



- 1. Dali-Baoshan Section of Dali-Ruili Railway
- 2. Taipingchuan Service Area of Shuangliao-Taonan Expressway
- 3. Qingdao Jiaodong International Airport
- 4. Fujian Changle Wind Power Area A Project
- 5. The First Domestically Produced Large-diameter Tunnel Boring Machine for Plateau and Alpine Regions, "Snowy Pioneer"

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	不忘初心 牢记使命 为党和人民事业不懈奋斗

COMPANY PROFILE

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

We are one of the largest multi-functional integrated construction groups in the PRC and Asia in terms of the total revenue of the engineering contract, and rank 34th on the 2022 Fortune Global 500 list. We offer a full range of construction-related services, including infrastructure construction, survey, design and consulting services and engineering equipment and component manufacturing, and also expand to other businesses such as property development and mining development.

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

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

FINANCIAL SUMMARY

The financial data contained in this interim report have been prepared in accordance with International Accounting Standard 34 "Interim Financial Reporting". Unless otherwise specified, the financial data of the Company and its subsidiaries are consolidated and presented in RMB.

Summary of interim condensed consolidated statement of profit or loss

	F	or the six i	months end	ed 30 June		Change 2022 vs 2021
	2022	2021	2020 RMB million	2019	2018	(%)
Revenue						
Revenue Infrastructure Construction	495,908	459,516	385,934	324,150	276,636	7.9
	9,232	7.701	7.967	7,978	7,553	19.9
Survey, Design and Consulting Services	9,232	7,701	7,907	7,970	7,555	19.9
Engineering Equipment and	16 767	16 166	12 251	11 117	0.615	1.8
Component Manufacturing	16,767	16,466	13,351	11,147	9,615	
Property Development	23,709	14,122	13,001	13,898	12,411	67.9
Other Businesses	50,314	45,039	29,418	30,741	29,237	11.7
Inter-segment Eliminations and Adjustments	(35,343)	(44,617)	(33,368)	(26,027)	(19,350)	
Total	560,587	498,227	416,303	361,887	316,102	12.5
Gross Profit	46,550	41,767	36,381	34,818	31,132	11.5
Profit before Income Tax	21,897	18,412	16,098	14,634	12,713	18.9
Profit for the Period	16,825	14,350	12,398	11,263	9,412	17.2
Profit for the Period Attributable to						
Owners of the Company	15,126	13,095	11,697	10,514	9,552	15.5
Basic Earnings per Share (RMB)	0.551	0.454	0.425	0.399	0.394	21.4

FINANCIAL SUMMARY

Summary of interim condensed consolidated balance sheet

				Char	nge
				30 June	30 June
		As at		2022 vs	2022 vs
		31 December		31 December	30 June
	2022	2021	2021	2021	2021
		RMB million		(%)	(%)
Assets					
Current Assets	904,951	801,058	802,506	13.0	12.8
Non-current Assets	627,615	560,522	494,582	12.0	26.9
Total Assets	1,532,566	1,361,580	1,297,088	12.6	18.2
Liabilities					
Current Liabilities	854,334	787,860	778,337	8.4	9.8
Non-current Liabilities	281,203	215,526	185,552	30.5	51.5
Total Liabilities	1,135,537	1,003,386	963,889	13.2	17.8
Total Equity	397,029	358,194	333,199	10.8	19.2
Total Equity and Liabilities	1,532,566	1,361,580	1,297,088	12.6	18.2

Differences between financial data prepared in accordance with IAS 34 and Chinese Accounting Standard ("CAS")

	Net assets as at 30 June 2022 RMB million	Profit for the period for the six months ended 30 June 2022 <i>RMB million</i>
Amounts attributable to owners of the Company stated in the financial statements prepared in accordance with CAS	284,191	15,126
Adjustments as required by IAS 34:		
– Recognition of loss on shares conversion scheme of a subsidiary	(148)	
Amounts attributable to owners of the Company stated in the interim		
financial information prepared in accordance with the IAS 34	284,043	15,126

