% year on year, including RMB1.47 trillion in expressways, increased 6.6% year on year. In terms of water conservancy construction, in 2022, China's investments in water conservancy construction amounted to RMB1,089.3 billion, an increase of 43.8% over 2021. The number of new water conservancy projects and the scale of investment saw a record high. In terms of urban rail transit, 25 new lines with a total length of 1,085.17 kilometres were put into operation, including 803.12 kilometres of subways (74.01%) and 212.39 kilometres of urban rapid rail lines (19.57%).

Infrastructure construction is an important starting point for stabilizing investment, and PPP has increasingly become an important driving force for infrastructure investment. PPP has played an important role in stimulating the vitality of private investment and facilitating the implementation of major national strategies. As of 31 December 2022, there were 14,038 projects in database in the PPP of the Ministry of Finance, with a total investment of RMB20.92 trillion, including 10,346 projects in the management library with an investment of RMB16.62 trillion; 3,692 projects on the reserve list, with an investment of RMB4.30 trillion. In order to further revitalize stock assets and expand effective investment, National Development and Reform Commission, China Securities Regulatory Commission and many local governments have actively introduced policies to promote the implementation of REITs since 2022, encourage the revitalization of stock assets in key areas, regions and enterprises, and promote the healthy development of REITs in the infrastructure sector.

(2) International

2022 saw the complex once-in-a-century changes and geopolitical conflicts, rising risk of stagflation in the world economy, and significant increase in factors of instability and uncertainty. China's overseas contracted engineering projects and labor service cooperation industries faced a more complex and severe external environment. China continued to actively promote high-quality Belt and Road cooperation, and its investment cooperation with countries along the Belt and Road remained active. According to the statistics issued by the Ministry of Commerce, in 2022, China's overseas contracted engineering projects achieved a turnover of RMB1,042.49 billion, a year-on-year increase of 4.3% (equivalent to USD154.99 billion, basically the same as last year), and newly signed contracts amounted to RMB1,702.17 billion, a year-on-year increase of 2.1% (equivalent to USD253.07 billion, a decrease of 2.1%). Among them, Chinese enterprises signed 5,514 new contracts for overseas contracted engineering projects in countries along the "Belt and Road", with value of RMB871.84 billion, a year-on-year increase of 0.8% (equivalent to USD129.62 billion, a decrease of 3.3%), accounting for 51.2% of amount of the contract value of China's new contracts for overseas contracted engineering projects in the same period. The turnover achieved RMB571.31 billion, a year-on-year decrease of 1.3% (equivalent to USD84.94 billion, a decrease of 5.3%). In view of the cooperation development trend, investment cooperation with countries along the Belt and Road is still 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*

In 2022, the overall size of the engineering survey and design industry continued to rise, with significant differences among different segments. In particular, the overall performance of transport design enterprises is better than the industry average owing to the benefit from “actively expanding effective investment, moderately advancing infrastructure investment”; the overall performance of construction design enterprises is not satisfactory owing to the continuous impact from the upstream real estate market. In April 2022, the China Engineering & Consulting Association published the Guiding Opinions on the Informationization of the Engineering Survey and Design Industry in the 14th Five-Year Plan Period, which puts forward the development requirements and transformation ideas for corporate digitalization. In May, the Ministry of Housing and Urban-Rural Development issued the 14th Five-Year Plan for Engineering Survey and Design Industry Development, which further points out the industrial development direction. In the future, with the change of demand scenes, the engineering construction industry will face the comprehensive synergy and integration of space, industry and data. The engineering survey and design enterprises will deepen the digital transformation strategy at four levels of “strategy, tactic, execution and organization, promote the innovation of business model and profit model with engineering technology as the core, explore the differentiated development path, and realize sustainable growth.

(3) *Engineering equipment and component manufacturing business*

In 2022, the pace of high-end, smart and green development of China's manufacturing sector was accelerated, structural adjustment, transformation and upgrading was further advanced, the industrial economy stabilized and improved, the industry's support and contribution to the national economy further increased, and industrial development became more resilient. The value added of industrial enterprises above designated business scale recorded a year-on-year increase of 3.6%, in which the added value of equipment manufacturing industry increased by 5.6% year on year, manufacturing investment grew by 9.1% year on year, 4.0 percentage points higher than China's fixed asset investments. With the issuance of the 14th Five-Year Plan for Modern Comprehensive Transportation Network Development, the 14th Five-Year Plan for Construction Industry Development, Opinions on Financial Support for the Work of Carbon Neutrality and Carbon Peaking, Notice on Supporting the Making Up of Shortcomings and Reinforcing of Advantages of National Integrated Freight Hub, the 14th Five-Year Plan for New Urbanization Implementation, among others, China will increase funding for weak points in the equipment industry, help the manufacturing industry break through the bottleneck of industrial development, promote the equipment digitalization, foster new modalities and models of business, which creates favorable conditions for the development of the equipment industry. Guided and driven by the national "double carbon" policy, the application of steel structure and other energy saving and environmental friendly materials has become an important lever to promote the green and industrial development of construction and achieve the transformation and upgrading of traditional industries. The proportion of steel structure buildings and steel structure bridges in China continues to increase, and the bridge steel structure business is still in a period of golden development. The market pattern of tunnel boring machine was further changed, and scope of application continuously expanded from subway construction at the early stage to subway, municipal works, water conservancy, pumped storage, railway, mine construction, etc., and the application of tunnel boring machine in emerging business segments have been continuously increased.

(4) *Property development business*

In 2022, the national regulatory authorities issued a number of favorable policies to support consumer demands and corporate demands, and increasingly intensified them, and allowed local governments to tailor their specific policies. In 2022, more than 300 provinces and cities (counties) issued nearly 1,000 policies, reached peak in recent years, with further increased policy intensity, optimized demand-side policies, and the housing mortgage interest rate in many places reached a historic low. According to the data released by the National Bureau of Statistics, in 2022, the property development investments nationwide amounted to RMB13,289.5 billion, representing a year-on-year decline of 10.0%. The investments in residential housing amounted to RMB10,064.6 billion, representing a year-on-year decline of 9.5%; office building investments amounted to RMB529.1 billion, representing a year-on-year decline of 11.4%; the investments in commercial housing amounted to RMB1,064.7 billion, representing a year-on-year decline of 14.4%. The area of commodity housing available for sale at the end of the year was 563.66 million square meters, representing a year-on-year increase of 53.43 million square meters, including 269.47 million square meters of commercial housing available for sale, representing a year-on-year increase of 41.86 million square meters. It is expected that in 2023, the central government will continue to adhere to the keynote of “houses are for living in and not for speculation”, and there is room for further optimization of policies at both ends of supply and demand.

(5) *Other businesses*

Mining business

In 2022, affected by multiple factors such as the tightening of global liquidity, slowing demand, geopolitical conflicts, and restructuring of industrial chains, the downward pressure on the global economy increased, and consequently the prices of non-ferrous metals showed significant fluctuations at high levels throughout the year. Regarding copper products, the global copper mine operations were generally stable in 2022 with a slight decrease in production growth rate. With the exception of individual copper mines being affected by strikes, blockades and other factors, most mines operated stably. According to the data provided by Wind, the LME copper closing price was USD8,374/ton at the end of the year, a 13.8% decrease from the beginning of the year, with an average price of approximately USD8,790/ton for the year. Regarding molybdenum products, global molybdenum production in 2022 was relatively stable with no new molybdenum mining capacity added. Due to factors such as reduced overseas copper ore production and declining molybdenum grades, molybdenum concentrate production was slightly lower than the previous year. From the perspective of supply and demand, molybdenum demand rebounded in 2022, leading to a shift from surplus to shortage in supply. As a result, molybdenum prices continued to rise, especially since the fourth quarter of 2022, with a year-end closing price of RMB4,290/ton and an average price of approximately RMB2,806/ton for the year for molybdenum concentrate (40%-50%), according to data provided by Antaike. With the recovery of the domestic economy and the implementation of a series of policies to stabilize growth, such as expanding domestic demand and stabilizing the real estate market, the conversion of consumption momentum from old to new and the rapid development of new fields have increased the demand for copper, cobalt, molybdenum, lithium and other non-ferrous metals, providing stable support for their prices.

Financial business

In 2022, faced with a complex and ever-changing international landscape and the arduous task of domestic reform and development, China increased efforts for the implementation of a stable monetary policy, utilizing the guiding function of structural monetary policy tools. The scale of monetary credit and social financing grew reasonably, with continuous optimization of credit structures and a stable yet descending comprehensive financing cost. This effectively supported the stabilization of macroeconomic situation and the overall smooth operation of the financial market. 2022 is the first year of formal implementation of the new regulations on capital management in the trust industry after the transition period ended. Following the industry transformation, a series of institutional reforms were enacted immediately. The China Banking and Insurance Regulatory Commission (“CBIRC”) issued the Administrative Measures for the Assurance Funds and Liquidity Mutual Assistance Funds for the Trust Industry (Draft for Comment) in February, Notice Regarding Trust Companies’ Work on Financial Stability Security Fund, Trust Industry Stability Fund, and Trust Industry Fund Raising in June, and the Notice Regarding the Regulation of Trust Company Trust Business Classification (Draft for Comment) in December, which will have a profound impact on the trust industry. It is expected that as the economy recovers and the real estate market rebounds, the scale of industry trust assets will show a steady upward trend. In terms of the industry of financial companies, the revised Measures for the Administration of Financial Companies of Enterprise Groups by CBIRC came into effect, which further standardizes and improves the industry through measures such as “extending upward supervision, shrinking business scope, and clarifying regulatory indicators”. In terms of fund industry, the Asset Management Association of China issued a number of normative documents such as Public Disclosure of Private Fund Filing Cases in order to further improve the system of private fund registration and filing rules, optimize management of private fund registration and filing and self regulation, and guide the high-quality development of the private fund industry.

4.2.2 Business Development Overview

Shouldered the mission with determination and played the pillar role to the most extent. The Group actively served the national strategies, fully implemented the important deployment of the CPC Central Committee, the State Council and SASAC on growth stabilization, adhered to the principles of fast starting, early involvement and a good start, and made comprehensive efforts to improve our business. While constantly consolidating our core advantages, we actively explored the “second curve” market such as urban renewal, water conservancy and hydropower, environmental protection, and clean energy, accelerated contract conversion, made every effort to stabilize and increase production, and ensure that we can effectively play our pillar role and become a reliable “anchor” in stabilizing the overall economy. Iconic domestic projects we participated in this year, such as Beijing Fengtai Station, Zhengzhou-Chongqing High-speed Railway, Hangzhou-Taizhou High-speed Railway, Shenzhen Metro “two lines and three hubs”, and Yuchu Expressway, were completed and put into use. Overseas key projects such as the Padma Bridge in Bangladesh and the 10th of Ramadan Railway were successfully completed, showcasing the power of “Constructed in China” to the world.

Successfully completed the reform with remarkable results in quality and efficiency improvement. The Group has fully implemented the three-year action of state-owned enterprise reform and completed a total of 221 tasks in 31 reform aspects in six major reform areas. The Group has obtained A-level in the assessment, and has been evaluated as a “State-owned Enterprise Corporate Governance Demonstration Enterprise”. The Group improved “1+5+N” governance Institutional system, comprehensively implemented the tenure system of managers and contract management, improved the market-oriented employment mechanism, broadened medium and long-term incentive channels, completed the first batch of restricted share incentive scheme covering 747 core backbone personnel, and implemented bonus incentives for key core positions in 13 technology-based enterprises. The Group continued to consolidate the foundation of safety, quality and environmental protection, solidly carried out “8+4” comprehensive governance, carried out in-depth “compliance management strengthening year” activities, continuously improved the operation management and control mechanism of investment and financing projects, and comprehensively strengthened the prevention and control of systemic risks. The Group fully implemented big business management, building a big business management system, strengthening the operation and development, improving and quality and efficiency of project performance, closing and settlement and other links, and continuously injecting new and stronger momentum into “benefit improvement and value creation” to effectively promote the Company to build a new development pattern and effectively enhance the core competitiveness.

Fruitful scientific and technological innovation to signal the brand strength of China Railway. The Group actively implemented the important instructions of “Three Transformations”, gave full play to the leading role of the three national laboratories in innovation, deployed the innovation chain in line with the industrial chain and worked on the industrial chain with the innovation chain, and made every effort to promote the scientific and technological innovation in the “14th Five-Year Plan” period; preemptively engaged in the “new track” of intelligent construction, and built a new brand of “Digital Intelligence China Railway”; implemented the “Double Carbon” target guideline to formulate the carbon peaking action plan of China Railway, and strove to be the industry’s benchmark for green development; carried out the second practical technology innovation competition, and innovation achievements won 6 patent awards; overcame the world’s most difficult problems such as the key technology for designing road-rail bridges in complicated sea area. 44 achievements we developed, such as “key technology research of railroad large-span mid-bearing concrete-filled steel tube arch bridge”, reached the international leading level, and 110 achievements, such as “key technology of construction for implanted rock-socketed pile foundation of offshore wind farm under adverse sea conditions and complex geological conditions”, reached the international advanced level. Our three subsidiaries, namely China Railway Major Bridge Engineering, China Railway Electrification Engineering and China Railway Industry, were selected into the list of the first 200 model enterprises by the SASAC of the State Council.

Implemented the Belt and Road towards in-depth and practical cooperation with shared use and benefits. Faced with a complex international environment, the Group overcame many challenges, vigorously expanded markets, pushed forward project fulfillment, firmly followed the path of specialized, branded, and localized development, and continuously promoted the growth and improvement of overseas business; adhered to the overseas “dual optimization” strategy, continually deepened the overseas operation system reform featuring “one body, two wings, N drives”, systematically outlined the “market map by country”, improved the market system, strengthened the efforts for key countries, key areas, and key projects along the “Belt and Road”, deepened cooperation on traditional infrastructure projects, pushed forward key projects for infrastructure interconnectivity within neighboring countries, and continuously enhanced the capability of providing solutions and products; along with the completion of landmark projects such as the Laos-China Railway, the 10th of Ramadan Light Rail Transit AB Section, and the Padma Bridge in Bangladesh under the “Belt and Road”, the test run of the Jakarta-Bandung High-Speed Railway, and the successful contracting of projects such as Stockholm Metro and Bangladesh National Digital Unicom, China Railway is contributing its strength to continuously driving pragmatic cooperation and improving the level of interconnectivity, and promoting regional coordinated development. During the Reporting Period, the operation of primary business of the Group are described as follows.

1. *New contracts and contract backlog*

In 2022, the amount of new contracts of the Group was RMB3,032.39 billion, representing a year-on-year increase of 11.1%. In 2022, the amount of new contracts in the domestic business amounted to RMB2,848.61 billion, representing a year-on-year increase of 10.5%; the amount of new contracts in the overseas business amounted to RMB183.78 billion, representing a year-on-year increase of 21.1%. In 2022, the Group concentrated on water conservancy and hydropower, ecological environmental protection, and clean energy as the “second curve” business to expand the market scale and gain competitive advantages. During the Reporting Period, the amount of new contracts of the second curve business reached RMB301.892 billion, representing a year-on-year increase of 81.18%. As of the end of the Reporting Period, the amount of the Group’s contract backlog was RMB4,931.10 billion, representing an increase of 8.5% from the end of 2021. The amount of new contracts by business segment is set out as below:

Amount of New Contracts

Unit: 100 million Currency: RMB

Business type	2022	2021	Year-on-year increase/decrease
Infrastructure Construction	26,659.3	24,166.8	10.3%
Including Railway	5,157.8	4,335.7	19.0%
Highway	3,483.1	2,952.6	18.0%
Municipal works and other	18,018.4	16,878.5	6.8%
Survey, Design and Consulting Services	278.9	205.5	35.7%
Industrial Equipment and Component			
Manufacturing	631.9	612.8	3.1%
Property Development	751.9	580.3	29.6%
Other Businesses	2,001.9	1,727.8	15.9%
Total	<u>30,323.9</u>	<u>27,293.2</u>	<u>11.1%</u>

2. *Developments of the Company's principal business activities*

(1) Infrastructure construction business

Infrastructure construction is the core of China Railway, the foundation for consolidating the leading position of China Railway in the construction industry and enhancing brand strength, an important pillar for 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 Company has special-grade qualification for general contracting of construction of railways, highways, municipal public engineering, building engineering, etc. 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 Group to continuously maintain the advantages of construction contracting 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; 32 general contracting projects for highway construction at special grade; and 19 general contracting projects for engineering construction at special grade, 9 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 Engineering Research Center 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 “Belt and Road” including China-Laos Railway, the Indonesian Jakarta-Bandung High – speed Railway, the Budapest-Belgrade Railway and the Padma Bridge in Bangladesh.