1 Changes in Shares

(1) Changes in shares

11	n	it.	51	ha	res

											Silares
			Before the c	hange		Increase/decrease in the change (+/-)				After the ch	iange
					Newly issued	Bonus	Capitalisation of capital				
			Number	Ratio (%)	shares	shares	reserve	Other	Sub-total	Number	Ratio (%)
l.	Sha	res with selling restrictions	0	0	170,724,400	0	0	0	170,724,400	170,724,400	0.69
	1.	Shares held by the State	0	0	0	0	0	0	0	0	0
	2.	Shares held by state-owned legal									
		persons	0	0	0	0	0	0	0	0	0
	3.	Shares held by other domestic									
		investors including:	0	0	170,724,400	0	0	0	170,724,400	170,724,400	0.69
		shares held by domestic									
		non-state-owned legal persons	0	0	0	0	0	0	0	0	0
		shares held by domestic individuals	0	0	170,724,400	0	0	0	170,724,400	170,724,400	0.69
	4.	Shares held by foreign investors	0	0	0	0	0	0	0	0	0
		including:									
		shares held by foreign legal person	s 0	0	0	0	0	0	0	0	0
		shares held by foreign individuals	0	0	0	0	0	0	0	0	0
∥.	Trac	lable shares without selling restrictions	24,570,929,283	100	0	0	0	0	0	24,570,929,283	99.31
	1.	RMB-denominated ordinary shares	20,363,539,283	82.88	0	0	0	0	0	20,363,539,283	82.30
	2.	PRC-listed foreign shares	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	17.01
	4.	Other	0	0	0	0	0	0	0	0	0
III.	Tota	al number of shares	24,570,929,283	100	170,724,400	0	0	0	170,724,400	24,741,653,683	100

(2) Explanation to the changes in shares

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 directors, 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 2021 restricted share incentive scheme was formulated. On 23 February 2022, the Company completed the first granting under the 2021 restricted share incentive scheme. The registered number of the initially granted restricted shares is 170,724,400 ordinary A Shares pursuant to a specific mandate and the total share capital increases from 24,570,929,283 to 24,741,653,683. (Announcement of China Railway Group Limited on the Results of the First Grant of the 2021 Restricted Share Incentive Scheme (Lin 2022-010)). The grant price was RMB3.55 per A share and the number of participants was 697 individuals, being the senior management of the Company and employees of the Group. The grant price of RMB3.55 per A share represents a discount of approximately 31.86% to the closing price of RMB5.21 per A share, as quoted on the Shanghai Stock Exchange on 22 November 2021, when the Board approved the relevant resolution in relation to the proposed adoption of the 2021 restricted share scheme. The par value of each A share is RMB1.00.

For more details on the 2021 restricted share incentive scheme, please refer to the Company's circular (published on 13 December 2021) and related announcements published on the websites of Shanghai Stock Exchange and the Hong Kong Stock Exchange.

- (3) Impact of changes in shares after the reporting period and prior to the date of the interim report on earnings per share, net asset value per share or other financial indicators (if any)

 Not applicable
- (4) Other information considered necessary by the Company or required by securities regulators that should be disclosed

Not applicable

(5) Changes in shares with selling restrictions

Name of Shareholder	Number of shares with selling restrictions at the beginning of the period	Number of shares released from selling restrictions during the reporting period	Number of shares with selling restrictions increased during the reporting period	Number of shares with selling restrictions at the end of the period	Reason of selling restrictions	Duration of restrictions releasing period
697 share incentive scheme participants	0	0	170,724,400	170,724,400	Restricted share incentive scheme	24 months, 36 months and 48 months
Total	0	0	170,724,400	170,724,400	1	1

Note: On 23 February 2022, the Company completed the first granting under the 2021 restricted share incentive scheme. The registered number of the initially granted restricted shares is 170,724,400 and the total share capital increased from 24,570,929,283 to 24,741,653,683. The restricted shares granted by the 2021 restricted share incentive scheme are released in three batches. The lock-up period of each batch is 24 months, 36 months and 48 months from the date of completing the corresponding granted share registration respectively. (Announcement of China Railway Group Limited on the Results of the First Grant of the 2021 Restricted Share Incentive Scheme (Lin 2022-010)).

Restrictions releasing period	Restrictions releasing time	Restriction release proportion
First restriction releasing period	From the first trading day after 24 months from the date of the completion of the registration of the corresponding restricted shares to the last trading day within 36 months from the date of the completion of the registration of corresponding restricted shares	1/3
Second restriction releasing period	From the first trading day after 36 months from the date of the completion of the registration of the corresponding restricted shares to the last trading day within 48 months from the date of the completion of the registration of corresponding restricted shares	1/3
Third restriction releasing period	From the first trading day after 48 months from the date of the completion of the registration of the corresponding restricted shares to the last trading day within 60 months from the date of the completion of the registration of corresponding restricted shares	1/3

2 Information on Shareholders

(1) Number of shareholders

Total number of holders of ordinary shares as at the end of the reporting period

Total number of holders of preference shares with reinstated voting rights

as at the end of the reporting period

0

(2) Shareholdings of the top ten shareholders

Unit: Shares

		Shar	eholdings of the	top ten shareho	lders			
No.	Name of Shareholder	Increase/ decrease during the reporting period	Total number of shares held at the end of the reporting period	Shareholding percentage	Number of shares with selling restrictions	Number of p frozen s Conditions of shares		Nature of shareholder
				(%)				
1	CREC (Note 1)	11,600,000	11,610,364,390	46.93	0	N/A	0	State-owned legal person
2	HKSCC Nominees Limited (Note 2)	582,332	4,009,744,962	16.21	0	N/A	0	Other
3	Hong Kong Securities Clearing Company Limited (Note 3)	298,057,179	653,208,107	2.64	0	N/A	0	Other
4	China Securities Finance Corporation Limited	0	619,264,325	2.50	0	N/A	0	State-owned legal person
5	China Reform Holdings Corporation Ltd.	0	387,050,131	1.56	0	N/A	0	State-owned legal person
6	Central Huijin Asset Management Ltd.	0	230,435,700	0.93	0	N/A	0	State-owned legal person
7	China Great Wall Asset Management Co., Ltd.	-195,388,472	176,804,035	0.71	0	N/A	0	State-owned legal person
8	Bank of Communications Co., Ltd.– GF CSF Infrastructure Engineering Traded Open-ended Index Securities Investment Fund	74,870,600	174,183,300	0.70	0	N/A	0	Other
9	China Orient Asset Management Co., Ltd.	-51,551,620	171,720,124	0.69	0	N/A	0	State-owned legal person
10	Bosera Fund-Agricultural Bank of China-Bosera CSF Financial Asset Management Plan	0	131,135,600	0.53	0	N/A	0	Other
10	E Fund-Agricultural Bank of China-E Fund CSF Financial Asset Management Plan	0	131,135,600	0.53	0	N/A	0	Other

			eholdings of the Total number	top ten shareho	lders			
No.	Name of Shareholder	Increase/ decrease during the reporting period	of shares held at the end of	Shareholding percentage (%)	Number of shares with selling restrictions	Number of pi frozen si Conditions of shares		Nature of shareholder
10	Dacheng Fund-Agricultural Bank of China-Dacheng CSF Financial Asset Management Plan	0	131,135,600	0.53	0	N/A	0	Other
10	Harvest Fund-Agricultural Bank of China-Harvest CSF Financial Asset Management Plan	0	131,135,600	0.53	0	N/A	0	Other
10	GF Fund-Agricultural Bank of China-GF CSF Financial Asset Management Plan	0	131,135,600	0.53	0	N/A	0	Other
10	Zhong Ou AMC-Agricultural Bank of China-Zhong Ou CSF Financial Asset Management Plan	0	131,135,600	0.53	0	N/A	0	Other
10	Huaxia Fund-Agricultural Bank of China-Huaxia CSF Financial Asset Management Plan	0	131,135,600	0.53	0	N/A	0	Other
10	Yinhua Fund-Agricultural Bank of China-Yinhua CSF Financial Asset Management Plan	0	131,135,600	0.53	0	N/A	0	Other
10	Southern Fund – Agricultural Bank of China – Southern CSF Financial Asset Management Plan	0	131,135,600	0.53	0	N/A	0	Other
	ement on the related relations and a ong the shareholders above	acting-in-concer	t relationship	relationship with	the other above sh	pes not have relate areholders. The Cor lationship among th	npany is not aw	vare of any related

Note 1: CREC held 11,610,364,390 shares of the Company, including 11,445,970,390 A shares and 164,394,000 H shares of the Company. CREC planned to increase its shareholding of A shares of the Company via the call auction trading system on the Shanghai Stock Exchange within 6 months starting from 31 March 2022. The cumulative increased amount would be not lower than RMB150,000,000 and not more than RMB300,000,000 (Announcement of China Railway Group Limited Regarding the Proposal on Increase in Shareholding by the Controlling Shareholder (Lin 2022-019)).

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 has already been deducted.

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

Note 4: The numbers shown in the table are based on the register of members of the Company as at 30 June 2022.