During the reporting period, the amount of the Group's new contracts of infrastructure construction business was RMB2,665.93 billion, representing a year-on-year increase of 10.3%. As of the end of the reporting period, the amount of the Group's contract backlog of infrastructure construction business was RMB4,443.77 billion, representing a year-on-year increase of 5.5%. From a business segment perspective: (1) In respect of railway construction business, benefiting from the increase in the size of tendering for large and medium-sized railway market, the amount of new contracts in the Company's railway business maintained a steady growth. In 2022, the amount of new contracts in the railway business amounted to RMB515.78 billion, representing a year-on-year increase of 19.0%; the amount of contract backlog amounted to RMB761.2 billion, representing a year-on-year increase of 5.0%. (2) In respect of the highway construction business, the growth of investments in fixed assets of highways nationwide was accelerated, the amount of new contracts in the Group's highway business in the year amounted to RMB348.31 billion, representing a year-on-year increase of 18.0%; the amount of contract backlog amounted to RMB650.71 billion, representing a year-on-year decrease of 5.9%. (3) In respect of municipal works and other businesses, the Group continued to focus on urban integrated development and strengthened traditional businesses such as municipal construction and real estate to maintain competitive advantages. The results of operations in fields such as water conservancy and hydropower, ports and waterways, and airport engineering were significant, contributing more significantly to the total amount of new contracts. In 2022, the amount of new contracts in the municipal works and other business amounted to RMB1,801.84 billion, representing a year-on-year increase of 6.8%; the amount of contract backlog amounted to RMB3,031.86 billion, representing a year-on-year increase of 8.5%. Among them, the amount of new contracts in municipal works business was RMB314.96 billion, representing a year-on-year decrease of 24.3%; the amount of new contracts in housing construction was RMB841.82 billion, representing a year-on-year increase of 6.2%; the amount of new contracts in urban rail transit business was RMB117.74 billion, representing a year-on-year decrease of 21.1%. (4) In terms of the second curve, during the reporting period, the Group achieved remarkable results. The amount of new contracts in "second curve" business was RMB301.892 billion, accounting for 11.3% of the total amount of new contracts in infrastructure construction business, representing a year-on-year increase of 81.18%. Among them, the amount of new contracts in the water conservancy and hydropower sector was RMB98.557 billion, representing a year-on-year increase of 223.29%; the amount of new contracts in the ecological environmental protection sector was RMB75.223 billion, and those in the clean energy sector was more than RMB40 billion.

(2) Survey, Design and Consulting Services Business

Survey, design and 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 survey, design and 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, smart 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. The Group has won 154 National Excellent Engineering Survey and Design Awards, 101 National Excellent Engineering Consulting Achievement Awards, and 34 International Engineering Consulting (FIDIC) and Engineering Design Awards. In ENR's 2022 ranking of the world's 150 largest design companies, the Group ranked 15th.

In 2022, the Group fully leveraged the professional advantages and leading role of each enterprise in the design sector, rationally deploy and manage production factors, continuously strengthened the design and planning advantages in areas such as highway, water conservancy and hydropower, water resources development and utilization, aquatic ecosystems of rivers or basins, and water environment governance. The Group's new contracts for survey, design and consulting services amounted to RMB27.89 billion, representing a year-on-year increase of 35.7%. As of the end of the reporting period, the value of the Group's contract backlog of survey, design and consulting services business was RMB53.39 billion, representing a year-on-year increase of 7.2%.

(3) Engineering Equipment and Component Manufacturing Business

Engineering equipment and component 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 engineering equipment and component 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 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 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 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, and girder carrier, 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.

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 64% in the high-speed turnout market that requires high technical content (speed over 250km/h), a market share of 46% in the regular turnout market, a market share of 56% in the heavy-haul turnout market, a market share of 70% in the turnout market of urban rail transit, a market share of more than 60% in the large steel structure bridge market, a market share of more than 60% in the catenary components market of high-speed railway, and a market share of approximate 50% in the power supply product market of urban rail transit. CRHIC (stock code: 600528.SH), a controlling subsidiary of the Group, has the most complete products in the field of railway infrastructure equipment in our country and is the only industrial enterprise in A share main board market that mainly engages in high-end equipment for rail transit and underground excavation. CRHEEC (stock code: 688285.SH) is an important supplier engaging in the R&D, production and system integration of domestic electrified catenary components and power supply equipment for urban rail transit. China Railway Prefabricated Construction (stock code: 300374.SZ) is a supplier with rich product structures and integration service capability of prefabricated buildings in the domestic prefabricated building component industry, able to provide a complete set of solutions for prefabricated buildings.

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 2022, the amount of new contracts for the industrial equipment and component manufacturing business of the Group was RMB63.19 billion, representing a year-on-year increase of 3.1%, of which the amount of new contracts of domestic business was RMB62.38 billion and that of new contracts of overseas business was RMB810 million. As of the end of the reporting period, the amount of the Group's contract backlog of industrial equipment and component manufacturing business was RMB130.63 billion, representing a year-on-year increase of 33.8%.

(4) Property development business

Property development business is the development priority of China Railway, and an important carrier for diversified brands of China Railway. The Company is transforming to “real estate + infrastructure” and “real estate + industry” relying on its main business advantages with a view to becoming an outstanding urban comprehensive development operator. The Group accelerated the transition from traditional commercial property development to a comprehensive development model that integrates multiple modes, industries, and functions. The Group gives full play to the advantages of industrial chain integration, innovate business models, and form China Railway characteristics in terms of land acquisition, industrial chain coordination, products and services. 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 2022, 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. The Group performed in-depth study and analysis of the real estate market environment in the regions and cities where it has presence, continuously optimized the map of real estate investment projects, prudently selected investment projects and increased the proportion of investment in first-tier cities and second-tier core cities as appropriate. In the face of the downward pressure of the overall market, The Group further strengthened the construction of the risk prevention and control system of the real estate sector, attached great importance to the project destocking, and collection of project sales arrears, and strengthened the revitalization of stock assets. Upholding the principles of sales-based production and revenue-based expenditure, the Group strove to ensure the safety of

cash flow of real estate business, and promote the steady and healthy development, transformation and upgrading of real estate business. During the reporting period, the amount of new contracts in the Group's real estate business was RMB75.19 billion, representing a year-on-year increase of 29.6%, sales area was approximately 5.41 million square meters and the newly acquired land reserve of the Group was 1.3061 million square meters. At the end of the reporting period, the Group held 20.24 million square meters of land to be developed and 30.51 million square meters of planned construction area to be developed in Beijing, Shanghai, Guangzhou, Shenzhen, Tianjin, Hangzhou and other cities.

(5) Other businesses

Mining business

The Group's mining resource 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, all of which are in good conditions. However, currently the world is still facing uncertainties of market supply and demand, international economy and politics. The Company will strengthen business risk control and management improvement of overseas mineral resources business to ensure safe production and stable income of mines in production. The main mineral products produced and sold by the Company include concentrate of varieties involving copper, cobalt, molybdenum, lead, zinc and others, copper cathode and cobalt hydroxide. Currently, 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 2022, the Group's overall development and sales of mineral resources remained stable. The Group produced 302,900 tons of copper (year-on-year increase of 25%), 5,200 tons of cobalt (year-on-year increase of 60%), 15,000 tons of molybdenum (year-on-year flat), 9,500 tons of lead (year-on-year decrease of 13%), 23,600 tons of zinc (year-on-year increase of 10%), 44.7 tons of silver (year-on-year increase of 16%).

Mining Resource Project Table

No.	Project name	Mining business		Resource/ Reserve (10,000 tons)	Equity ratio (%)	Planned total investment (RMB100 million)	Accumulated investment of the project (RMB100 million)	Production quantity in the reporting period (10,000 tons)	Project progress
		Type	Grade						
1	Luming Molybdenum Mine, Yichun City of Heilongjiang	Molybdenum Copper	0.09% /	64.18 /	83%	60.17	60.26	1.50 0.10	In normal production
2	SICOMINES Copper-Cobalt Mine	Copper Cobalt	3.13% 0.25%	722.07 57.21	41.72%	45.86	30.92	25.26 0.32	In normal production
3	Luishia Copper-Cobalt Mine	Copper Cobalt	2.24% 0.06%	47.00 1.35	72%	21.38	21.60	3.17 0.11	In normal production
4	MKM Copper-Cobalt Mine	Copper Cobalt	2.08% 0.21%	3.10 0.32	80.2%	11.95	12.35	1.76 0.09	In normal production
5	Wulan Lead and Zinc Mine, Xinxin Company	Lead Zinc Silver	1.15% 2.81% 54.62g/t	17.94 44.03 0.09	100%	15.4	15.4	0.95 2.36 0.005	In normal production
6	Muhaer Lead and Zinc Mine, Xinxin Company	Lead Zinc Silver	0.63% 2.37% 118.17g/t	4.11 15.47 0.08	100%				Not yet exploited
7	Wurile Ovoo and Zhanggai Tolgoi Gold Mine, Xinxin Company	Gold	3g/t	0.0003	100%				Not yet exploited
8	Silver-Lead-Zinc polymetallic Mine, Chafu, Xianglong Mineral Co., Ltd.	Lead Zinc Silver	7.00% 5.09% 200.51g/t	8.97 6.52 0.03	100%	3.3			Ceased production

Financial business

When carrying out financial business, the Group has strictly implemented the state regulatory policies 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 such 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. The Group has 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. 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.

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 formed by centralized purchase and supply based on the main businesses of the whole 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, which is responsible for sales of mineral products in the resource sector, 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 Group 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 price rising period of commodity prices, it provided reliable material supply guarantee for the Group's production and operation and helped the Group effectively address the price fluctuation risks by making appropriate reserve and locking price in good time.

Infrastructure asset operation

The business scope of infrastructure assets of the Group mainly covers operation, maintenance and management of infrastructure investment projects and asset operation, covering three modes of operation, namely, 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 51 projects under operation.

4.2.3 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 Tunnel Boring Machine and Intelligent Operation and Maintenance, 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), 49 provincial and ministerial research and development centers (laboratories), 18 nationally recognized enterprise technology centers, and 137 enterprise technical centers recognized at the ministerial or provincial level. It has also set up 22 professional R&D centers and invested in the national technology innovation center for the Sichuan-Tibet railway.

In 2022, 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, bridge construction 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, smart manufacturing and information technology, energy conservation and emissions reduction technology, and other key areas. In response to the actual needs for production and operation, the Group conducted technical research based on key difficult engineering projects, such as the Dianzhong Water Diversion Project, Chengdu-Chongqing Middle Line High-speed Railway, Zhoushan West Dongmen Road-Railway Bridge, and Chongqi Yangtze River Bridge, with focus on bridge survey and design theories and methods, new bridge structures and materials, and bridge intelligent construction technologies and equipment, complete technologies for fast construction of the hard rock large-span underground chambers, development of through-type synchronous power supply devices, intelligent assessment and performance improvement of serviceability of high-speed railway ballastless track-bridge structure system, and new components, materials, and industrial software for industrial manufacturing. We also carried out research based on highland engineering projects such as the Daduhe Bridge, the construction technologies of roadbeds under complex environment and disaster prevention, 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.. During the Reporting Period, the Group won 15 Zhan Tianyou Civil Engineering Prizes, 19 China Construction Engineering Luban Prizes, 54 National Quality Engineering Awards (of which 4 projects were awarded the National Quality Engineering Gold Award); 525 scientific and technological advancement awards at the provincial and ministerial level; 9,256 authorized patents, including 1,875 invention patents and 201 overseas PCT patents; and 794 provincial and ministerial engineering methods. The two patents applied by the subordinate enterprises, namely "Steel Pipe Concrete Rotary Hinging Device, Rotating System and Method Determining

Rotating System Parameters” and “Track Layer Automatically Changing Span in Advancing Process and Usage”, won the silver medal of the 23rd China Patent Award. Four patents, namely “Capping Construction Method for Hollow Pier”, “Parallel Construction Method of Bridge Deep Water Foundation Bored Pile and Cofferdam”, “A Cantilever Assembly Construction Method for Multi-main Truss Steel Truss Structure” and “Automatic Welding Device and Automatic Welding Method for Steel Main Beam Assemblies of Large Composite Beams”, won China Excellent Patent Awards.

4.2.4 Establishment and Implementation of Safety and Quality System

The Group has multiple special grade, comprehensive, and grade A qualifications, and is one of the enterprises with various qualifications of the highest grade, fullest range and largest number. As of the end of the Reporting Period, the Company had a total of 2,685 construction enterprise qualifications, including 79 special grade general contracting qualifications and 305 first grade qualifications. In terms of engineering design and survey, we have 264 engineering design qualifications, including 4 comprehensive engineering design qualifications; we have 67 engineering survey qualifications, including 7 comprehensive engineering survey qualifications.

In terms of the establishment of the system, the Company has set up the Production Safety (Quality) Committee, which is responsible for all aspects of the production safety of the Group. The Committee has 2 directors, who are the secretary of the party committee, chairman, and president of the Company, respectively, 1 deputy director, who is the vice president in charge of safety and quality, and members including other leadership team and senior management, and heads of relevant departments of the headquarters of the Company. Tier 2 and tier 3 companies have production safety supervision and management departments, and construction and investment enterprises have full-time safety directors.

In terms of the improvement of systems, In 2022, the Company issued the Implementation Plan of China Railway for Improving the Safety and Quality Control System, which purports to build a work mechanism of “horizontal cooperation and collaboration, vertical effective connection” among production key departments and form a “big safety” production pattern. The Company established a comprehensive “1+9+N” system, formulated the Measures of China Railway for the Management of Safety, Quality and Environmental Protection, a programmatic document guiding the overall work, revised the regulations on emergency management of work safety and emergency plans, issued the guidelines on preventing and reducing natural disasters, and published the Ten Stringent Rules for Public Security and Rigid Standards so as to promote the engineering quality improvement and the implementation of the “double carbon” program, revised the regulations of China Railway on excellence creation.

In terms of monitoring the implementation of the system, the Company established a safety, quality and environmental protection inspection team, three stationed inspection groups and a number of control and inspection teams, and set up the Tibet Team of China Railway No.2 Engineering of National Tunnel Emergency Rescue, showing a change from single safety management system to synergistic multiple systems, and from result orientation to process orientation, and constituting a systematic, three-dimensional and normalized pre-control mechanism that integrates inspection, assistance and guidance. The Company organized special inspections for the resumption of work and production, screening of potential safety risks, safety inspections of self-built housing, inspections of workplace safety, and inspections of fire prevention and disaster prevention. We organized examinations for all employees to know and understand the Production Safety Law, production safety management system and requirements, and assigned specialists to conduct on-site examinations for the leaders, senior management and all employees of 18 engineering bureaus, which effectively improved the knowledge and ability of all employees on production safety.

4.2.5 Implementation of Environmental Protection Measures

The details are set out in the “Environmental Information” on page 93 to page 97 of this announcement.

4.2.6 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.

4.2.7 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.

4.2.8 Outlook

Facing the challenging international environment and the arduous tasks of domestic reform, development, and stability, the Central Economic Work Conference emphasized the necessity to “more effectively coordinate the improvement in quality and the reasonable increase in quantity, uphold the principle of quality first, and quantitative increase giving rise to a qualitative change.” This highlights the determination and confidence of the Central Committee of CPC and the State Council to grasp big economic picture and accelerate the economic recovery in the first year after the Party’s 20th National Congress. The infrastructure investment, as the main force of stabilizing the economy by “counter-cycle adjustment + cross-cycle adjustment”, is expected to play a more dominant role as an engine in stabilizing growth. **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 Development of Modern Integrated Transportation System, the 14th Five-year Plan for the Development of Construction Industry, Guideline To Accelerate Construction of Urban and Rural Environmental Infrastructure, 14th Five-Year Plan on Modern Energy System Planning, Work Plan on Solidly Promoting the Implementation of Major Transportation Projects under the 14th Five-Year Plan, New Urbanization Implementation Plan during the 14th Five-Year Plan Period, and the 14th Five-Year Plan National Urban Infrastructure Construction, 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, by 2025, China’s operation mileage of railway, highway and urban rail transit is expected to reach 165,000 kilometers, 5.5 million kilometers and 10,000 kilometers, respectively, and more than 95 percent of cities with a population of over 500,000 will be covered with the high-speed railway network with the trains running at 250 kilometers and above per hour. 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 navigation route. A modern urban infrastructure system that is systematic, sound, efficient, smart, green, safe and reliable will be established. Construction will be made in a way of green transformation. Its overall quality, operation efficiency, and service and management level is expected to be on par with international advanced levels. **From the perspective of changes in policy orientation.** While the construction of major projects was accelerated, various policy supports also continued to inject impetus. The 11th meeting of the Central Committee for Financial and Economic Affairs on April 26, 2022 calls for “all out” infrastructure push. Strengthening infrastructure construction in an all-round way is of great strategic significance to ensuring national security as well as playing the pillar role in economic development. At the end of July 2022, The General Office of the State Council set up a coordination mechanism for promoting effective investment in major projects, and coordinated the implementation of investment policies such as policy-oriented development financial instruments. The Central Economic Work Conference held

at the end of 2022 stressed lifting overall social investment through government investment and policies, speeding up the implementation of the “14th Five-Year Plan” major projects, and strengthening the inter-regional infrastructure connectivity. It is also noted that policy-based finance should increase financing support for major projects in line with national development plans and industrial policies, and encourage and attract more private capital to participate in the construction of major national projects and projects to make up for shortcomings. The Outline of the Strategic Plan for Expanding Domestic Demand (2022-2035), issued by The State Council at the end of 2022, sets out the requirements in terms of promoting consumption in an all-round way, accelerating the improvement and upgrading of consumption, optimizing investment structure, expanding investment space, promoting coordinated development between urban and rural areas and between regions, unleashing the potential of domestic demand, improving the quality of supply, and driving effective sanctification of demand. A study by the National Development and Reform Commission shows that China’s per capita infrastructure capital stock is only 20% to 30% of that of developed countries. China’s traditional infrastructure construction demands are still huge. The layout of new infrastructure is accelerated, investment in industrial transformation and upgrading is increased, and there are still many weak points in people’s livelihood, which will give rise to more investment demand. **From the perspective of degree of financial support.** China is giving top priority to stabilizing growth. Fiscal policy will be more effective and fiscal expansion will be further intensified. With the comprehensive use of deficit, special bonds, discount interest and other tools, fiscal funds for infrastructure construction will maintain a steady growth. In particular, further expansion of the areas of investment and scope of capitalization of the special-purpose bonds will leverage more incremental funds. Monetary policy will be targeted and effective, with the focus on supporting infrastructure and major projects. Credit conditions are expected to be further eased, market-based interest rates will continue to fall, and the scale of new policy-based development financial instruments will continue without abating. According to the reports of 31 provinces on the execution of budgets for 2022 and on the draft budgets for 2023, new special-purpose bonds for 2023 approved by the Ministry of Finance ahead of time were RMB2.19 trillion, an increase of 50% as compared with the RMB1.46 trillion in the previous year. This is the first time that the new special-purpose bonds approved ahead of time exceeded RMB2 trillion. At the same time, the number of areas in which special-purpose bonds can be invested increased from the original nine to 11 (adding two areas, i.e. new energy projects and new infrastructure), and the number of areas that can be used as project capital increased from the original 10 to 13 (adding three areas, i.e. new energy projects, coal reserve facilities and national industrial parks’ infrastructure). **From the perspective of industry innovation and upgrading.** During the 14th Five-Year Plan period, investment in traditional infrastructure will continue to remain high. Major projects such as Plateau Railway, Chengdu-Chongqing Middle Line High-speed Railway, and South-north Water Diversion will kick off one after another. the “New Infrastructure” is about to start. There is vast potential for the development of smart cities, smart transportation and smart energy. Industry innovation requires more technological empowerment. The construction industry will gradually shift from being driven by investment and labor and other factors to by innovation. The integration of the construction industry with advanced manufacturing, information technology and energy-saving technology will be further enhanced, and the upgrading of industrialization, digitization and intelligence will accelerate, leading to higher quality development of the construction industry towards content-intensive integration.

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, promote the implementation of the “123456” development strategy, and adhere to the economic line of “two transformations” (i.e. transformation from debt-driven development to accumulation and innovation-driven development, transformation from traditional production and operation to asset management and capital operation). 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 curve, so as to comprehensively enhance its core competitiveness, and lay a solid foundation for its transformation and upgrading.

4.2.9 Operating Plan

In 2023, the Group will fully implement the spirit of the Party's 20th National Congress and the Central Economic Work Conference, deeply implementing the requirements of the meeting of central enterprise leaders, adhering to the general concept of seeking progress while maintaining stability, fully, accurately, and comprehensively implementing the new development concept, serving to build a new development pattern, and anchoring the primary task of high-quality development. The Group focuses on the primary task of high-quality development, comprehensively strengthen the guiding role of the 14th Five-Year Plan, deeply implement the "123456" development strategy, intensify marketing management, and provide practically a strong support for stable growth. It will also strengthen its physical fitness and efficiency, improve the enterprise economic benefits, intensify efforts to push for reform, boost the corporate vitality; strengthen innovation-driven development and stimulate high-quality development engines; strengthen overseas management and enhance international competitive strength. At the same time, the Group will further implement the decisions and arrangements of the Party Central Committee and the State Council on improving the quality of listed companies and the relevant work requirements of the SASAC, and promote quality improvement and valuation recovery from multiple dimensions such as management philosophy, value creation, value transmission, and value realization.

In 2023, the Group proposes the development goal of "three increases, two controls and four upgrades" according to the assessment index system of "one profit and five ratios" by the State-owned Assets Supervision and Administration Commission in consideration of the reality of the Group. The "three increases" means increase in the amount of new contracts, operating income and gross profit; "two controls" means no year-on-year increase in gearing ratio and a decrease in the percentage of "two funds" in the operating income; "four upgrades" means improvement in net return on assets, gross labor productivity and operating cash ratio, and increase in investment in research and development. On the basis of ensuring the fulfillment of the above indexes, the Group also needs to further continuously optimize the structure by breaking down the indexes such as net return on assets, amount of new contracts, and "two funds". It is necessary to identify weak points in business development and asset quality and focus on optimizing them. At the same time, attention should be paid to marginal improvement, and efforts should be made to consolidate the trend of improving the quality of economic operation, and drive gradual improvement in quality through continuous accumulation of increments.

In 2023, the Group plans to achieve total revenue of approximately RMB1.2 trillion, costs of operation (including interest expense) of approximately RMB1,078.5 billion, four expenses of approximately RMB66.5 billion. It is estimated that the new contracts to be entered into will amount to approximately RMB3.2 trillion. The Group will promptly adjust its operation plan to suit market conditions and to reflect the actual implementation of the plan.

4.3 Financial Performance 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 2022, the Group achieved revenue of RMB1,154.349 billion, representing a year-on-year increase of 7.6%. Profit for the year increased by 14.8% year-on-year to RMB34.972 billion while profit for the year attributable to owners of the Company increased by 13.2% year-on-year to RMB31.276 billion.

A comparison of the financial results for 2022 and 2021 is set forth below.

4.4 Consolidated Results of Operations

Revenue

In 2022, the Group's revenue increased year-on-year by 7.6% to RMB1,154.349 billion. It was mainly due to the increase in revenue from the Group's infrastructure construction business. Among which, revenue from overseas was RMB58.437 billion, representing a year-on-year increase of 6.7%.

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 2022, the Group's cost of sales and services recorded a year-on-year increase of 7.8% to RMB1,045.459 billion while gross profit of the Group increased year-on-year by 5.3% to RMB108.890 billion. The overall gross profit margin for 2022 was 9.4%, which is basically the same as 9.6% for 2021.

Other income

The Group's other income primarily consists of dividend income, subsidies from government and compensation and claims. In 2022, the Group's other income was RMB2.623 billion, decreased by 4.1% from RMB2.736 billion of last year. Such decrease of other income was primarily due to the decrease in compensation and claims.

Other expenses

The Group's other expenses primarily includes lawsuit expenditure and others. In 2022, other expenses decreased by 45.4% from RMB1.982 billion of last year to RMB1.082 billion.

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 2022, the Group's net impairment losses on financial assets and contract assets decreased year-on-year by 39.0% to RMB3.343 billion, mainly attributable to the decrease in impairment losses on trade and other receivables.

Other gains/(losses), net

The Group's other gains and losses mainly include gains and losses on disposal or write-off of financial assets or liabilities, joint ventures, associates and subsidiaries, foreign exchange gains or losses, impairment losses on property, plant and equipment and other assets and changes in the fair value of financial assets or liabilities through profit and loss. The Group's other gains recorded RMB615 million in 2022, mainly comprised of exchange gains of RMB566 million and deemed disposal gains of interest in associates of RMB483 million.

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 which were transferred in accordance with asset-backed notes ("ABN") and asset-backed securities ("ABS") issuance, and non-recourse factoring agreements. In 2022, the Group's losses from derecognition of financial assets at amortised cost was RMB4.520 billion, representing a decrease of 1.6% from last year. In 2022, the Group transferred trade receivables of RMB68.033 billion and RMB16.908 billion under the issuance of ABN and ABS, and non-recourse factoring agreements, respectively (2021: RMB85.945 billion and RMB14.971 billion, respectively).

Selling and marketing expenses

The Group's selling and marketing expenses primarily consist of employee compensation and benefits, distribution and logistic costs and advertising costs. In 2022, the Group's selling and marketing expenses amounted to RMB6.328 billion, representing a year-on-year increase of 6.4%. Such increase was mainly due to the increase in sales agency fee of the real estate business as well as the increased investment in sales and marketing for strengthening business development effort. The selling and marketing expenses as a percentage of the total revenue for 2022 was 0.5%, representing a year-on-year decrease of 0.1 percentage point.

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 2022, the Group's administrative expenses was RMB26.413 billion, representing a year-on-year increase of 3.8%. Such increase was mainly due to the increase in staff salary brought by the expansion of business scale, the increase of business activities and the improvement of efficiency. Administrative expenses as a percentage of revenue for 2022 was 2.3%, representing a year-on-year decrease of 0.2 percentage point.

Research and development expenditures

In 2022, the Group's research and development expenditures increased by 12.1% from RMB24.756 billion of last year to RMB27.742 billion, mainly due to the Group's continuous advancement on scientific research and technological innovation and further increase input in research and development.

Finance costs, net

In 2022, the Group's net finance costs (finance costs less finance income) was RMB1.305 billion, representing a decrease of 13.6% from last year. It was mainly due to the increase in investment and financial income from the growth in scale of infrastructure construction investment projects under financial asset mode. Secondly, there was a continuous decrease in average financing cost attributable to the continuous strengthened fund control and reasonable replacement of borrowings with higher interest rates.

Profit before income tax

As a result of the foregoing factors, the profit before income tax for 2022 increased by RMB5.056 billion or 12.8% to RMB44.692 billion from RMB39.636 billion for 2021.

Income tax expense

In 2022, the Group's income tax expense increased year-on-year by 6.0% to RMB9.720 billion. By excluding the impact of land appreciation tax, the effective income tax rate of the Group decreased by 1.0 percentage point from 18.0% for 2021 to 17.0% for 2022.

Profit for the year attributable to owners of the Company

In 2022, profit for the year attributable to owners of the Company increased by 13.2% to RMB31.276 billion from RMB27.618 billion for 2021.

4.5 Segment Results

The revenue and results of each segment of the Group's business for 2022 are set forth in the table below.

Business Segment	Revenue <i>RMB million</i>	Growth Rate (%)	Profit/(loss) Before Income Tax <i>RMB million</i>	Growth Rate (%)	Profit/(loss) Before Income Tax Margin ¹ (%)	Revenue as a Percentage of Total (%)	Profit/(loss) Before Income Tax as a Percentage of Total (%)
Infrastructure Construction	1,019,730	7.0	39,286	14.9	3.9	82.0	78.8
Survey, Design and Consulting Services	19,795	6.4	1,753	8.5	8.9	1.6	3.5
Engineering Equipment and Component Manufacturing	38,863	17.1	2,375	17.1	6.1	3.1	4.8
Property Development	54,082	5.4	(1,451)	Profit turned into loss	(2.7)	4.3	(2.9)
Other Businesses	111,538	9.4	7,856	34.8	7.0	9.0	15.8
Inter-segment Elimination and Adjustments	<u>(89,659)</u>		<u>(5,127)</u>				
Total	<u>1,154,349</u>	7.6	<u>44,692</u>	12.8	3.9	<u>100.0</u>	<u>100.0</u>

¹ Profit/(loss) before tax margin is the profit before tax divided by the revenue.

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 2022, the revenue from the infrastructure construction business accounted for 82.0% of the total revenue of the Group (2021: 82.3%). In 2022, various tasks of the Group progressed steadily and orderly and the Group's revenue of infrastructure construction business increased by 7.0% year-on-year to RMB1,019.730 billion. Gross profit margin and profit before income tax margin of the infrastructure construction segment for 2022 was 8.1% and 3.9% respectively, remained basically the same as 8.1% and 3.6% respectively for 2021.

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 services on survey, design and consulting, research and development, feasibility studies and compliance certification of infrastructure construction projects. In 2022, the Group's survey, design and consulting services business developed sustainably and steadily, with revenue recorded RMB19.795 billion, representing a year-on-year increase of 6.4%. Gross profit margin and profit before income tax margin for the segment for 2022 was 27.9% and 8.9% respectively, remained basically the same as 27.9% and 8.7% respectively for 2021.

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 2022, the Group seized the dividends of the "steady growth" policy and the development opportunities of the equipment manufacturing industry, and continued to increase market development efforts. In 2022, the Group's revenue of the engineering equipment and component manufacturing business of the Group increased by 17.1% year-on-year to RMB38.863 billion. Gross profit margin and profit before income tax margin was 20.0% and 6.1% respectively for 2022 (2021: 21.0% and 6.1% respectively). The decrease in gross profit margin was mainly due to the decrease in profitability of manufacture and installation of steel structure business resulting from the fluctuation of steel price and intense market competition.

Property development business

In 2022, the Group closely monitored the changes in policies and market conditions, speed up the progress of house delivery and destocking. In 2022, revenue from property development business recorded RMB54.082 billion, increased by 5.4% year-on-year. Gross profit margin and profit before income tax margin was 12.4% and -2.7% (2021: 17.0% and 3.2% respectively). The decrease in gross profit margin and the turnaround of profit to loss before income tax was mainly due to ① certain projects were sold at low prices due to market downturn factors. ② the profitability was affected by the change in product mix recognized for revenue this year.

Other businesses

In 2022, the Group strived to progressively implementing the "limited and interrelated" diversification strategy, revenue from other businesses increased year-on-year by 9.4% to RMB111.538 billion in 2022. Gross profit margin for 2022 was 17.4%, remained basically the same as 17.8% for 2021. Profit before income tax for 2022 was RMB7.856 billion (2021: RMB5.830 billion). Among which, ① Revenue from mining was RMB8.007 billion, a year-on-year increase of 26.9% while gross profit margin was 55.3%, an increase of 0.7 percentage point from last year. ② Revenue from merchandise trading was RMB77.715 billion, a year-on-year increase of 4.1% while gross profit margin was 3.4%, an increase of 0.3 percentage point from last year. ③ Revenue from financial business was RMB4.620 billion, a year-on-year increase of 10.4% while gross profit margin was 91.1%, an increase of 1.4 percentage points from last year. ④ Revenue from infrastructure operation business was RMB4.413 billion, a year-on-year increase of 78.7% while gross profit margin was 18.3%, an increase of 6.2 percentage points from last year.

4.6 Cash Flow

In 2022, the net cash inflow from operating activities of the Group amounted to RMB43.552 billion, representing an increase in net cash inflow of RMB30.483 billion from RMB13.069 billion for 2021, mainly attributable to the Group actively took advantage of the “steady growth” measures implemented by the state to speed up the recovery of funds, and at the same time strengthened cash flow management and control, striving to improve the financial situation.

In 2022, the net cash outflow from investing activities of the Group amounted to RMB84.388 billion, representing an increase in net cash outflow of RMB6.931 billion from RM77.457 billion for 2021, which was mainly due to the increase of investment in long-term assets.

In 2022, the net cash inflow from financing activities of the Group amounted to RMB96.365 billion, an increase in net cash inflow of RMB29.000 billion from RMB67.365 billion for 2021, which was mainly due to the increase in external financing to meet production and operation needs.

Capital expenditure

The capital expenditure of the Group primarily comprises expenditure on purchases of equipment, the expenditure of service concession arrangements including in intangible assets and upgrading of the Group’s production facilities. The Group’s total capital expenditure for 2022 was RMB103.246 billion (2021: RMB65.542 billion), which was mainly due to the capital expenditure in relation with the Group’s acquisition of equity interest in Yunnan Dianzhong Water Diversion Engineering Co., Ltd. during the year.

The following table sets forth the Group’s capital expenditure by business segment in 2022.

	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	49,822	530	926	2,002	1,059	54,339
Lease prepayments	56	46	12	281	9	404
Investment properties	1,100	200	–	14	433	1,747
Intangible assets	14,837	30	5	20	30,824	45,716
Mining assets	8	–	–	–	–	8
Right-of-use assets	794	26	16	37	159	1,032
Total	66,617	832	959	2,354	32,484	103,246

Working capital

	As at 31 December	
	2022	2021
	<i>RMB million</i>	<i>RMB million</i>
Inventories	49,198	45,371
Trade and bills receivables	160,574	157,025
Trade and bills payables	480,430	405,520
Turnover of inventory (days)	16	16
Turnover of trade and bills receivables (days)	50	50
Turnover of trade and bills payables (days)	153	147

At the end of 2022, the balance of the Group's inventories was RMB49.198 billion, representing an increase of 8.4% from the end of 2021. The Group's inventory turnover days was 16 days in 2022, basically remained the same as 2021.

Trade and bills receivables

At the end of 2022, the Group's trade and bills receivables increased by 2.3% from the end of 2021 to RMB160.574 billion as at the end of 2022 while the turnover days of trade and bills receivables was 50 days in 2022, basically remained the same as 2021. 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 27.6% (31 December 2021: 24.5%) 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 2022 and 2021, based on invoice date.

	As at 31 December	
	2022	2021
	<i>RMB million</i>	<i>RMB million</i>
Less than one year	116,291	118,517
One year to two years	19,811	14,919
Two years to three years	7,853	10,297
Three years to four years	5,587	4,562
Four years to five years	3,245	1,407
More than five years	7,787	7,323
Total	160,574	157,025

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 18.5% from end of 2021 to RMB480.430 billion as at the end of 2022. The turnover days of trade and bills payables was 153 days in 2022, an increase of 6 days from 147 days in 2021. 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 8.5% (31 December 2021: 8.6%) of the total payables.

The following table sets forth the ageing analysis of the Group's trade and bills payables as at 31 December 2022 and 2021, based on invoice date.

	As at 31 December	
	2022	2021
	<i>RMB million</i>	<i>RMB million</i>
Less than one year	439,796	370,538
One year to two years	22,478	19,622
Two years to three years	9,311	9,274
More than three years	8,845	6,086
	<hr/>	<hr/>
Total	480,430	405,520
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4.7 Borrowings

The following table sets forth the Group's total borrowings as at 31 December 2022 and 2021. 28.0% of the Group's borrowings were short-term borrowings (31 December 2021: 36.4%). The Group is generally capable of making timely repayments.

	As at 31 December	
	2022	2021
	<i>RMB million</i>	<i>RMB million</i>
Bank borrowings		
Secured	120,449	81,976
Unsecured	205,020	152,824
	325,469	234,800
Long-term debentures, unsecured	53,122	55,007
Other borrowings		
Secured	1,895	1,992
Unsecured	11,756	20,128
Total	392,242	311,927
Long-term borrowings	282,508	198,503
Short-term borrowings	109,734	113,424
Total	392,242	311,927

Bank borrowings carry interest rates ranging from 0.75% to 6.65% (31 December 2021: 0.75% to 9.50%) per annum. Long-term debentures carry fixed interest rates ranging from 2.14% to 4.80% per annum (31 December 2021: 2.14% to 4.50%). Other borrowings carry interest rates of 2.90% to 4.43% (31 December 2021: 2.35%) per annum. In 2022, the Group's average cost of financing was 3.94%, representing a year-on-year decrease of 0.17 percentage point.

The following table sets forth the maturity of the Group's borrowings as at 31 December 2022 and 2021.