(3) Shareholdings of the top ten shareholders without selling restrictions

	Shareholdings of the top ten	shareholders without selli Number of shares	ng restrictions			
		held without	Type and number	Type and number of shares		
No.	Name of Shareholder	selling restrictions	Туре	Quantity		
1	CREC (Note 1)	11,445,970,390	RMB-denominated ordinary shares	11,445,970,390		
		164,394,000	Overseas listed foreign shares	164,394,000		
2	HKSCC Nominees Limited (Note 2)	4,009,744,962	Overseas listed foreign shares	4,009,744,962		
3	Hong Kong Securities Clearing Company Limited (Note 3)	653,208,107	RMB-denominated ordinary shares	653,208,107		
4	China Securities Finance Corporation Limited	619,264,325	RMB-denominated ordinary shares	619,264,325		
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	Bank of Communications Co., Ltd.– GF CSF Infrastructure Engineering Traded Open-ended Index Securities Investment Fund	174,183,300	RMB-denominated ordinary shares	174,183,300		
9	China Orient Asset Management Co., Ltd.	171,720,124	RMB-denominated ordinary shares	171,720,124		
10	Bosera Fund-Agricultural Bank of China-Bosera CSF Financial Asset Management Plan	131,135,600	RMB-denominated ordinary shares	131,135,600		
10	E Fund-Agricultural Bank of China-E Fund CSF Financial Asset Management Plan	131,135,600	RMB-denominated ordinary shares	131,135,600		
10	Dacheng Fund-Agricultural Bank of China-Dacheng CSF Financial Asset Management Plan	131,135,600	RMB-denominated ordinary shares	131,135,600		
10	Harvest Fund-Agricultural Bank of China-Harvest CSF Financial Asset Management Plan	131,135,600	RMB-denominated ordinary shares	131,135,600		

	Shareholdings of the top	ten shareholders without selli Number of shares	ng restrictions	
		held without	Type and number	of shares
No.	Name of Shareholder	selling restrictions	Туре	Quantity
10	GF Fund-Agricultural Bank of China-GF CSF Financial Asset Management Plan	131,135,600	RMB-denominated ordinary shares	131,135,600
10	Zhong Ou AMC-Agricultural Bank of China-Zhong Ou CSF Financial Asset Management Plan	131,135,600	RMB-denominated ordinary shares	131,135,600
10	Huaxia Fund-Agricultural Bank of China-Huaxia CSF Financial Asset Management Plan	131,135,600	RMB-denominated ordinary shares	131,135,600
10	Yinhua Fund-Agricultural Bank of China-Yinhua CSF Financial Asset Management Plan	131,135,600	RMB-denominated ordinary shares	131,135,600
10	Southern Fund-Agricultural Bank of China-Southern CSF Financial Asset Management Plan	131,135,600	RMB-denominated ordinary shares	131,135,600
State	ement on the related relations and acting-in-concert relationship	CREC, the largest shareholder,	, does not have related relation	ons or acting-in-concert
amoi	ng the shareholders above	relationship with the other a	above shareholders. The Com	pany is not aware of
		any related relationships or a shareholders.	cting-in-concert relationship a	mong the other above

Note 1: CREC held 11,610,364,390 shares of the Company, including 11,445,970,390 A shares and 164,394,000 H shares of the Company.

(4) Strategic investors or general legal persons becoming the top ten shareholders by placing of new shares

Not applicable

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 has already been deducted.

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

Note 4: The numbers shown in the table are based on the register of members of the Company as at 30 June 2022.

3 Information on Directors, Supervisors and Senior Management

(1) Changes in shareholdings of the incumbent directors, supervisors and senior management and those departed during the reporting period

Name	Position	Shareholdings at the beginning of the reporting period	Shareholdings at the end of the reporting period	Increase/ decrease in shareholdings during the reporting period	Unit: Shares Reasons for increase/ decrease
YU Tengqun	Senior management	50,069	50,069	0	1
KONG Dun	Senior management	0	400,000	400,000	Restricted share
MA Jiangqian	Senior management	0	400,000	400,000	incentive scheme Restricted share incentive scheme
LI Xinsheng	Senior management	0	400,000	400,000	Restricted share
HE Was	Contanton	0	400.000	400.000	incentive scheme
HE Wen	Senior management	0	400,000	400,000	Restricted share incentive scheme
ZHAO Bin	Senior management	0	223,200	223,200	Restricted share
CENC Challes	Contamination	0	222 200	222.200	incentive scheme
GENG Shubiao	Senior management	0	223,200	223,200	Restricted share incentive scheme
		_			-
Total		50,069	2,096,469	2,046,400	

- (2) Share incentives granted to the directors, supervisors and senior management during the reporting period
 - (i) Share option incentive
 Not applicable

(ii) Restricted share incentive

Name	Position	Number of restricted stocks held at the beginning of the reporting period	New restricted stocks granted during the reporting period	Vested shares	Unvested shares	Number of restricted stocks held at the end of the reporting period
KONG Dun	Senior management	0	400,000	0	400,000	400,000
MA Jiangqian	Senior management	0	400,000	0	400,000	400,000
LI Xinsheng	Senior management	0	400,000	0	400,000	400,000
HE Wen	Senior management	0	400,000	0	400,000	400,000
ZHAO Bin	Senior management	0	223,200	0	223,200	223,200
GENG Shubiao	Senior management	0	223,200	0	223,200	223,200
Total		0	2,046,400	0	2,046,400	2,046,400

Unit: Charac

Changes in the Controlling Shareholder and the Ultimate Controller

Not applicable

5 Purchase, Sale or Redemption of the Company's Listed Securities

During the six months ended 30 June 2022, neither the Company nor any of its subsidiaries purchased, sold or redeemed any of the Company's listed securities.

Interests and Short Positions of Directors, Supervisors and Chief **Executive in Shares, Underlying Shares and Debentures**

As at 30 June 2022, none of the directors, supervisors and chief executive of the Company had any interests and short position in the shares, underlying shares and debentures of the Company or any of its associated corporations (within the meaning of Part XV of the Securities and Futures Ordinance (Chapter 571 of the Laws of Hong Kong) (the "SFO") which will have to be notified to the Company and The Stock Exchange of Hong Kong Limited (the "Hong Kong Stock Exchange") pursuant to Divisions 7 and 8 of Part XV of the SFO (including interests and short positions which they are taken or deemed to have under such provisions of the SFO), or which will be required, pursuant to Section 352 of the SFO, to be entered in the register referred to therein or which will be required to be notified to the Company and the Hong Kong Stock Exchange pursuant to the Model Code for Securities Transactions by Directors of Listed Issuers.

Interests and Short Positions of Substantial Shareholders and Other 7 **Persons in Shares and Underlying Shares**

As at 30 June 2022, the Company has been notified of the following 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:

Holders of A Shares

Name of substantial shareholder	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	11,445,970,390	Long position	55.7	46.26

Holders of H Shares

Name of substantial shareholder	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 corporation	259,009,309	Long position	6.16	1.05
	•	16,243,000	Short position	0.39	0.07
Deutsche Bank	(Note 1)	229,803,271	Long position	5.46	0.93
Aktiengesellschaft		123,424,962 10,406,000	Short position Lending pool	2.93 0.25	0.50 0.04
Lehman Brothers Holdings Inc.	Interest of	210,186,560	Long position	5.00	0.85
	controlled corporation	94,560,550	Short position	2.25	0.38

Notes:

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 corporation	54,042,600	_
Custodian corporation	10,406,000	-
Others	8,668,000	_

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

		Long position				Short position			
Name of substantial shareholder	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	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	
BlackRock, Inc.	-	-	-	2,040,000	-	-	-	228,000	
Deutsche Bank	-	-	-	17,624,000	-	-	-	10,166,000	
Aktiengesellschaft Lehman Brothers	_	_	10,000,000	_	_	_	60,000	_	
Holdings Inc.			10,000,000				00,000		

Apart from the foregoing, as at 30 June 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 by the Company under Divisions 2 and 3 of Part XV of the SFO.

DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT

1 Directors

The directors of the Company during the six months ended 30 June 2022 are as follows:

Name	Age	Position
CHEN Yun	59	Chairman and Executive Director
CHEN Wenjian	49	Executive Director and President
WANG Shiqi	56	Executive Director
WEN Limin	56	Non-executive Director
CHUNG Shui Ming Timpson	70	Independent Non-executive Director
ZHANG Cheng	64	Independent Non-executive Director
XIU Long	65	Independent Non-executive Director

2 Supervisors

The supervisors of the Company during the six months ended 30 June 2022 are as follows:

Name	Age	Position
JIA Huiping	57	Chairman of the Supervisory Committee, Shareholder Representative Supervisor
YUAN Baoyin	58	Employee Representative Supervisor
LI Xiaosheng	50	Employee Representative Supervisor
WANG Xinhua	51	Employee Representative Supervisor
WAN Ming	51	Employee Representative Supervisor

DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT

3 **Senior Management**

The senior management of the Company during the six months ended 30 June 2022 are as follows:

Name	Age	Position
CHEN Wenjian	49	Executive Director and President
SUN Cui	56	Vice President and Chief Accountant
YU Tengqun (ceased to act on 30 August 2022)	52	Vice President and General Legal Advisor
LIU Baolong	58	Vice President
REN Hongpeng	48	Vice President
KONG Dun	56	Vice President and Chief Engineer
MA Jiangqian	53	Vice President and Chief Economist (ceased to act on 22 June 2022)
LI Xinsheng	42	Vice President
HE Wen	58	Secretary to the Board and Joint Company
		Secretary
ZHAO Bin (appointed on 22 June 2022)	53	Chief Economist
GENG Shubiao (appointed on 22 June 2022)	44	Assistant to President
TAM Chun Chung	49	Joint Company Secretary and Qualified
		Accountant
LI Fengchao (ceased to act on 1 February 2022)	61	Safety Production Director

Change of Directors, Supervisors and Senior Management

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

On 22 June 2022, on the 17th meeting of the fifth session of the board of directors of the Company, Mr. MA Jiangqian was removed from the position of Chief Economist and continued acting as Vice President; Mr. ZHAO Bin was appointed as Chief Economist and Mr. GENG Shubiao was appointed as Assistant to President, whose terms of office commenced from the date on which the appointment was passed by the board of directors and will end on the expiry of the fifth session of the board of directors.