	As at 31 December	
	2022	2021
	<i>RMB million</i>	<i>RMB million</i>
Less than one year	109,734	113,424
One year to two years	42,096	31,351
Two years to five years	71,435	64,552
More than five years	168,977	102,600
Total	<u>392,242</u>	<u>311,927</u>

As at 31 December 2022 and 2021, the Group's floating-rate borrowings was RMB233.856 billion and RMB156.440 billion respectively.

The following table sets forth the carrying amounts of the Group's borrowings by currencies as at 31 December 2022 and 2021. The Group's borrowings are primarily denominated in Renminbi and the Group's foreign currency borrowings are primarily denominated in U.S. dollars.

	As at 31 December	
	2022	2021
	<i>RMB million</i>	<i>RMB million</i>
RMB	383,834	299,876
USD	8,213	11,682
Euro	10	13
Others	185	356
Total	<u>392,242</u>	<u>311,927</u>

The following table sets forth the details of the Group's secured borrowings as at 31 December 2022 and 2021.

	As at 31 December			
	2022		2021	
	Secured borrowings	Carrying amount of pledged assets and contract value of certain rights	Secured borrowings	Carrying amount of pledged assets and contract value of certain rights
	<i>RMB million</i>	<i>RMB million</i>	<i>RMB million</i>	<i>RMB million</i>
Property, plant and equipment	2,205	3,878	295	1,715
Intangible assets	75,252	96,955	45,894	64,728
Properties under development for sale	5,013	13,420	7,699	30,698
Trade and bills receivables	319	319	221	221
Trade receivables from fellow subsidiaries of the Group	14	375	34	375
Contract assets	39,541	63,529	29,825	48,320
Total	122,344	178,476	83,968	146,057

As at 31 December 2022, the Group's unused credit line facility from banks was RMB1,505.574 billion (31 December 2021: RMB1,201.491 billion).

As at 31 December 2022, the Group's gearing ratio (total liabilities/total assets) was 73.8%, representing an increase of 0.1 percentage point from 73.7% as at 31 December 2021.

4.8 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	
	2022	2021
	<i>RMB million</i>	<i>RMB million</i>
Pending lawsuits (<i>Note 1</i>)		
– arising in the ordinary course of business	5,116	5,256

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.

4.9 Business Risks

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

- (1) **Investment 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, and scale risk arising from the increase number of investment projects of the Company; 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 standard changes and other factors, which may lead to the failure to normally carry out the Company's overseas construction projects.
- (3) **Cash flow risk:** It refers to the possibility that the Company 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 Company's debts in its operations due to improper management of cash flow.
- (4) **Health, safety and environmental protection risk:** The health, safety and environmental protection risks faced by the Company are mainly concentrated in the construction safety risks of construction projects, and the risk 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.

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 procedure 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.

Foreign exchange risk

The business operations of the Group are mainly in China with most of its transactions settled in RMB. Nevertheless, the Group continually monitors its exposure to foreign exchange and will take appropriate actions to mitigate the foreign exchange risk when necessary.

5 SIGNIFICANT EVENTS

5.1 The Plan for Profit Distribution on Ordinary Shares or Capitalisation of Capital Reserves

5.1.1 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 share 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.

(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 2021. Pursuant to the profit distribution plan considered and passed at the 2021 annual general meeting convened on 22 June 2022, a cash dividend of RMB0.196 (tax inclusive) per share based on the total share capital of 24,741,653,683 shares before the implementation of the plan was declared by the Company, totalling RMB4,849,364,121.87 (tax inclusive) and representing 17.5% of net profit attributable to the Company's shareholders under the consolidated financial statements for the year of 2021 of the Company. The announcement on the profit distribution of H shares was published on 7 July 2022 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 22 July 2022 on China Securities Journal, Shanghai Securities News, Securities Times, Securities Daily and the website of Shanghai Stock Exchange. As of 9 August 2022, the implementation of the profit distribution plan of the Company for 2021 has been completed.

(3) Profit distribution plan for 2022

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 2022 of the Company" which was adopted at the 26th 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 2022 were RMB78,408,144,168.91 based on the audited CAS financial report prepared under CAS of the Company for 2022. After taking into account the added net profit realized by the Company of RMB24,393,480,424.54 during the year and deducting the cash dividends for 2022 and interest payments on perpetual notes amounting to RMB6,648,407,436.94, and with 10% of the net profit of the parent, i.e. RMB2,439,348,042.45, being appropriated to its surplus reserve, the distributable profit of the Company to shareholders amounted to RMB93,713,869,114.06 as of 31 December 2022. Based on the Company's total share capital of 24,752,195,983 shares as at 30 March 2023, a cash dividend of RMB2.00 per 10 shares (tax inclusive) is proposed to be distributed, and the total amount of such dividend is RMB4,950,439,196.60 (tax inclusive), representing 15.82% 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 RMB88,763,429,917.46 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.

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 2022 annual general meeting of the Company. Minority shareholders will be offered sufficient opportunities to express their views and requests at the 2022 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 2022

In 2022, the Company intends to make a cash dividend at 15.82% of net profit attributable to the 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:

(i) 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, green infrastructure and ecological environmental protection will become new directions 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. The Central Economic Working Conference pointed out that the fiscal policy will be more effective this year. By utilizing tools such as deficits, special-purpose bonds, and interest subsidies on a combined basis, fiscal funds for infrastructure construction will maintain a high level of growth. The Company is still in a period of great opportunity.

(ii) The Company's development stage and its own business model

The Company actively implements the national strategy, actively serves the building of a new development pattern, seizes opportunities of international market recovery and the 10th anniversary of the "Belt and Road" Initiative, and deeply expand into overseas markets to accelerate building it into a world-class construction industry group with global competitiveness. In 2022, the amount of new contracts, operating income and net profit of the Company hit a new record high. The Company jumps to No. 34 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 accumulation-driven development, and achieve the improvement in quality and the reasonable increase in quantity.

(iii) Profitability level and demands on the funds of the Company

In recent years, the Company has maintained a relatively high level of net profit and generated a relatively stable return on investment for its shareholders. For the year of 2022, the Company's net profit attributable to shareholders of the Company increased by 13.25% year on year, and the basic earnings per share after deducting non-recurring profit and loss increased by 11.20% 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, optimize financial structure, improve the efficiency of fund use according to business development needs to ensure the Company's sustainable, healthy and stable development.

(iv) Reasons for the Company's low level of cash dividends

At present, the downward pressure on the world economy continues to increase, and the international situation is complex and changing. 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.

(v) The exact purpose of the 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 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, enhance the profitability and profit level so as to provide shareholders with long-term, sustainable and stable return.

(vi) All the independent directors of the Company express the following independent opinions on the reasonability of the above 2022 profit distribution plan:

- ① The formulation of the Company's 2022 profit distribution plan takes into account the characteristics of the construction industry in which the company is located, the company's development stage, its own business model, capital needs and other factors, and is in line with the actual situation of the Company.
- ② The Company's total amount of cash dividends in 2022 maintained a steady growth, accounting for about 15.82% of the net profit attributable to shareholders of listed companies in the consolidated income statement for the current year. It is in line with the requirements of profit distribution policy under the Articles of Association of the Company and "2021-2023 Shareholder Return Plan of China Railway Group Limited", and can take into account the reasonable return of investors and the sustainable development of the Company, and does not impair the interests of small and medium shareholders.

Therefore, we believe that the 2022 profit distribution plan of the Company is reasonable. We agree on the profit distribution plan, and agree to submit it to the Company's general meeting of shareholders for deliberation.

5.1.2 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 <input type="checkbox"/> No
Were the dividend distribution criteria and proportion well-defined and clear?	√Yes <input type="checkbox"/> No
Were the related decision-making process and mechanism in place?	√Yes <input type="checkbox"/> No
Did independent directors fulfill their duties and play their role?	√Yes <input type="checkbox"/> No
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 <input type="checkbox"/> No

5.1.3 If profits for the reporting period and the distributable profit of the 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

5.2 Share Incentive Scheme, Employee Stock Ownership Plan and Other Incentive Measures and the Impacts Thereof

As of 31 December 2022, the 2021 Restricted Share Incentive Scheme (the “**Incentive Scheme**”) was implemented completely, including the initial grant of 170.7244 million restricted shares and the grant of 11.922 million reserved restricted shares. Regarding 5 participants of the initial grant, 2 participants were transferred from the Company and ceased to take office in the Company due to organisational arrangements, 3 participants were disqualified from the Incentive Scheme due to incompetence in the position, disqualification in performance appraisal, negligence, violation of laws, non-compliance of laws, etc.. The Company repurchased and cancelled 1,379,700 restricted shares that had been granted to the above five participants but not yet unlocked.

Purpose of the Incentive Scheme

In order to further promote the establishment and improvement of the long-term incentive mechanism of the Company, attract and retain talents, fully incentivize the senior management personnel, middle management personnel and core personnel of the Group, effectively align the interests of the Shareholders, the Company with the individual interests of the operators to focus on and work collectively for the long-term development of the Company, the Incentive Scheme was formulated in accordance with the relevant requirements under the Securities Law, the Company Law, the Articles of Association and other relevant laws and regulations as well as in conjunction with the current management systems such as the remuneration system and performance appraisal system of the Company.

Participants of the Incentive Scheme

The incentive participants include (1) senior management of the Group; (2) middle management of the Group; and (3) core key personnel of the Group.

Total number of restricted shares available for issue under the Incentive Scheme and their percentage in the total shares issued as at the date of this announcement

The number of restricted shares to be granted under the Company's 2021 Restricted Share Incentive Scheme is not more than 200,000,000 shares, of which 180,000,000 shares are to be initially granted and 20,000,000 shares are reserved. As of 31 December 2022, the Incentive Scheme was implemented completely. 181,266,700 shares have been granted under the Incentive Scheme, accounting for approximately 0.88% of the total A share capital and 0.73% of the total share capital of the Company as of the date of this announcement.

Cap of restricted shares available for grant to each participant in the Incentive Scheme

The total number of the Company's Shares granted under the Incentive Scheme to any of the participants shall not exceed 1% of the total A share capital of the Company at the time when the Incentive Scheme was submitted for approval at the general meetings. The value of the entitlements granted to senior management shall be determined at no more than 40% of the total remuneration level (including the value of interests granted) at the time of grant, and the value of the interests granted to other participants such as the core members in management, technology and business shall be determined reasonably by the Board.

Lock-up period

Lock-up period of the restricted shares granted under the Incentive Scheme shall be 24 months, 36 months and 48 months from the relevant completion date of registration of the restricted shares under the corresponding grant. After the expiry of each of the three unlocking periods, 1/3 of the restricted shares granted under the first grant and the grant of the reserved shares will be unlocked. The restricted shares granted to the incentive recipients under the Incentive Scheme shall not be transferred, used for guarantee or debt repayment until the sales restrictions are released.

Amount (if any) payable for the acceptance of restricted shares

The amount payable for the acceptance of restricted shares is the grant price multiplied by the number of restricted shares granted.

Basis of determining the exercise price

The grant price of the restricted shares under the first grant shall not be less than the nominal value of the shares, and shall not be lower than 60% of the fair market value. The fair market value shall be the higher of the following prices: 1. the average trading price of the underlying A shares of the Company on the last trading day immediately preceding the date of the relevant announcement of the first grant (the total transaction value for the last trading day/total volume of the shares of the Company traded for the last trading day); or 2. any of the average trading price of the underlying A shares of the Company for the last 20 trading days, 60 trading days and 120 trading days immediately preceding the date of the relevant announcement.

The grant of the restricted shares under the reserved grant is subject to the consideration and passing of related resolutions by the Board and the disclosure of related information. The grant price of the restricted shares under the reserved grant shall not be less than the nominal value of the shares, and shall not be lower than 60% of the fair market value. The fair market value shall be the higher of the following prices: 1. the average trading price of the A shares on the last trading day immediately preceding the date of the announcement of Board resolutions on the reserved grant; or 2. any of the average trading price of the A shares for the last 20 trading days, 60 trading days and 120 trading days immediately preceding the date of the announcement of Board resolutions on the reserved grant.

The remaining life of the Incentive Scheme

The term of the Incentive Scheme commenced from the completion date of registration of the restricted shares under the first grant and will end on the date when all the restricted shares granted to the participants have been unlocked or repurchased and cancelled, the maximum period of which shall not exceed 72 months.

5.3 Performance Status of Undertakings

5.3.1 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.	None	No	Yes	/	/
Undertakings related to refinancing	Other undertakings	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	/	/

- 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 China Railway Hi-Tech Industry Co., Ltd. in March 2017, stock code: 600528.SH), 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 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 China Railway Hi-tech Industry Corporation Limited (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 at 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) published 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.*

5.3.2 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

5.3.3 Fulfillment of undertakings and its impact on goodwill impairment test

Not applicable

5.4 Non-operating Appropriation of Funds by the Controlling Shareholder and Other Related Parties during the Reporting Period

Not applicable

5.5 Illegal Guarantee

Not applicable

5.6 Explanation of the Company on the “Modified Audit Report” from Auditors

Not applicable

5.7 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

5.7.1 Analysis and explanation of the Company on the reasons for and impacts of the changes in accounting policies or accounting estimates

The Ministry of Finance issued in 2021 the Notice on the Issuance of the Interpretation No. 15 of Accounting Standards for Business Enterprises, and issued the Notice on the Issuance of the Interpretation No. 16 of Accounting Standards for Business Enterprises and and Implementation Q&As on Accounting Standards for Business Enterprises (collectively, the “**Notices and Implementation Q&As**”) in 2022 and 2023, The Company has adopted the Notices and Implementation Q&As in preparation of the CAS 2022 financial statement, and there is no material impact to the Company's financial statements.

5.7.2 Analysis and explanation of the Company on the reasons for and impacts of the correction of material accounting errors

Not applicable

5.7.3 Communications with former auditors

Not applicable

5.7.4 Others

Not applicable

5.8 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	6 years
Names of the certified public accountants of the domestic accounting firm	Zhao Jianrong, Hu Wei
The continuous period providing auditing services by the certified public accountants of the domestic accounting firm	Zhao Jianrong (1 year), Hu Wei (2 years)
Name of international accounting firm	PricewaterhouseCoopers
Remuneration of international accounting firm	220
Term of international accounting firm	6 years
	<div><div>Name</div><div>Remuneration</div></div>
Accounting firm for internal control audit	PricewaterhouseCoopers Zhong Tian LLP180
Financial advisor	/ /
Sponsor	/ /

Explanation on the appointment and removal of auditors

On 29 March 2022, two resolutions, namely the Resolution on the Appointment of Auditors for 2022 and Resolution on the Appointment of Internal Control Auditors for 2022 were considered and approved at the 14th 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 2022. These resolutions were then considered and approved at the 2021 annual general meeting of the Company on 22 June 2022. The Company has engaged PricewaterhouseCoopers Zhong Tian LLP and PricewaterhouseCoopers as the auditors of the Company for 2022 and engaged PricewaterhouseCoopers Zhong Tian LLP as the internal control auditors for 2022. For details, please refer to the Announcement of China Railway Group Limited on Resolutions of Annual General Meeting of 2021 disclosed by the Company on the website of the Shanghai Stock Exchange on 23 June 2022.

5.9 Risk of Suspension of Listing

5.9.1 Reason for Suspension of Listing

Not applicable

5.9.2 Response Measures to be Adopted by the Company

Not applicable

5.9.3 Delisting and the Reasons Thereof

Not applicable

5.10 Matters Relating to Insolvency or Restructuring

Not applicable

5.11 Material Litigation and Arbitration

The Company had no material litigation or arbitration during the year.

5.12 Penalty and Rectification Order against the Company and its Directors, Supervisors, Senior Management, Controlling Shareholders, Ultimate Controller and Acquirer

Not applicable

5.13 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 2022 as accredited by the China Cooperative Trade Enterprises Association and China Enterprise Reform and Development Society.

5.14 Significant Related Party Transactions

5.14.1 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*

Not applicable

(3) *Matters undisclosed in announcement*

Unit: '000 Currency: RMB

Related parties	Related relations	Type of related party transaction	Particulars of 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	23,718	23,718	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	46,586	46,586	Less than 1%
Total					<u>70,304</u>	<u>70,304</u>	

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 30 December 2021. The terms of both agreements are three years. The total transaction amount involved was within the decision-making authority of the Board and was considered and approved at the 18th meeting of the fourth session of the Board, 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 RMB288,000.

5.14.2 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

5.14.3 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

5.14.4 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

5.14.5 The financial business between the Company and its related financial company, and between the financial company held by the Company and its 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 China Railway Finance Co., Ltd.. The Proposal on the Related Party Transactions of Financial Services Framework Agreement between China Railway Finance Co., Ltd. and China Railway Engineering Group Co., Ltd. was considered and adopted at the 12th meeting of the fifth session of the Board convened by the Company on 22 December 2021, 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 2024) 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 31 December 2021 disclosed on the website of the Shanghai Stock Exchange. During the reporting period, the daily deposit balance (including interest accrued) of CREC and its subsidiaries with China Railway Finance Co., Ltd. did not exceed the maximum amount stipulated in the Financial Services Framework Agreement; the maximum daily loan balance (including interest accrued) obtained by CREC and its subsidiaries from China Railway Finance Co., Ltd. did not exceed the maximum amount stipulated in the Financial Services Framework Agreement; and the service fee collected by China Railway Finance Co., Ltd. from CREC and its subsidiaries for other financial services did not exceed the maximum amount stipulated in the Financial Services Framework Agreement.