On 30 August 2022, the Company held the 19th meeting of the fifth session of the board of directors and approved to release Mr. YU Tenggun from the position of Vice President and General Legal Advisor due to job transfer.

DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT

5 Human Resources and Emolument Policy

The Company has been devoted to improving a remuneration management scheme which is scientific and reasonable, fair and equitable, normative and orderly, in accordance with the requirements of the modern enterprise system, focused on the incentive and constraint functions that remuneration distribution may serve, and aimed to attract and retain the core talents of the Group and maintain the normative and orderly growth in remuneration. In respect of remuneration policies, the Company carefully implemented the Opinions on Reforming the Salary Determination Mechanism of State-owned Enterprises and has, based on the general principle of "linking salary with economic benefits, adjusting efficiency benchmark and regulating salary level", established and improved a salary determination and normal growth mechanism which is suitable for the labour market and linked with economic benefits of enterprise and labour productivity as well as the labour cost input-output efficiency index, strengthened the alignment between salary level and economic benefits, continued improving the labour cost input-output efficiency and created a positive incentive atmosphere.

Employee remuneration of the Company comprises basic salary, performance-based bonus and allowances and subsidies. In accordance with PRC laws, the Company entered into an employment contract with each of its employees. Such contracts include provisions on wages, employee vacation, benefits, training programs, health and safety, confidentiality obligations and grounds for termination. In accordance with state policies, the Company makes contributions in full to the employee aged-care insurance, medical insurance, unemployment insurance, maternity insurance and work injury compensation insurance as well as employee housing provident fund. In addition to statutory contributions, the Company also provides voluntary benefits to employees which include enterprise annuities for employees.

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

During the reporting period, the total number and structure of the Company's employees did not have significant change compared to the end of last year.

6 Dealings of securities by Directors and Supervisors

The Company has adopted the Model Code for Securities Transactions by Directors of Listed Issuers as set out in Appendix 10 (the "Model Code") to the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited (the "Hong Kong Listing Rules"), as amended, as the code of conduct regarding securities transactions by directors and supervisors. The Company has made enquiries to all directors and supervisors, each director and supervisor confirmed that he or she has complied with the required standard set out in the Model Code throughout the period from 1 January 2022 to 30 June 2022.

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 infrastructure construction, survey, design and consulting services, and engineering equipment and component manufacturing. The Group also diversifies its business and expands its value-added services by exploiting into other businesses such as property development, merchandise trading, investment and operation of infrastructure, mining development and finance. After years of practice and development, the Group's businesses have established a close upstream-downstream relationship among themselves, with the infrastructure construction business supporting the engineering equipment and component manufacturing, survey, design and consulting service, merchandise trading, infrastructure investment, property development and mining development businesses supporting the survey, design and consulting services and infrastructure construction business; survey, design and consulting services supporting the infrastructure construction business; engineering equipment and component manufacturing business providing construction equipment (such as bridge girder erection machine and shield) and the necessary components (such as turnout, bridge steel structure and rail transit electrification equipment) for infrastructure construction; merchandise trading business supplying materials (such as steel and cement) for infrastructure construction; and finance business offering financing services for the main businesses. All these have gradually formed a vertically integrated construction industry chain with outstanding principal business supplemented by diversified relevant business horizontally. The Group ranked 34th (up 1 place from the previous year) in the latest Fortune Global 500 list, and 5th in the Fortune China 500 list; ranked 2nd among the top 250 global contractors by Engineering News - Record ("ENR"); was awarded Grade A in the business performance assessment and evaluation of State-owned Assets Supervision and Administration Commission (SASAC) for 9 consecutive years, Grade A in the business performance assessment of 2019-2021, as well as the title of excellent performance enterprise and enterprise with outstanding contribution to scientific and technological innovation during 2019-2021; and obtained Grade A evaluation for information disclosure from Shanghai Stock Exchange for 9 consecutive years. The three top international rating agencies (Moody's, Fitch and Standard & Poor's) rated China Railway as A3/A-/BBB+, and maintained the outlook of "stable".