1. Deposit business

Unit: '000 Currency: RMB

Related Party	Related relationship	Maximum daily deposit limit	Range of deposit interest rate	Opening balance	Amount for the current period		Closing balance
					Total deposits for the current period	Total withdrawals for the current period	
CREC	Parent company	20,000,000	1.265%	127,147	4,314,006	3,847,723	593,430
China Railway State Assets Management Co., Ltd.	Wholly-owned subsidiaries of the parent company		1.265%	591,196	816,193	1,386,177	21,212
Party school of China Railway Engineering Group Co., Ltd.	Wholly-owned subsidiaries of the parent company		1.265%	29,972	50,905	68,742	12,135
Total				748,315	5,181,104	5,302,642	626,777

2. Loan business

Unit: '000 Currency: RMB

Related Party	Related relationship	Line of credit	Range of loan interest rate	Opening balance	Amount for the current period		Closing balance
					Total loans for the current period	Total repayments for the current period	
CREC	Parent company	3,500,000	3.3%-3.45%	980,000	1,100,000	980,000	1,100,000
Total				980,000	1,100,000	980,000	1,100,000

3. *Credit business or other financial business*

Unit: '000 Currency: RMB

Related Party	Related relationship	Business type	Total	Amount incurred
CREC	Parent company	Comprehensive credit granting	3,500,000	1,100,000
Total			3,500,000	1,100,000

4. *Others*

Unit: '000 Currency: RMB

Item	Related Party	Amount for the current period	Amount of the corresponding period last year
Interest Income	CREC	44,788	54,652
Interest Expense	CREC	13,887	12,705
Interest Expense	China Railway State Assets Management Co., Ltd.	1,086	3,935
Interest Expense	Party school of China Railway Engineering Group Co., Ltd.	205	66

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 and China Railway State Assets Management Co., Ltd. and party school of CREC for deposit-taking.

5.14.6 Others

Related party guarantees

Unit: '000 Currency: RMB

Guarantor	Secured party	Guarantee amount	Commencement date of guarantee	Expiry date of guarantee	Guarantee fully performed
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 by the Company in October 2010. In accordance with the agreement on the guarantee period in the Company's "Prospectus for Public Offering of Corporate Bonds", the guarantor shall assume the guarantee liability during the period from the first day of issuance of the bonds to six months after the maturity date of the bonds. As of 31 December 2022, the guarantee liability undertaken by CREC as the guarantor of the 15-year 2010 Corporate Bonds (Tranche 2) has not expired. As at 31 December 2022, the remaining payable amount of the above-mentioned bonds was RMB3,526,101 thousand (31 December 2021: RMB3,524,444 thousand).

5.15 Material Contracts and Their Performance

5.15.1 Trusteeship, Contracting and Leasing

(1) Trusteeship

Not applicable

(2) Contracting

Not applicable

(3) Leasing

Not applicable

5.15.2 Guarantees

Unit: '0,000 Currency: RMB

Guarantees provided by the Company (excluding the guarantees to subsidiaries)

Guarantor	Relationship between guarantor and the listed company		Guarantee amount	Commencement date of guarantee	Commencement of guarantee	Expiry date of guarantee	Type of guarantee	Main debt condition	Collateral (if any)	Guarantee		Overdue amount	Counter provided		Related relationship
	Secured party			(date of the agreement)						fully performed	Guarantee overdue		guarantee available	to related parties	
China Railway	The Company	Linha Railway Co., Ltd.	30,479	30 June 2008	30 June 2008	20 June 2027	Joint and several liability guarantee	Normal performance	None	No	No	/	Yes	No	/
China Railway No.4 Engineering Group Co., Ltd.	Wholly-owned subsidiary	Xuzhou Yingbin Expressway Construction Co., Ltd.	119,000	22 October 2018	30 October 2018	29 October 2028	Joint and several liability guarantee	Normal performance	Equity pledge	No	No	/	None	No	/
China Railway No.5 Engineering Group Co., Ltd.	Wholly-owned subsidiary	Qinghai Minmetals China Railway Expressway Construction Management Co., Ltd.	14,850	14 January 2020	14 January 2020	30 December 2045	Joint and several liability guarantee	Normal performance	Equity pledge	No	No	/	None	No	/
China Railway No.5 Engineering Group Co., Ltd.	Wholly-owned subsidiary	Jiangxi Chengke Yunchuang Real Estate Co., Ltd.	4,100	22 September 2021	22 September 2021	21 September 2029	Joint and several liability guarantee	Normal performance	None	No	No	/	None	No	/
China Railway No.10 Engineering Group Co., Ltd.	Wholly-owned subsidiary	Chongqing CREC Renzhi Pension Industry Co., Ltd.	50,000	12 January 2017	12 January 2017	30 November 2024	Joint and several liability guarantee	Normal performance	None	No	No	/	None	No	/

Guarantees provided by the Company (excluding the guarantees to subsidiaries)

Guarantor	Relationship between guarantor and the listed company	Secured party	Guarantee amount	Commencement	Commencement of guarantee	Expiry date of guarantee	Type of guarantee	Main debt condition	Collateral (if any)	Guarantee		Overdue amount	Counter	Guarantee	Related
				(date of the agreement)						fully performed	Guarantee overdue		guarantee available	provided to related parties	
China Railway Major Bridge Engineering Group Co., Ltd.	Wholly-owned subsidiary	Wuhan Yangsigang Bridge Co., Ltd.	156,555.7	24 December 2015	24 December 2015	30 June 2023	Joint and several liability guarantee	Normal performance	None	No	No	/	None	No	/
China Railway Major Bridge Engineering Group Co., Ltd.	Wholly-owned subsidiary	Shantou Niutianyang Expressway Investment Development Co., Ltd.	7,502.03	14 November 2019	14 November 2019	23 August 2039	Joint and several liability guarantee	Normal performance	Equity pledge	No	No	/	None	No	/
China Railway Tunnel Group Co., Ltd.	Wholly-owned subsidiary	China Shanghai (Group) Corporation for Foreign Economic & Technological Cooperation	5,691.75	29 December 2012	29 December 2012	30 June 2023	Joint and several liability guarantee	Normal performance	None	No	No	/	None	No	/
China Railway Shanghai Engineering Group Co. Ltd.	Wholly-owned subsidiary	Fangchenggang China Railway Diluyuan Investment Development Co., Ltd.	500	8 May 2019	8 May 2019	31 December 2030	Joint and several liability guarantee	Normal performance	Equity pledge	No	No	/	None	No	/
China Railway International Group Co., Ltd.	Wholly-owned subsidiary	MontagProp Proprietary Limited	6,139.5	3 July 2015	3 July 2015	3 November 2023	Joint and several liability guarantee	Normal performance	None	No	No	/	None	No	/
China Southern Investment Group Co., Ltd.	Wholly-owned subsidiary	Shantou Niutianyang Expressway Investment Development Co., Ltd.	336,840.92	14 November 2019	14 November 2019	23 August 2039	Joint and several liability guarantee	Normal performance	Equity pledge	No	No	/	None	No	/

Total amount of guarantees incurred during the reporting period (excluding the guarantees provided to subsidiaries)	-86,289.42
Total balance of guarantee as at the end of the reporting period (A) (excluding the guarantees provided for subsidiaries)	731,658.9
Guarantees provided by the Company to its subsidiaries	
Total amount of guarantees provided to subsidiaries during the reporting period	207,573.45
Total balance of guarantee provided to subsidiaries as at the end of the reporting period (B)	15,314,781.95
Total guaranteed amount of the Company (including guarantees provided to subsidiaries)	
Total amount of guarantees (A+B)	16,046,440.85
Total guaranteed amount as a percentage of net assets of the Company (%)	37.93
Of which:	
Amount of guarantees provided to shareholders, de facto controller and their related parties (C)	0.00
Amount of debt guarantees directly or indirectly provided to the parties with the gearing ratio exceeding 70% (D)	13,304,068.31
Excess amount of aggregate guarantee over 50% of net assets (E)	0.00
Total amount of the above three types of guarantees (C+D+E)	13,304,068.31
Statement on the contingent joint and several liability in connection with unexpired guarantee	Not applicable
Explanations on guarantees	<ol style="list-style-type: none"> 1. The aggregate guarantee included the commitment to make up the difference of RMB97,413.1243 million provided to its subsidiaries; 2. As at 31 December 2022, the balance of guarantee of China Railway Group Limited (consolidated) in relation to real estate mortgage was RMB49,788.4402 million.

5.15.3 Management of Cash Assets Entrusted to Third Parties

(1) Entrusted wealth management

(i) Overview of entrusted wealth management

Not applicable

(ii) Breakdown of entrusted wealth management

Not applicable

(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	Occurrence amount	Unexpired balance	Overdue amount
Entrusted loans	Self-owned funds	439,280.88	439,280.88	0

(ii) Breakdown of entrusted loans

Unit: 0'000 Currency: RMB

Name of trustee	Type of entrusted loan	Entrusted loan amount	Commencement date	Termination date	Source of funds	Source of target	Determination of returns	Annualized yield rate	Expected gains (If any)	Actual gains or losses	Actual recovery	Going through legal procedures or not	Future entrusted loan plan available	Amount of impairment provision (if any)
Beijingxi Railway Station Branch, ICBC	Entrusted loan	120,780.88	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)	By agreement	3.81	4,501.75	–		Yes	No	1,761.85
China Railway Finance Co., Ltd.	Entrusted loan	7,500	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		Yes	No	28.67
China Railway Finance Co., Ltd.	Entrusted loan	16,500	2020/3/11	2023/3/10	Self-owned funds	Payment of principal and interest by Yulin-Shenmu Expressway	By agreement	4.75	2,351.25	749.66		Yes	No	63.08
China Railway Finance Co., Ltd.	Entrusted loan	21,700	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		Yes	No	82.96
China Railway Finance Co., Ltd.	Entrusted loan	67,000	2020/3/10	2023/3/9	Self-owned funds	Payment of principal and interest by Miansui Expressway	By agreement	4.75	9,547.5	3,044.06		Yes	No	256.16
China Railway Finance Co., Ltd.	Entrusted loan	7,500	2020/3/10	2023/3/9	Self-owned funds	Payment of principal and interest by Quanzhou county-Xing'an county Expressway	By agreement	4.75	1,068.75	340.75		Yes	No	28.67
China Railway Finance Co., Ltd.	Entrusted loan	19,350	2020/3/11	2023/3/10	Self-owned funds	Payment by Guangxi Expressway for the acquisition of Yulin-Shenmu Expressway	By agreement	4.75	2,757.38	957.11		Yes	No	73.98
China Railway Finance Co., Ltd.	Entrusted loan	151,750	2020/3/10	2023/3/9	Self-owned funds	Gap of capital dividends from Guangxi Expressway	By agreement	5.23	23,786.81	7,506.05		Yes	No	580.18
China Railway Finance Co., Ltd.	Entrusted loan	27,200	2021/3/8	2024/3/7	Self-owned funds	Payment of principal and interest by Dianzhong	By agreement	4.79	3,904.56	313.78		Yes	No	408.94

(iii) Impairment provision of entrusted loans

Not applicable

5.16 Description of Other Significant Matters That Have a Significant Impact on the Value Judgments and Investment Decisions Made by Investors

5.16.1 Material contracts signed during the reporting period

(1) Infrastructure construction

No.	Signatory	Name of contract	Contract awarded Date of contract	Contract sum (RMB'0,000)	Construction period
Railways					
1	China Railway No. 1 Engineering, China Railway No. 4 Engineering, China Railway No. 10 Engineering, China Railway Major Bridge Engineering, China Railway Tunnel, China Railway Shanghai Engineering	General contracting of sections HSZQ-2, HSZQ-4, HSZQ-5, HSZQ-6、HSZQ-7, HSZQ-12 for the construction of the civil engineering and auxiliary projects and the relevant project of the Shanghai-Ningbo section of the newly built Shanghai-Nanjing-Hefei High-speed Railway	November 2022	3,260,782	60-84 months
2	China Railway No. 1 Engineering, China Railway No. 2 Engineering, China Railway No. 3 Engineering, China Railway No. 4 Engineering, China Railway No. 10 Engineering, China Railway Major Bridge Engineering, China Railway Tunnel	Unit cost contracting of sections XCTJ1, XCTJ3, XCTJ5, XCTJ6, XCTJ9, XCTJ11, and XCTJ13 of the civil engineering and auxiliary project of the newly built Xining-Chengdu Railway (Gansu-Qinghai section)	November 2022	1,987,147	2,191-2,556 calendar days
3	China Railway No. 3 Engineering, China Railway No. 4 Engineering, China Railway No. 6 Engineering, China Railway No. 10 Engineering, China Railway Major Bridge Engineering, China Railway Guangzhou	Construction cost contracting of sections SJSG-4, SJSG-5, SJSG-6, SJSG-8, SJSG-9, and SJSG-10 of the civil engineering and auxiliary project of the newly built Shenzhen-Jiangmen Railway	November 2022	1,488,925	1,461-2,009 calendar days

No.	Signatory	Name of contract	Contract awarded Date of contract	Contract sum (RMB'0,000)	Construction period
Highway					
1	China Railway No. 10 Engineering	Section Qimen to the boundary of Anhui and Jiangxi of G0321 Dezhou-Shangrao Expressway	December 2022	386,415	42 months
2	China Railway Tunnel	Section ZLGSTJ-4 of Zhengzhou-Luoyang Expressway	November 2022	225,675	3 years
3	China Railway No. 1 Engineering and other parties	Design and construction general contracting of section Qiantun curve to Laoxiaan line of Tonghua-Wuhai road of national expressway G230	June 2022	213,877	21 months
Municipal and other works					
1	China Railway, China Railway (Guangzhou) Investment & Development, China Railway No. 1 Engineering, China Railway No. 3 Engineering, China Railway No. 4 Engineering, China Railway No. 6 Engineering, China Railway No. 10 Engineering, China Railway Tunnel, China Railway Guangzhou Engineering	General contracting of section Foshan West Station to Guangzhou North Station of Guangzhou-Foshan ring road of intercity rail transit of Pearl River Delta	October 2022	919,017	60 months
2	China Railway, China Southern Railway Construction Investment, China Railway No. 1 Engineering, China Railway No. 2 Engineering, China Railway No. 4 Engineering, China Railway Electrification, China Railway Guangzhou Engineering and other parties	Construction costs general contracting of section YDZH-8 of the newly built "one ring and one line" intercity railway in east Guangdong province	November 2022	820,974	54 months
3	China Railway No. 2 Engineering, China Railway No. 3 Engineering, China Railway No. 4 Engineering, China Railway Tunnel	Sections TJ-01, TJ-02, TJ-03 and TJ-04 of No.2 subsea tunnel project of Jiaozhou Bay	September 2022	484,708	1,552 calendar days

(2) Survey, Design and Consulting Services Business

No.	Signatory	Name of contract	Date of winning the bidding/contract signature	Contract sum (RMB'0,000)	Construction period
1	China Railway Liuyuan Engineering	Special railway line of the pilot highway and railway port construction project for the innovative development of the “Belt and Road” international logistics system (consulting services throughout the whole process with an agent-construction system)	Won the bidding in October 2022 but the contract has been not signed yet	59,130	To completion acceptance
2	China Railway Eryuan Engineering	General contracting of survey and design of Chengdu to Deyang line railway, a municipal railway (suburbs)	March 2022	48,590	December 2026
3	China Railway Eryuan Engineering	General contracting of survey and design of chengdu to Meishan line railway, a municipal railway (suburbs)	March 2022	36,739	December 2026

(3) Engineering Equipment and Component Manufacturing Business

No.	Signatory	Name of contract	Date of winning the bidding/contract signature	Contract sum (RMB'0,000)	Construction period (months)
Steel structures					
1	China Railway Baoji Bridge and China Railway Shanhaiguan Bridge	Steel structures of the Huanghe Ultra-long bridge of section YZSG-1 of the Huanghe Expressway (Sections 1-3)	June 2022	67,867	1 July 2022-30 June 2023
2	China Railway Shanhaiguan Bridge and China Railway Baoji Bridge	Manufacturing and processing of steel structures of section YZSG-2 of the Huanghe Expressway	June 2022	51,346	June 2022-August 2024
3	China Railway Baoji Bridge	Contracting for the manufacturing of anchorage beams, manufacturing and installation of steel truss beams and relevant auxiliary structures for section HHDQ-3 of the extension project of the Long Huanghe Expressway bridge (approach bridge, main bridge section) of G104 Beijing-Pingtai road in Ji'nan	May 2022	50,022	1 June 2022-31 October 2023

No.	Signatory	Name of contract	Date of winning the bidding/contract signature	Contract sum (RMB'0,000)	Construction period (months)
Turnout					
1	China Railway Shanhaiguan Bridge	Contract of materials supplied by the customer, under the management of State Railway Group, of the newly built Jinhua-Ningbo railway	June 2022	21,915	The date of delivery is from September 2022 to the completion of the project
2	China Railway Shanhaiguan Bridge	Purchase contract of the civil engineering and auxiliary project of the newly built Weifang-Yantan railway	October 2022	21,519	As required by the customer
3	China Railway Baoji Bridge	Procurement and supply contract of materials supplied by the customer, under the management of State Railway Group, of Jiande-Quzhou section of the newly built Hangzhou-Quzhou railway	July 2022	13,687	To the completion of the project

Engineering machinery (including track equipment and shields)

1	China Railway Engineering Equipment	Contract of the purchase project of TBM main body for hard rock and subsequent supporting systems of section CZXZZQ-8 of Ya'an-Linzhi section of the newly built Sichuan-Tibet Railway	July 2022	36,201	First unit: 15 October 2022 Second unit: 15 November 2022
2	China Railway Engineering Equipment	Contract of the purchase project of TBM main body for hard rock and subsequent supporting systems in large sections of Xindu Bridge-Bomi section of the newly built Sichuan-Tibet railway	November 2022	35,801	First unit: 1 August 2023 Second unit: 1 September 2023
3	China Railway Engineering Equipment	Sales contract of the two-model shield tunneling machine, i.e. earth pressure balance or TBM, of section JJZQ-4 of Zhuhai-Zhaoqing High-speed Railway	December 2022	21,900	To 5 March 2023

(4) *Property development business*

No.	Project name	Project location	Project type	Planned area (0'000 square meters)
1	Comprehensive enhancement project of urban environment of Wolong District Central City, Nanyang City (Phase I)	Henan	Urban renovation	213
2	Renovation project of urban villages in Xinhua District of section III of urban renovation of the downtown of Cangzhou City	Hebei	Urban renovation	140
3	Renovation of urban village project in Jinsheng Village, Shihudang Town, Songjiang District	Shanghai	Urban renovation	19.35

5.16.2 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	Concession period	Signing date
1	Contract of PPP project of the Wuzhou-Yulin-Qinzhou Highway (Yulin-Pubei section)	China Railway Communications Investment Group Co., Ltd and other parties (project companies) (“China Railway Communications Party”)	178.57	China Railway Communications Party holds 19.9%, the industrial fund holds 80%, and Transfigure holds 0.1% of equity	3	30	September 2022
2	Franchise agreement of Zizhong-Leshan section and Zizhong-Tonglang Expressway (in Sichuan) of S48 line	China Railway City Investment and Development Group Co., Ltd and other parties (project companies) (“China Railway City Party”)	187.19	China Railway City Party holds 49.5%, Sichuan Railway Investment holds 50% and Sichuan Road & Bridge holds 0.5% of equity	3	30	May 2022
3	Contract of PPP project of Benxi-Huanre (boundary of Liaoning province and Jilin province) of Benxi-Ji'an Expressway in Liaoning province	China Railway Group Limited and other parties (project companies) (“China Railway Party”)	263.71	China Railway Party holds 51%, and the government contributes and holds 49% on behalf of Liaoning Provincial Transportation Investment Group Co., Ltd	4	40	October 2022

5.16.3 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	PPP project of Hohhot City Transit Line 1 (Phase 1)	China Railway Group Limited and other parties	146.79	September 2016	December 2019	25
2	PPP project of the Xundian-Zhanyi Expressway (Kunming section)	China Railway Group Limited and other parties	61.1	August 2018	January 2020	30
3	PPP project of the Dongchuan-Gele section of the S25 Kunming-Qiaojia Expressway	China Railway Group Limited and other parties	56.9	April 2017	January 2020	30

5.16.4 Strategic framework agreements signed during the reporting period

No.	Signing date	Agreement name	Agreed investment amount (if any)	Main content of agreements
1	March 2022	Strategic cooperation agreement between the Shandong Provincial People's Government and China Railway Group Limited	To strive to get involved in major projects and contracts for major infrastructure projects of Shandong during the "14th Five-Year Plan" period, and the value of the new contracts are not less than RMB500 billion.	<ol style="list-style-type: none"> 1. To establish a long-term strategic partnership. 2. To cooperate in major areas including expressways, municipal railways, urban rail transit, regular railways, roads, airports, ecological governance, water conservation and hydropower, water affairs and water transportation, urban construction, new infrastructure and new energy. 3. To support the establishment of the Shandong subsidiary directly under China Railway.
2	July 2022	Strategic cooperation agreement between the Anhui Provincial People's Government and China Railway Group Limited	During the "14th Five-Year Plan" period, China Railway plans to invest approximately RMB100 billion in Anhui.	<ol style="list-style-type: none"> 1. To cultivate industrial clusters featuring rail transit 2. To accelerate the establishment of the Anhui Ecological and Environmental Industry Group 3. To develop markets of countries and regions along the "Belt and Road" 4. To deepen cooperation in infrastructure 5. To cooperate in the R&D of high-speed magnetic levitation technology and construction of experimental engineering 6. To promote rural revitalization 7. To promote the development in north Anhui province 8. To forge ahead with the high-quality development of the construction industry in Anhui

5.16.5 Particulars of Material Properties

(1) Property held for development

Name of building or project	Address	Current land use	Area (‘0,000 square meters)	Floor area (‘0,000 square meters)	State of completion	Expected completion date	Interests of the Company and its subsidiaries
China Railway Caishi Project	South of Jingshidong Road, north of Guangfu Avenue and west of Panlong Road, Licheng District, Jinan City, Shandong Province	Commercial housing land, commercial land	58.81	106.58	Under construction	2027	100%
Guangzhou Nuode Cloud City	North of Jiangfu Road and west of Guanghua Road, Jianggao Town, Baiyun District, Guangzhou City, Guangdong Province	Urban residential land	11.7	35	Under construction	2024	80%
Yipin Garden	Lane 1758, Huqingping Highway, Xujing Town, Qingpu District, Shanghai	Ordinary commercial housing	6.04	15.4	Under construction	2024	100%
Beijing Daxing District Huangcun Town Project	Huangcun Town, Daxing District, Beijing	Public service facilities, underground garage, underground storage, residential, commercial	4.64	19.79	Under construction	2024	100%
China Railway Changchun Expo City	No.6888 Yongchun Street, Yongchun Town, Chaoyang District, Changchun City, Jilin Province	Urban residential land, other land for commercial use, land for cultural facilities	232.71	447.16	Under construction	2031	90%

(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	November 2054	100%
Tianjin Nuode Center No. 1 Building, No. 2 Building and equipped facilities	No. 50 Lvwei Road, Hebei District, Tianjin	Commercial	January 2054	100%
Guiyang Huaguoyuan Shopping Center	Huaguoyuan, Nanming District, Guiyang City, Guizhou Province	Commercial	April 2052	100%
Guangzhou Nuode Center	No. 477 East Hanxi Avenue, Nancun Town, Panyu District, Guangzhou City, Guangdong	Commercial	May 2053	100%
Lot AT090904, Starting Area, Financial City, Tianhe District	Lot AT090904, Starting Area, Financial City, Huangpu Avenue, Tianhe District, Guangzhou City, Guangdong	Commercial	December 2068	100%
Chengdu Nuode No. 1	Intersection of Guangxi Road and Huanhu Road, Shuangliu District, Chengdu City, Sichuan	Commercial	January 2065	100%
Shanghai Nuode International Plaza	3/5 Block, 219 Lane, Xinzhuang Town, Minhang District, Shanghai	Commercial	March 2064	100%
China Railway Real Estate Qingdao Center	No. 8 Hong Kong Middle Road, South City District, Qingdao, Shandong	Commercial	July 2046	100%
Reeda Plaza	No. 46 South Shengli Road, Heping District, Shenyang, Liaoning	Commercial	April 2051	100%
China Railway South Headquarters Building	No. 3333 Houhai Center Road, Nanshan District, Shenzhen, Guangdong	Commercial	December 2046	100%

5.17 Environmental Information

Whether environmental protection related mechanisms is established	Yes
Funds invested in environmental protection during the Reporting Period (Unit: '0,000)	358,590.336

5.17.1 Description of environmental protection efforts of the highly polluting companies and their subsidiaries as announced by the environmental protection authorities

Not applicable

5.17.2 Description of environmental protection efforts of companies other than highly polluting companies

(1) Administrative penalties due to environmental issues

In 2022, 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 totalled approximately RMB1.6335 million and involved 30 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..

(2) Disclosure of other environmental information with reference to highly polluting companies

Not applicable

(3) Reasons for not disclosing other environmental information

Not applicable

5.17.3 Information on ecological protection, pollution prevention and fulfilment of environmental responsibilities

In strict accordance with the Environmental Protection Law of the People's Republic of China and the Energy Conservation Law of the People's Republic of China, the Regulations on the Administration of Environmental Protection of Construction Projects and other laws and regulations, the Company has implemented the thoughts on ecological civilization, established the concept of green development, practiced the decisions on ecological civilization construction and environmental protection of the Party Central Committee and the State Council, and continued refining the environmental management system guided by "ecological priority, green development". The Company has striven 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. The Company has formulated the China Railway Carbon Peaking Action Plan, established the leadership group of carbon peaking and carbon neutrality, and organized a series of learning on "ensuring carbon peaking and carbon neutral to promote high-quality enterprise development". The Company has guided enterprises to steadily promote carbon peaking, comprehensively propelled green and low-carbon transformation development, and continuously improved the capability of supplying high-quality green products and services. Based on systematic environmental management, the Company has obtained ISO14001 environmental management system certification issued by China Certification Center Inc.

The main energy consumed by the Company is electricity, gasoline, diesel fuel and natural gas used in the construction and office processes. The Company has been promoting energy saving and efficiency enhancement solidly. In accordance with the provisions of the Regulations on the Supervision and Management of Energy Saving and Emission Reduction and the "14th Five-Year Plan" for Energy Conservation and Emission Reduction, the Company has issued the Quantitative Indicators of Energy Saving and Ecological Environment Protection for 2022. In 2022, the comprehensive energy consumption (comparable price) per ten-thousand yuan of operating income of the Company was 0.0429 ton of standard coal/RMB10,000, 3.16% lower than the same period last year; and the emissions of CO₂ per ten-thousand yuan were 0.1502 ton/RMB10,000, 3.8% lower than the same period last year, successfully completing the established work goals in annual energy conservation and environmental protection of 2022. The following table shows the specific energy consumption.

Key Performance Indicators of Energy and Resource Consumption

Energy/Resource type	Indicators	Data in 2022	Year-on-year increase/decrease
Direct energy consumption	Gasoline (10,000 tonnes)	50.0052	8.5%
	Gasoline (ton/RMB10,000)	0.0046	2.2%
	Diesel (10,000 tonnes)	167.5264	5.6%
	Diesel (ton/RMB10,000)	0.015	0
	Natural gas (10,000 standard m ³)	7160.4	5.8%
	Natural gas (m ³ /RMB10,000)	0.66	-1.5%
Indirect energy consumption	Electricity (10,000 kwh)	1130796	8.2%
	Electricity (10,000 kwh/RMB10,000)	0.0104	1%
Comprehensive energy consumption	Comprehensive energy consumption (10,000 tonnes of standard coal)	482.323	7.5%
	Comprehensive energy consumption (ton of standard coal/RMB10,000 income)	0.0429	-3.2%
	Comprehensive energy consumption (10,000 kwh)	3924515	7.5%
	Comprehensive energy consumption (kwh/RMB10,000 income)	361	0.5%
	Total new water consumption (10,000 tonnes)	46105.66	0.02%

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 RMB10,000 operating income to calculate and disclose energy consumption density.

5.17.4 Measures taken to reduce carbon emissions during the reporting period and their effects

Whether to adopt carbon reduction measures	Yes
Reduction in CO ₂ emission density (ton/RMB10,000)	3.8%
Types of carbon reduction measures (e.g. using clean energy to generate electricity, using carbon reduction technologies in production, developing new products that can help reduce carbon, etc.)	Stepping up clean energy substitution, improving the level of fossil energy use, driving low-carbon transformation of energy structure, developing and using energy-saving and low-carbon technologies, etc.

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. The Company put emphasis on the construction of the system of energy conservation and ecological environment protection. To that end, the Company continued strengthening the identification and evaluation of key environmental factors in construction projects and operation sites, formulated and implemented environmental management plans, and established the ecological and environmental monitoring system. In addition, the Company cemented the management of ecological and environmental risk sources and pollutant emission control during operation, and conducted continuous supervision and inspection. **First, the system of energy conservation and ecological environment protection was improved comprehensively.** The Company launched a special project to improve safety, quality and environmental protection. In response to the new requirements for improving the management system of energy saving and environmental protection, the Company intended to revise and improve the existing administrative measures for energy-saving and environmental protection, to improve the management system of energy saving and environmental protection and its management work. **Second, the statistical monitoring system for energy conservation and ecological environment protection operated properly.** The Company attached great importance to energy conservation and ecological environment protection. In this regard, the Company aligned its efforts with the new energy saving and emission reduction system of central enterprises published by the SASAC, and developed its own the energy conservation and ecological environment protection system. Currently, online reporting has become the norm. Paying continuous attention to the requirements of the SASAC's 14th five-year plan for energy conservation and environmental protection of central enterprises, the Company will improve the statistical monitoring system, and make data statistics of energy conservation and environmental protection. **Third, the goal of energy conservation and ecological environment protection set forth in the "14th Five-Year Plan" was clarified.** In accordance with the requirements of SASAC, the Company calculated the indicators of energy conservation and environmental protection, formed the proposed values of energy saving and emission reduction indicators and submitted them to the SASAC. According to the proposed values, the Company clarified the objectives of energy conservation and environmental protection set forth in the "14th Five-Year Plan" and officially released them. Furthermore, the Company strictly assessed the rewards and punishments and carried out energy conservation and environmental protection set forth in the "14th Five-Year Plan", to achieve the established objectives.

Key Performance Indicators of Emissions and Waste

Indicators	Data in 2022	Year-on-year increase/decrease
Total amount of CO ₂ emission (10,000 tonnes)	1,632.9429	6.7%
CO ₂ emission density (ton/RMB10,000)	0.1502	-3.8%
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 hazardous waste (ton)	1,340	3.1%
Discharge of hazardous waste per RMB 10,000 (kg/RMB10,000)	0.012	-5.1%
Total nonhazardous waste (10,000 tons)	508.85	3.1%
Discharge of nonhazardous waste per RMB10,000 (kg/RMB10,000)	0.05	0

Notes: 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 fulfillment of ecological protection, pollution prevention and control, and environmental responsibilities, please refer to the 2022 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.

5.18 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.

China Railway has participated in the formulation of industry standards such as enterprise ESG disclosure guidelines and evaluation systems, filling the gaps in relevant systems for ESG disclosure of domestic enterprises. We have prepared and released the company's 14th ESG and social responsibility report, which was highly praised by the capital markets of Shanghai and Hong Kong, and won the Best ESG Report Award from "New Fortune". China Railway's ESG practice case was awarded the "Best Practice of Listed Companies" by China Association of Listed Companies; it was successfully selected as "50 Central Enterprises ESG•Social Value Pioneers" and "Central Enterprises ESG•Risk Management Pioneers 50" and Forbes "China ESG 50", which fully demonstrated that China Railway actively fulfilled its social responsibilities and promoted its due responsibility and market recognition for sustainable and high-quality development.

For details about the Company's fulfilment of social responsibilities, please refer to the 2022 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.

External donations, public welfare projects	Quantity/Content	Description
Total investment (RMB'0,000)	8,998	
Of which: funds (RMB'0,000)	8,948	
Cash converted from materials (RMB'0,000)	50	

Specific description

The Company highly values giving back to the society while developing itself, and actively undertakes social responsibility. In 2022, the Company invested a total of RMB89.98 million in external donations and public welfare projects, including RMB89.48 million of capital and RMB500,000 of cash converted from materials. The Company demonstrated its role as a central enterprise in advancing rural revitalization, and actively participated in disaster relief and rescue in various places. The Company organized and coordinated a total of 230 emergency rescue and relief activities such as the "8.17" Chongqing forest fire and the "9.5" Luding County earthquake. The Company encouraged its employees to participate in voluntary activities, supported basic education, and attached importance to the heritage and protection of Chinese culture, contributing its share to the construction of a harmonious and beautiful society.

5.19 Work of consolidating and expanding poverty alleviation results and rural revitalization

Poverty alleviation and rural revitalization projects	Quantity/ Content	Description
Total investment (RMB'0,000)	8,040	See specific description for details Key projects and the use of funds: The Company invested RMB20 million in the reconstruction project of Zengkou-Panxi Highway along the X004 route in Guidong County; invested RMB5 million to assist the development of the raw white tea industry in Rucheng County; invested RMB15 million to help eight villages in Rucheng County to build beautiful villages and improve rural habitats; invested RMB20 million to build a photovoltaic power station project in Baode County; invested RMB14.50 million to help build a new road project for Angtongxiong Pasture in Tuoba Township, and an reconstruction and extension project for Naitong Village Primary School in Yoba Township.
Of which: funds (RMB'0,000)	7,990	
Cash converted from materials (RMB'0,000)	50	Donated supplies for pandemic prevention in Karuo District.
Number of beneficiaries (persons)	96,000	/
Forms of assistance (such as industrial assistance, employment assistance, education assistance, etc.)	Industrial assistance, employment assistance, consumption assistance, education assistance, etc.	Throughout the year, the Company trained 406 grass-root cadres in total, 123 leaders in rural revitalization, and 1,160 professional technical personnel; purchased RMB22.482 million of agricultural products, and helped sell RMB2.208 million of agricultural products. The Company also launched the activity of “helping you grow with love in my heart” to assist the impoverished students.

Specific description

In 2022, the Company attached great importance to targeted assistance. Specifically, the Company dispatched 6 cadres assuming a temporary post; invested RMB84.63 million of assistance funds; attracted RMB500 million of assistance funds; trained grass-root cadres of 406 person times, leaders in rural revitalization of 123 person times, and professional technical personnel of 1,160 person times; purchased RMB22.482 million of agricultural products, and helped sell RMB2.208 million of agricultural products. Marked achievements were made in targeted assistance. The short video titled “Happy nest”, which was based on the change of Tuanwo Village in Baode County, won the nomination award of “Listen to the fellow-villagers talk about the well-off life”. Dongshan Village in Rucheng County was awarded as a model beautiful village in Hunan Province; the “Sichu Liukao” model of habitat improvement in Rucheng County fully mobilized local people to participate actively and magnified the efficiency of the use of invested funds. The model was highly recognized in the field verification of the National Rural Revitalization Administration (“NRRA”). The “Red Rucheng” educational book written by the Company and the children’s song “half a quilt of warmth” were granted the award of “Five One Project” in Chenzhou City.