1 Industry Development Overview

Infrastructure construction business

Domestically, since 2022, faced with increasing new downward pressures, the CPC Central Committee and The State Council have made scientific decisions, implemented timely and decisive policies, refrained from adopting indiscriminate policies, proactively implemented the policies and measures of the Central Economic Work Conference and the Government Work Report, and rolled out a package of policies and measures to stabilize the economy in accordance with the overall thinking and policy orientation. Moreover, issuance of instruments including special bonds has given full play to the leverage of government investment. As of the end of June, new special bonds issued nationwide amounted to RMB3.41 trillion in total, supporting more than 23.8 thousand projects. More than RMB240 billion of proceeds from special bonds were used as capital of major projects. According to the data released by the National Bureau of Statistics, in the first half of the year, the fixed assets investments nationwide (excluding rural households) amounted to RMB27,143 billion, representing a year-on-year increase of 6.1%. The national fixed asset investment in transportation increased by 6.7% year-on-year to approximately RMB1,675.8 billion, maintaining a high level. In particular, the fixed asset investment in railways decreased by 4.6% year-on-year to RMB285.3 billion, the fixed asset investment in highways increased by 9.7% year-on-year to RMB1,270.4 billion, and the fixed asset investment in waterways increased by 4.7% year-on-year to RMB73.9 billion. With regard to the urban rail transit, in the first half of the year, urban rail lines were put into service in Nanping, increasing the number of cities operating urban rail lines to 51, and the length of urban rail transit lines in service to 9,573.65km. The new operating mileage amounted to 366.87 km. On the whole, infrastructure was still an important support for the economic and social development, China's infrastructure was still insufficient to meet the need of national development and security. At present and for some time to come, moderately advanced, scientifically planned, multi-wheel driven and stratified infrastructure development is of great significance to ensuring national security, smoothening domestic circulation, promoting both domestic and international circulation, expanding domestic demand and promoting high-quality development. There is still large room in the markets for new and existing infrastructure constructions.

Internationally, since 2022, the repeated outbreaks of COVID-19, the conflict between Russia and Ukraine, and the USD tightening have restrained the market performance in terms of economic recovery, mass inflation and market liquidity, and the global economic structure, industrial structure and energy structure have experienced intensified adjustments. According to the forecast of IMF, the global economy growth rate will be 3.2% this year, 0.4 percentage points lower than its April forecast. In addition, with the increasing economic downward risks, recession fears and cross-border investment pressures, Chinese enterprises will face many challenges in their "going global". In recent years, China has continued to actively promote high-quality Belt and Road cooperation, and investment cooperation between China and countries along the Belt and Road remain active. In addition, under the RCEP framework, the investment among the member countries is also expected to drive the outbound direct investment of Chinese enterprises to Southeast Asia and countries along the Belt and Road. According to statistics from the Ministry of Commerce, the value of China's new contracts for overseas contracted projects in the first half of this year was RMB671.56 billion, representing a year-on-year decrease of 6.1%, and the turnover was RMB458 billion, representing a year-on-year increase of 4.2%, with the value of new contracts and turnover from countries along the Belt and Road accounting for 50.4% and 54.4% of the total respectively. Judging from the trend of international infrastructure cooperation, green development is the inevitable demand of the time. China will work with other countries to implement the new concept of green development, create more green, low-carbon and sustainable infrastructure projects, and promote the steady, sound and sustainable development of international infrastructure investment cooperation, making a positive contribution to realizing regional infrastructure connectivity, promoting economic development and transform, deepening multilateral and bilateral economic and trade relations, and promoting the economic recovery and growth of the host country and the world.

Survey, design and consulting services business

Being a technology- and intelligence-intensive production-based service industry, the survey, design and consulting services business is in the front of the engineering construction projects of various industries, including construction, transportation, electricity and water conservancy, serves the whole lifecycle of the construction projects and offers technical and management services throughout the decision-making and implementation process of the projects. It plays an important supporting role in improving the investment benefits and social benefits of construction projects, and is a key link in project construction. At present, the state actively promotes the construction of high-speed railways, urban rail transit, water conservancy and hydropower, underground utility tunnels and sponge cities. In particular, with the mutual progress, promotion, integration and connectivity of the major regional strategies, such as the Belt and Road Initiative, the coordinated development of the Beijing-Tianjin-Hebei region, the construction of Yangtze River Economic Belt, and the 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, the construction of new economic belts will continue to pick up. The next few years will be a critical period for our infrastructure construction and development, providing more market opportunities for enterprises. As the soul and forerunner of engineering construction, the survey, design and consulting service market will still have room for growth at home, and room for improvement overseas. The "14th Five-year Plan" period is the first five-year period for China to start a new journey of comprehensively building a modern socialist nation and march toward the second centenary goal. The survey, design and consulting services are faced with a complex situation in which opportunities and challenges coexist and hopes and difficulties coexist, which is mainly reflected in that the leading role of survey, design and consultation industry in engineering construction has not been fully played, the horizontal competition, cross-industry competition, the industry chain competition, and international competition are increasingly fierce, and the market has stricter requirements on the innovation ability, technical strength, quality level, business scope and service price of enterprises.