- (1) Vigorously supporting the development of industries, and strengthening the engine of revitalization and development. Stretching Baode County’s long sunshine hours and abundant solar energy resources, the Company invested RMB20 million to build a 5MW photovoltaic power station project in Shenshan Village. The project will be completed in early 2023, with an expected operating cycle of 25 years and an average annual income of more than RMB2.5 million, all of which will be used for the development of local public welfare projects and assistance to poor households. Considering the development prospect of the tea industry in Rucheng County, the Company established a development fund the raw white tea industry. The Company invested RMB5 million and plans to invest RMB5 million per year during the “14th Five-Year Plan” period to support the development of the raw white tea industry. Through the town and village linkage model, the Company motivated the local tea farmers to plant tea and increased the driving force for the revitalization of the villages. The project was highly recognized and supported by the tea academician Liu Zhonghua. Given the significant effect of the project of Zhongtie Zhenxing Avenue in Guidong County on the industries of villages and towns along the route, the Company continued investing RMB20 million in the reconstruction project of Zengkou-Panxi Highway (the southern section of Zhongtie Zhenxing Avenue) along the X004 route in Guidong County. It was intended to propel the development of cultural tourism and real estate projects in Zengkou area of Oujiang Town by relieving the pressure of traffic congestion in the vicinity.

- (2) Building ecological civilization model village, and creating a beautiful and livable home. We invested more than RMB15 million to deepen rural construction and improve rural habitats. We implemented special projects for village construction and habitat improvement in 11 villages, including Waisha Village in Maqiao Town, Rucheng County, and Guangming Village in Guidong County, in an effort to create clean, neat and orderly, beautiful and livable homes. Local villagers got actively involved in the construction of their own homes, and their internal dynamics were fully stimulated. The Reshui Village in Rucheng County, through environmental improvement and relying on hot spring resources, attracted the investment of RMB40 million from private enterprises to develop high-end homestay. Dongshan Village was rated as a model beautiful village in Hunan Province.
- (3) Expanding the training coverage and enhancing the capability and quality of various talents. According to the actual needs of targeted assistance counties, the Company organized the training of various personnel by level and category, and expanded the coverage of training. A total of 406 grass-roots cadres, 123 leaders in rural revitalization, and 1,160 professional and technical personnel were trained throughout the year. By making use of the training platform of the China Railway Party School, 54 grass-roots cadres from targeted assistance counties were organized to participate in the second training class for the grass-roots Party branch secretaries from targeted assistance counties, to further play the role of “bellwethers” of the leaders in rural revitalization. With its technology advantages in the industry, the Company regularly organized model workers and high-end skilled personnel to share their experience in targeted assistance counties, leading the progress of local technical skills and helping Rucheng Vocational High School win the third prize in the National Survey Competition. The Company guided the targeted assistance counties to continue with career training. While implementing the two branded training programs of “Baode Good Driver” and “Everyone Has A Skill” in depth, the Company created the brand of “Baode Good Property”. In addition, the Company helped the first batch of 44 households that had been lifted out of poverty complete relevant skills upgrading training, helping the labor force from the households find a new way to get rich.

- (4) In-depth development of grass-roots Party building, to boost the development of grass-roots Party organizations. The Company always cared and maintained close contact with the grassroots Party members and the public, and carried out Party building activities. Rucheng County invited many times the Party branches of the departments and affiliated units of China Railway No.5 Engineering Group Co., Ltd. to carry out branch building activities locally, and they visited the exhibition hall of “half a quilt of warmth” and the former residence of General Zhu Liangcai and other red classic educational bases. The Company launched the activity of “helping you grow with love in my heart” to assist the impoverished students, and provided targeted assistance to nine students in need in Yanshou Township, supporting them until they graduate from universities. One of the nine students was admitted to Peking University in 2022. Insisting on Party building and taking the opportunity of “welcoming the 20th National Congress, following the Party forever, and striving for a new journey”, the Party branch of Tuanwo Village in Baode County organized ten thematic Party days, five special Party classes, and one life meeting. The Party branch developed a Party building list of 100 items in 15 categories, realizing a two-pronged hard work pattern of grasping positions and data at the same time and advancing rural revitalization through Party building.
- (5) Increasing the purchase and sale of agricultural products in assistance areas with a combination of measures. The annual purchase of agricultural products amounted to RMB22.482 million, and the sales of local agricultural products amounted to RMB2.208 million. First, fully leveraging its own advantages, the Company called on the Labor Union of the affiliated unit and the canteen to communicate on the agricultural products of the assistance areas, setting up a “bridge of love” between the targeted assistance areas and the Company. Second, by opening up external channels, the Company invited supermarkets and fruit chain stores to conduct the on-the-spot investigation, and was partnered with distributors, central enterprises and other sales platforms to broaden the sales channels of local agricultural products. Third, through live-streaming sales, the Company got actively involved in the weekly activity of “helping revitalize agriculture through consumption” organized by the SASAC, and sold goods through the SASAC new media platform State-owned Assets Xiaoxin (“國資小新”).

6 FINANCIAL REPORT

Consolidated Income Statement

		Year ended 31 December	
	Note	2022	2021
		RMB million	RMB million
Revenue	3	1,154,349	1,073,272
Cost of sales and services		(1,045,459)	(969,886)
Gross profit		108,890	103,386
Other income	4	2,623	2,736
Other expenses	4	(1,082)	(1,982)
Net impairment losses on financial assets and contract assets	5	(3,343)	(5,478)
Other gains/(losses), net	6	615	(82)
Losses from derecognition of financial assets at amortised cost	7	(4,520)	(4,595)
Selling and marketing expenses		(6,328)	(5,948)
Administrative expenses		(26,413)	(25,436)
Research and development expenditures		(27,742)	(24,756)
Operating profit		42,700	37,845
Finance income		8,273	6,105
Finance costs		(9,578)	(7,616)
Share of post-tax losses of joint ventures		(1,437)	(507)
Share of post-tax profits of associates		4,734	3,809
Profit before income tax		44,692	39,636
Income tax expense	8	(9,720)	(9,166)
Profit for the year		34,972	30,470
Profit attributable to:			
– Owners of the Company		31,276	27,618
– Non-controlling interests		3,696	2,852
		34,972	30,470
Earnings per share for profit attributable to owners of the Company (expressed in RMB per share)			
– Basic	9	1.198	1.037
– Diluted	9	1.198	1.037

Consolidated Statement of Comprehensive Income

	Year ended 31 December	
Note	2022	2021
	RMB million	RMB million
Profit for the year	34,972	30,470
Other comprehensive income/(expenses), net of income tax		
<i>Items that will not be reclassified to profit or loss:</i>		
Remeasurement of retirement and other supplemental benefit obligations	(12)	(78)
Income tax relating to remeasurement of retirement and other supplemental benefit obligations	2	13
Changes in the fair value of equity investments at fair value through other comprehensive income	93	57
Income tax relating to changes in the fair value of equity investments at fair value through other comprehensive income	(20)	(19)
	63	(27)
<i>Items that may be reclassified subsequently to profit or loss:</i>		
Exchange differences on translating foreign operations	158	(64)
Share of other comprehensive income/(expenses) of associates	675	(106)
	833	(170)
Other comprehensive income/(expenses) for the year, net of tax	896	(197)
Total comprehensive income for the year	35,868	30,273
Total comprehensive income for the year attributable to:		
– Owners of the Company	32,120	27,458
– Non-controlling interests	3,748	2,815
	35,868	30,273

Consolidated Balance Sheet

		As at 31 December	
	Note	2022	2021
		RMB million	RMB million
ASSETS			
Non-current assets			
Property, plant and equipment		118,250	75,134
Right-of-use assets		1,754	1,659
Deposits for acquisition of property, plant and equipment		1,918	2,234
Lease prepayments		12,637	12,656
Deposits for investments		668	441
Investment properties		15,224	14,016
Intangible assets		155,137	110,496
Mining assets		3,376	3,479
Contract assets		203,132	161,377
Investments in joint ventures		55,122	49,831
Investments in associates		54,611	46,181
Goodwill		1,771	1,568
Financial assets at fair value through other comprehensive income		14,945	12,164
Other financial assets at amortised cost		19,139	22,960
Financial assets at fair value through profit or loss		13,543	12,294
Deferred tax assets		12,109	10,372
Other prepayments		397	332
Trade and other receivables	11	30,508	23,374
		<u>714,241</u>	<u>560,568</u>
Current assets			
Lease prepayments		212	223
Properties held for sale		56,979	48,745
Properties under development for sale		101,694	109,330
Inventories		49,198	45,371
Financial assets at fair value through other comprehensive income		766	526
Trade and other receivables	11	252,672	249,169
Contract assets		169,735	149,142
Current income tax recoverable		3,849	3,736
Other financial assets at amortised cost		14,777	8,553
Financial assets at fair value through profit or loss		10,312	7,304
Restricted cash and term deposit with maturity over three months		33,597	30,797
Cash and cash equivalents		204,987	148,116
		<u>898,778</u>	<u>801,012</u>
Total assets		<u><u>1,613,019</u></u>	<u><u>1,361,580</u></u>

		As at 31 December	
	<i>Note</i>	2022	2021
		RMB million	RMB million
EQUITY			
Equity attributable to owners of the Company			
Share capital		24,752	24,571
Shares held for 2021 Restricted Share Incentive Scheme		(612)	–
Share premium and reserves		231,321	204,927
Perpetual notes		45,621	45,624
		<u>301,082</u>	<u>275,122</u>
Non-controlling interests		<u>121,828</u>	<u>83,072</u>
Total equity		<u>422,910</u>	<u>358,194</u>
LIABILITIES			
Non-current liabilities			
Trade and other payables	12	26,288	10,263
Borrowings		282,508	198,503
Lease liabilities		1,139	972
Retirement and other supplemental benefit obligations		2,050	2,293
Provisions		578	761
Deferred government grants and income		1,152	1,087
Deferred tax liabilities		3,019	1,647
		<u>316,734</u>	<u>215,526</u>
Current liabilities			
Trade and other payables	12	617,305	522,411
Contract liabilities		136,937	144,095
Current income tax liabilities		8,663	7,100
Borrowings		109,734	113,424
Lease liabilities		343	360
Retirement and other supplemental benefit obligations		275	300
Financial liabilities at fair value through profit or loss		96	122
Provision		22	48
		<u>873,375</u>	<u>787,860</u>
Total liabilities		<u>1,190,109</u>	<u>1,003,386</u>
Total equity and liabilities		<u>1,613,019</u>	<u>1,361,580</u>

Notes:

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 2023.

2. 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.

(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 2022.

	Effective for accounting periods beginning on or after
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

The adoption of above did not have any material impact on the Group’s results for the year ended 31 December 2022 and the Group’s financial position as at 31 December 2022. The Group did not have to change its accounting policies or make retrospective adjustments as a result of adopting these amended standards.

(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 2022, 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 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.

3. 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.

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

	For the year ended 31 December 2022						
	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>	Elimination <i>RMB million</i>	Total <i>RMB million</i>
External revenue	983,533	18,616	25,838	53,459	64,918	-	1,146,364
Inter-segment revenue	31,946	978	12,371	-	43,831	(89,126)	-
Other revenue	3,863	201	654	623	2,644	-	7,985
Inter-segment other revenue	388	-	-	-	145	(533)	-
Segment revenue	1,019,730	19,795	38,863	54,082	111,538	(89,659)	1,154,349
Segment results							
Profit before income tax	39,286	1,753	2,375	(1,451)	7,856	(7,235)	42,584
Segment results included:							
Share of (losses)/profit of joint ventures	(1,168)	-	84	(12)	(341)	-	(1,437)
Share of profit/(losses) of associates	1,108	12	67	(48)	3,595	-	4,734
Interest income	1,493	69	107	147	6,085	(721)	7,180
Interest expenses	(2,513)	(160)	(89)	(1,786)	(6,855)	2,033	(9,370)
Losses from derecognition of financial assets at amortised cost	(4,204)	(26)	(121)	-	(169)	-	(4,520)

	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>	Elimination <i>RMB million</i>	Total <i>RMB million</i>
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	<u>953,038</u>	<u>18,607</u>	<u>33,176</u>	<u>51,300</u>	<u>101,942</u>	<u>(84,791)</u>	<u>1,073,272</u>
Segment results							
Profit before income tax	<u>34,204</u>	<u>1,615</u>	<u>2,029</u>	<u>1,622</u>	<u>5,830</u>	<u>(7,714)</u>	<u>37,586</u>
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	<u>(4,298)</u>	<u>(4)</u>	<u>(117)</u>	<u>–</u>	<u>(176)</u>	<u>–</u>	<u>(4,595)</u>

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

	2022 <i>RMB million</i>	2021 <i>RMB million</i>
(i) Segment interest income, before inter-segment elimination	7,901	5,669
Inter-segment elimination	<u>(721)</u>	<u>(627)</u>
	7,180	5,042
Reconciling items:		
Reclassification of interest income obtained from other financial assets at amortised cost	<u>1,093</u>	<u>1,063</u>
Total consolidated finance income, as reported	<u>8,273</u>	<u>6,105</u>
(ii) Segment interest expenses, before inter-segment elimination	11,403	8,514
Inter-segment elimination	<u>(2,033)</u>	<u>(1,124)</u>
	9,370	7,390
Reconciling item:		
Imputed interest expenses on retention payables	<u>208</u>	<u>226</u>
Total consolidated finance costs, as reported	<u>9,578</u>	<u>7,616</u>
(iii) Segment results, before inter-segment elimination	49,819	45,300
Inter-segment elimination	<u>(7,235)</u>	<u>(7,714)</u>
	42,584	37,586
Reconciling item:		
Land appreciation tax (<i>Note (a)</i>)	<u>2,108</u>	<u>2,050</u>
Total consolidated profit before income tax, as reported	<u>44,692</u>	<u>39,636</u>
(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.		

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

	As at 31 December 2022						
	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>	Elimination <i>RMB million</i>	Total <i>RMB million</i>
Segment assets	922,257	30,215	66,955	277,774	707,986	(406,989)	1,598,198
Investments in joint ventures	42,774	94	423	391	11,440	–	55,122
Investments in associates	38,288	963	686	2,059	12,615	–	54,611
Unallocated assets							14,821
Total assets							1,613,019
Segment liabilities	769,946	14,963	39,301	222,627	539,223	(403,698)	1,182,362
Unallocated liabilities							7,747
Total liabilities							1,190,109
	As at 31 December 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>	Elimination <i>RMB million</i>	Total <i>RMB million</i>
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

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.

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

	2022 RMB million	2021 <i>RMB million</i>
Segment assets, before inter-segment elimination	2,005,187	1,682,296
Inter-segment elimination	(406,989)	(333,527)
	1,598,198	1,348,769
Reconciling items:		
Deferred tax assets	12,109	10,372
Non-tradable shares reform of subsidiaries (<i>Note (a)</i>)	(148)	(148)
Current income tax recoverable	3,849	3,736
Prepaid land appreciation tax included in current income tax recoverable	(989)	(1,149)
	14,821	12,811
Total consolidated assets, as reported	1,613,019	1,361,580
Segment liabilities, before inter-segment elimination	1,586,060	1,321,799
Inter-segment elimination	(403,698)	(324,002)
	1,182,362	997,797
Reconciling items:		
Deferred tax liabilities	3,019	1,647
Current income tax liabilities	8,663	7,100
Land appreciation tax payable included in current income tax liabilities	(3,935)	(3,158)
	7,747	5,589
Total consolidated liabilities, as reported	1,190,109	1,003,386

- (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.

Other segment information:

	Year ended 31 December 2022					
	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>	Consolidated <i>RMB million</i>
Capital expenditure:						
Property, plant and equipment	49,822	530	926	2,002	1,059	54,339
Lease prepayments	56	46	12	281	9	404
Investment properties	1,100	200	–	14	433	1,747
Intangible assets	14,837	30	5	20	30,824	45,716
Mining assets	8	–	–	–	–	8
Right-of-use assets	794	26	16	37	159	1,032
Total	66,617	832	959	2,354	32,484	103,246
Depreciation and amortisation:						
Property, plant and equipment	4,893	289	812	373	2,227	8,594
Lease prepayments	125	17	53	78	79	352
Investment properties	71	5	9	342	59	486
Intangible assets	169	28	49	5	843	1,094
Mining assets	98	–	–	–	11	109
Right-of-use assets	534	40	40	21	101	736
Other prepayments	61	–	12	3	51	127
Total	5,951	379	975	822	3,371	11,498
(Gains)/Losses on disposal and/or write-off of property, plant and equipment	(414)	(5)	(32)	–	46	(405)
(Gains)/Losses on disposal of lease prepayments	(96)	2	(11)	–	–	(105)
Increase in foreseeable losses on contracts	87	–	–	–	–	87
Impairment loss/(reversal of impairment) on trade and other receivables	1,735	(198)	74	398	28	2,037
Impairment loss on other financial assets at amortised cost	190	92	–	57	298	637
Impairment loss on contract assets	669	–	–	–	–	669
Impairment loss on property, plant and equipment	–	–	48	456	–	504
Impairment loss on investment properties	6	–	–	–	–	6

Other segment information:

	Year ended 31 December 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>	Consolidated <i>RMB million</i>
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

(i) **Disaggregation of revenue**

Type of services and products	Year ended 31 December 2022					Total RMB million
	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	
Infrastructure construction contracts	983,533	–	–	–	–	983,533
Manufacturing and sales of engineering equipment and component	–	–	25,838	–	–	25,838
Rendering of services	–	18,616	–	–	7,292	25,908
Sales of properties	–	–	–	53,459	–	53,459
Sales of goods and others	3,863	201	654	623	60,270	65,611
Total revenue	987,396	18,817	26,492	54,082	67,562	1,154,349
Timing of revenue recognition:						
– At a point of time	3,863	201	17,236	52,687	65,699	139,686
– Over time	983,533	18,616	9,209	1,395	–	1,012,753
Total revenue from contracts with customers	987,396	18,817	26,445	54,082	65,699	1,152,439
Rental income	–	–	47	–	1,863	1,910
Total revenue	987,396	18,817	26,492	54,082	67,562	1,154,349

Type of services and products	Year ended 31 December 2021					Total RMB million
	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	
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

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

	For the year ended 31 December	
	2022	2021
	RMB million	RMB million
Mainland China	1,095,912	1,018,485
Other regions (including Hong Kong and Macau)	58,437	54,787
	<u>1,154,349</u>	<u>1,073,272</u>

(ii) 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:

	2022	2021
	RMB million	RMB million
Mainland China	495,949	368,413
Other regions (including Hong Kong and Macau)	17,647	14,492
	<u>513,596</u>	<u>382,905</u>

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

4. OTHER INCOME AND EXPENSES

	2022	2021
	RMB million	RMB million
Other income from:		
Government subsidies (a)	1,480	1,389
Dividends from financial assets at FVPL	548	603
Compensation and claims	171	224
Dividends from financial assets at FVOCI	135	85
Relocation compensation	13	13
Others	276	422
	<u>2,623</u>	<u>2,736</u>
Other expenses on:		
Lawsuit expenditure	460	95
Penalty cost	214	644
Others	408	1,243
	<u>1,082</u>	<u>1,982</u>

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.

5. NET IMPAIRMENT LOSSES ON FINANCIAL ASSETS AND CONTRACT ASSETS

	2022 <i>RMB million</i>	2021 <i>RMB million</i>
Trade and other receivables (excluding advance to suppliers)	2,037	3,694
Contract assets	670	1,224
Other financial assets at amortised cost	636	560
	<u>3,343</u>	<u>5,478</u>

6. OTHER GAINS/(LOSSES), NET

	2022 <i>RMB million</i>	2021 <i>RMB million</i>
Gains/(losses) on disposal and/or write-off of:		
– Interest in subsidiaries	–	72
– Interest in associates	68	14
– Interest in joint ventures	(15)	–
– Lease prepayments	105	98
– Property, plant and equipment	405	328
Gains on disposal of financial assets/liabilities at FVPL	29	47
Deemed disposal gains of interest in associates	483	–
Losses arising on change in fair value of financial assets/liabilities at FVPL	(563)	(515)
Gains on debt restructurings	114	135
Impairment losses recognised on:		
– Property, plant and equipment	(504)	(132)
– Advance to suppliers	(2)	(4)
– Investment properties	(6)	(48)
Foreign exchange gains/(losses), net	566	(80)
Others	(65)	3
	<u>615</u>	<u>(82)</u>

7. LOSSES FROM DERECOGNITION OF FINANCIAL ASSETS AT AMORTISED COST

	2022 <i>RMB million</i>	2021 <i>RMB million</i>
ABN & ABS	3,578	3,910
Factoring expenses	801	634
Bills receivables discounted expenses	141	51
	<u>4,520</u>	<u>4,595</u>

8. INCOME TAX EXPENSE

	2022 <i>RMB million</i>	2021 <i>RMB million</i>
Current income tax		
– Enterprise income tax (“EIT”)	8,210	7,931
– Land appreciation tax (“LAT”)	2,108	2,050
– (Over)/under provision in prior years	127	51
Deferred income tax	(725)	(866)
Income tax expense	<u>9,720</u>	<u>9,166</u>

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% (2021: 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% (2021: 20% and 15%) for the year ended 31 December 2022.

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% (2021: 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.

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

	2022 <i>RMB million</i>	2021 <i>RMB million</i>
Profit before income tax	44,692	39,636
Tax at PRC EIT rate of 25% (2021: 25%)	11,173	9,909
Tax effect of:		
Non-deductible expenses	263	354
Non-taxable income	(9)	(259)
Share of losses of joint ventures	359	127
Share of profits of associates	(1,183)	(496)
Tax losses/other deductible temporary differences not recognised as deferred tax assets	2,194	2,039
Utilisation of tax losses/other deductible temporary differences previously not recognised as deferred tax assets	467	(276)
Preferential tax rates on income of group entities and other income tax credits	(2,733)	(2,384)
Research and development tax credit	(1,169)	(1,036)
LAT	2,108	2,050
Tax effect of LAT	(527)	(513)
Over provision in prior years	127	51
Deductible dividends on perpetual notes	(450)	(493)
Others	34	93
Income tax expense for the year	9,720	9,166

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.

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

	2022		2021		
	Before tax	Tax charge	After tax	Before tax	Tax charge
	<i>RMB million</i>	<i>RMB million</i>	<i>RMB million</i>	<i>RMB million</i>	<i>RMB million</i>
Actuarial (losses)/gains on retirement and other supplemental benefit obligations	(12)	2	(10)	(78)	13
Changes in fair value of financial assets at FVOCI	93	(20)	73	57	(19)
Share of other comprehensive income/(expenses) of associates	675	–	675	(106)	–
Exchange differences	158	–	158	(64)	–
Other comprehensive Income/(expenses)	914	(18)	896	(191)	(6)
Current income tax		–			–
Deferred income tax		(18)			(6)
		(18)			(6)

9. 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.

	2022	2021
Profit attributable to owners of the Company (<i>RMB million</i>)	31,276	27,618
Less: dividends attributable to the perpetual notes (<i>RMB million</i>) (<i>Note (i)</i>)	1,799	2,149
the effect of restricted shares (<i>RMB million</i>)	33	–
Profit used to determine basic earnings per share (<i>RMB million</i>)	29,444	25,469
Weighted average number of ordinary shares in issue (<i>RMB millions</i>)	24,571	24,571
Basic earnings per share (RMB per share)	<u>1.198</u>	<u>1.037</u>

- (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 2022, were deducted from earnings when calculate the earnings per share for the year ended 31 December 2022.

(b) Diluted

Diluted earnings per share was calculated by dividing the adjusted profit attributable to ordinary equity holders of the Company based on the diluted potential ordinary shares by the weighted average number of shares in issue during the period. For the year of 2022, the Company’s 2021 Restricted Share Incentive Scheme has no diluted effect on earnings per share, therefore, the diluted earnings per share equals basic earnings per share.

10. DIVIDENDS

	2022 <i>RMB million</i>	2021 <i>RMB million</i>
Proposed final dividend of RMB0.200 per ordinary share (2021: RMB0.196)	<u>4,950</u>	<u>4,849</u>

The dividends paid in 2022 and 2021 were RMB4,950 million (RMB0.200 per ordinary share) and RMB4,849 million (RMB0.196 per ordinary share) respectively. A dividend in respect of the year ended 31 December 2022 of RMB0.200 per ordinary share, amounting to a total dividend of RMB4,950 million, is to be approved at the 2022 annual general meeting of the Company. These financial statements do not reflect this dividend payable.

11. TRADE AND OTHER RECEIVABLES

	2022 <i>RMB million</i>	2021 <i>RMB million</i>
Trade and bills receivables	160,574	157,025
Less: Loss allowance	<u>(15,102)</u>	<u>(13,935)</u>
Trade and bills receivables – net	145,472	143,090
Other receivables (net of impairment)	89,381	81,688
Advance to suppliers (net of impairment)	<u>48,327</u>	<u>47,765</u>
	283,180	272,543
Less: Amount due after one year included in non-current assets	<u>(30,508)</u>	<u>(23,374)</u>
Amount due within one year included in current assets	<u><u>252,672</u></u>	<u><u>249,169</u></u>

(a) Ageing analysis of trade and bills receivables, based on invoice date, is as follows:

	2022 <i>RMB million</i>	2021 <i>RMB million</i>
Less than 1 year	116,291	118,517
1 year to 2 years	19,811	14,919
2 years to 3 years	7,853	10,297
3 years to 4 years	5,587	4,562
4 years to 5 years	3,245	1,407
More than 5 years	<u>7,787</u>	<u>7,323</u>
Total	<u><u>160,574</u></u>	<u><u>157,025</u></u>

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.

- (b) Trade and bills receivables of RMB319 million (31 December 2021: RMB221 million) were pledged to secure borrowings amounting to RMB319 million (31 December 2021: RMB221 million).
- (c) As at 31 December 2022, trade receivables of RMB68,033 million (31 December 2021: RMB85,945 million) had been transferred in accordance with relevant ABN and ABS issuance, and trade receivables of RMB16,908 million (31 December 2021: RMB14,971 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 2022, bills receivables – bank acceptance and commercial acceptance notes of RMB336 million (31 December 2021: RMB310 million) were endorsed to suppliers, and RMB312 million (31 December 2021: RMB46 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 2022, bills receivables – bank acceptance notes of RMB307 million (31 December 2021: RMB670 million) were endorsed to suppliers, and RMB37 million (31 December 2021: RMB119 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 2022, trade receivables net of credit loss allowance, which were collectively assessed for impairment, are as follows:

Central-governmental enterprises

	As at 31 December 2022 <i>RMB million</i>	31 December 2021 <i>RMB million</i>
Less than 1 year	8,690	8,165
1 year to 2 years	1,145	970
2 years to 3 years	535	438
3 years to 4 years	226	195
4 years to 5 years	109	134
More than 5 years	115	123
	<hr/>	<hr/>
Total	10,820	10,025
	<hr/> <hr/>	<hr/> <hr/>

Locally-administrated state-owned enterprises

	As at 31 December 2022 <i>RMB million</i>	31 December 2021 <i>RMB million</i>
Less than 1 year	50,357	53,164
1 year to 2 years	9,481	8,511
2 years to 3 years	4,318	2,975
3 years to 4 years	1,592	1,195
4 years to 5 years	898	444
More than 5 years	739	662
	<hr/>	<hr/>
Total	67,385	66,951
	<hr/> <hr/>	<hr/> <hr/>

China State Railway Group Co., Ltd.

	As at 31 December 2022 <i>RMB million</i>	31 December 2021 <i>RMB million</i>
Less than 1 year	7,614	9,522
1 year to 2 years	1,330	780
2 years to 3 years	340	703
3 years to 4 years	397	167
4 years to 5 years	81	89
More than 5 years	158	155
	<hr/>	<hr/>
Total	9,920	11,416
	<hr/> <hr/>	<hr/> <hr/>

Overseas enterprises

	As at 31 December 2022 <i>RMB million</i>	31 December 2021 <i>RMB million</i>
Less than 1 year	1,273	1,723
1 year to 2 years	135	56
2 years to 3 years	11	12
3 years to 4 years	1	230
4 years to 5 years	174	25
Total	1,594	2,046

Other entities

	As at 31 December 2022 <i>RMB million</i>	31 December 2021 <i>RMB million</i>
Less than 1 year	17,874	17,339
1 year to 2 years	2,585	1,908
2 years to 3 years	996	1,345
3 years to 4 years	570	835
4 years to 5 years	485	207
More than 5 years	222	288
Total	22,732	21,922

As at 31 December 2022, the amount of individually impaired trade receivables was RMB16,884 million (31 December 2021: RMB15,884 million) with the provision for loss allowance of RMB7,098 million (31 December 2021: RMB6,123 million).

As at 31 December 2022, bills receivables – bank acceptance notes of RMB794 million (31 December 2021: RMB1,108 million) were not impaired. Commercial acceptance notes, which were collectively assessed for impairment, were RMB1,543 million (31 December 2021: RMB1,480 million) with the provision for credit loss allowance of RMB5 million (31 December 2021: RMB4 million).

As at 31 December 2022, the amount of collectively impaired long-term trade receivables was RMB19,838 million (31 December 2021: RMB16,041 million) with the provision for loss allowance of RMB74 million (31 December 2021: of RMB44 million). The amount of individually impaired long-term trade receivables was RMB4,529 million (31 December 2021: RMB3,291 million) with the provision for loss allowance of RMB3,390 million (31 December 2021: RMB3,268 million).

- (f) Movements on loss allowance of trade and other receivables are as follows:

	2022 <i>RMB million</i>	2021 <i>RMB million</i>
At 31 December in prior year	26,725	24,272
Increase in loss allowance recognised in profit or loss		
during the year	4,857	5,930
Amount reversed	(2,817)	(2,231)
Receivables written off during the year as non-collectible	(17)	(1,226)
Others	4	(20)
	<hr/>	<hr/>
At 31 December	28,752	26,725
	<hr/> <hr/>	<hr/> <hr/>

The increase and reversal in loss allowance of trade and other receivables have been included in net impairment losses on financial assets and other 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.

- (g) The carrying amount of trade and other receivables are denominated in the following currencies:

	2022 <i>RMB million</i>	2021 <i>RMB million</i>
RMB	272,832	264,239
USD	6,331	4,531
West African CFA Franc	249	318
Ethiopian Birr	240	108
HKD	145	82
EUR	97	98
Other currencies	3,286	3,167
	<hr/>	<hr/>
	283,180	272,543
	<hr/> <hr/>	<hr/> <hr/>

As at 31 December 2022, 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.

12. TRADE AND OTHER PAYABLES

	2022 <i>RMB million</i>	2021 <i>RMB million</i>
Trade and bills payables (a)	480,430	405,520
Dividend payables	698	702
Accrued payroll and welfare	4,537	4,100
Other taxes	6,084	4,622
Deposit received in advance	1,161	1,048
Deposits (b)	6,003	3,243
Advance from customers	1,031	446
Other payables	143,649	112,993
	643,593	532,674
Analysed for reporting purposes:		
Non-currents	26,288	10,263
Current	617,305	522,411
	643,593	532,674

The credit period on purchases of goods ranges from 180 days to 360 days. Included in trade and bills payables are retention payables of RMB13,817 million (31 December 2021: RMB10,518 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.

- (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:

	2022 <i>RMB million</i>	2021 <i>RMB million</i>
Less than 1 year	439,796	370,538
1 year to 2 years	22,478	19,622
2 years to 3 years	9,311	9,274
More than 3 years	8,845	6,086
	480,430	405,520

- (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:

	2022 <i>RMB million</i>	2021 <i>RMB million</i>
RMB	626,305	519,904
USD	12,974	7,518
Other currencies	4,314	5,252
	643,593	532,674

At 31 December 2022, other currencies mainly consist of West African Franc, Ethiopian Birr, and HKD.

7 AUDIT AND RISK MANAGEMENT COMMITTEE

The Audit and Risk Management Committee reviewed with management the accounting principles and practices adopted by the Group and discussed auditing, internal control and financial reporting matters including the review of the audited financial statements for the year ended 31 December 2022.

8 DIVIDENDS

The Board of Directors recommended the payment of a final dividend in the amount of RMB0.200 per share (including tax), totalling approximately RMB4.950 billion for the financial year ended 31 December 2022 (2021: RMB0.196 per share (including tax) totalling approximately RMB4.849 billion). The distribution plan will be implemented upon approval at the 2022 annual general meeting of the Company and the dividend is expected to be paid in around August 2023 to the shareholders of the Company.

9 REPURCHASE, SALE OR REDEMPTION OF SECURITIES

During the year ended 31 December 2022, the Company repurchased and cancelled part of the restricted A shares granted under the 2021 Restricted Share Incentive Scheme.

Because 2 participants were transferred from the Company and ceased to take office in the Company due to organisational arrangements, 3 participants were disqualified for the Incentive Scheme due to incompetence to the position, disqualification in performance appraisal, negligence, violation of laws, non-compliance of laws, etc. In accordance with the 2021 Restricted Share Incentive Scheme and relevant laws and regulations, the Company repurchased and cancelled from the above 5 participants of all the restricted shares (1,379,700 restricted shares in total) which were granted but not yet unlocked. The repurchase price of the restricted shares repurchased from the 3 participants was RMB3.354 per share, and the repurchase price of the restricted shares from the 2 participants was RMB3.354 per share, plus the interests calculated according to the benchmark deposit interest rate published by the People's Bank of China for the same period. Please refer to the announcements published on the website of the Stock Exchange of Hong Kong Limited on 30 October 2022 and 26 December 2022 for details.

Save for the aforementioned matters, neither the Company nor any of its subsidiaries sold any securities of the Company, nor did they repurchase or redeem any of the securities of the Company during the year ended 31 December 2022.

10 COMPLIANCE WITH THE CODE ON CORPORATE GOVERNANCE PRACTICES

As a company listed on the Main Board of the Hong Kong Stock Exchange, the Company is committed to comply with the requirements under the Corporate Governance Code set out in Appendix 14 to the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited. The Company has complied with all provisions of the Corporate Governance Code during the reporting period.

11 EVENT AFTER THE REPORTING PERIOD

In February 2023, L'Inspection Générale des Finances de la République Démocratique du Congo (the General Inspectorate of Finance of the Democratic Republic of the Congo) released a report on the implementation of cooperation agreements signed between the Democratic Republic of the Congo and the Chinese companies. The report recommended that the relevant contract parties to review the cooperation agreements in terms of the shareholder structure of specific structure companies, the capital expenditure of the infrastructure projects and the preferential tax treatment of the jointly invested companies. The Group will continue to pay attention to the progress of this event and evaluate its impact to the Group's financial position and operating results. As of the date of this announcement, there is no significantly negative influence has been identified by the Group.

12 PUBLICATION OF ANNUAL RESULTS ANNOUNCEMENT AND ANNUAL REPORT

This results announcement will be released on the website of The Stock Exchange of Hong Kong Limited (www.hkexnews.hk) and the website of the Company (www.crec.cn). The 2022 Annual Report prepared in accordance with the IFRS will be released on the website of The Stock Exchange of Hong Kong Limited (www.hkexnews.hk) and the website of the Company (www.crec.cn). The 2022 Annual Report and its abstract prepared in accordance with CAS will be released on the website of Shanghai Stock Exchange (www.sse.com.cn) and the website of the Company (www.crec.cn).

By Order of the Board
China Railway Group Limited
Chen Yun
Chairman

30 March 2023

As at the date of this announcement, the executive directors of the Company are CHEN Yun (Chairman), Mr. CHEN Wenjian and Mr. WANG Shiqi; the non-executive director of the Company is Mr. WEN Limin; the independent non-executive directors are Mr. CHUNG Shui Ming Timpson, Mr. ZHANG Cheng and Mr. XIU Long.