Engineering equipment and component manufacturing business

In 2022, the State Council issued the 14th Five-Year Plan for the Development of a Modern and Integrated Transport System, proposing to construct a high-quality comprehensive transportation network according to the main skeleton layout of "6 axes, 7 corridors and 8 channels" of the national comprehensive transportation network, increase the length of railway service mileage by 19,000 kilometers, achieve more advanced technology and equipment, accelerate the application of the self-developed advanced technology and equipment, and significantly increase the standardization rate of transport equipment. As pointed out at the executive meeting of State Council, industry and the service sector play a key supporting role in economic development and stable employment. We should strengthen and complement the manufacturing industry chain and rebuild the industrial base, speed up the construction of new types of infrastructure, upgrade energy conservation and carbon reduction technologies in key areas, and increase effective investment. The Ministry of Housing and Urban-Rural Development issued the "14th Five-Year Plan" for the Development of the Construction Industry, pointing out that the level of industrialization, digitalization and intelligence of the construction industry should be greatly improved, and the transformation of the construction industry from big to strong should be accelerated. The National Development and Reform Commission issued the National Highway Network Plan, proposing to complete a modern, high-quality national highway network with extensive coverage, complete functions, intensive and high efficiency, green intelligence, safety and reliability by 2035. The Ministry of Finance issued the Opinions on Financial Support for Carbon Peaking and Carbon Neutrality, proposing to support the development of renewable energy such as photovoltaic, wind power and biomass, replace fossil energy by new energy with stable output, and encourage regions where conditions permit to take the lead in developing new types of energy storage and pumped storage according to local conditions. In the first half of this year, investment in traditional infrastructure, such as railways, highways, urban rails and water conservancy, continued to recover in China, promoting the increase of overall demand of the equipment manufacturing industry, and boosting the development of emerging fields, such as new energy storage, pumped storage, and green energy substitution. In the first half of this year, the added value of largescale industries recorded a year-on-year increase of 3.4%. In particular, the added value of special equipment manufacturing industry increased by 6.0% in June. During the 14th Five-Year Plan period, the equipment manufacturing industry will have a good development prospect, but it will also face challenges such as intensifying industry competition and declining average yield, high level of homogeneous competition, complex and diversified customer demands, etc. On one hand, the abundant demand has been created in the market: market space for updating and upgrading existing projects has been created by the traditional infrastructure market, while new and expanded application areas have been created by the new infrastructure market. On the other hand, the market demands for innovation. The equipment manufacturing industry faces increasing pressure in fulfilling scenario-specific needs and exploring business model innovation.

Property development business

Since 2022, based on the long-term mechanism that "houses are for living in and not for speculation" and that "real estate should not be used as a means and a tool to stimulate the economy in the short term", the CPC Central Committee and The State Council have further strengthened the continuity and stability of our regulatory policies, enhanced the guidance of expectations, stabilized the land prices, housing prices, and expectations, and actively promoted the virtuous cycle and healthy development of the real estate industry by implementing specific policies according to local conditions. In the first half of this year, more than 150 cities across the country released policies to relax the regulation on the property market, which covered various aspects, in order to bail out the enterprises, strengthen prevention and defuse the risk of corporate debt repayment. On the whole, the third- and fourth-tier cities were much more relaxed than the first- and secondtier cities in terms of degree and coverage scope. The second-tier cities mainly adopted marginal relaxation policies targeted at specific groups and with specific conditions, and made dynamic adjustment according to the regulatory effects. They remained cautious in the adjustment of the core purchase restriction policy, focusing on the introduction of talent and the release of more home purchase qualifications. However, the policy effects have not shown at the market end, mainly because the underlying demand of the market is low, and the negative effect of the market has not dissipated, leading to little effect of marginal adjustment. According to the data released by the National Bureau of Statistics, in the first half of the year, the property development investments nationwide amounted to RMB6,831.4 billion, representing a year-on-year decline of 5.4%. The investments in residential housing amounted to RMB5,180.4 billion, representing a year-on-year decline of 4.5%. The housing construction area of real estate development enterprises amounted to 8,488.12 million square meters, representing a year-on-year decrease of 2.8%. The construction area of residential housing amounted to 5,994.29 million square meters, representing a year-on-year decrease of 2.9%. The housing construction starts amounted to 664.23 million square meters, representing a year-on-year decrease of 34.4%. The construction starts for residence reached 488 million square meters, representing a year-on-year decrease of 35.4%. The housing completion area amounted to 286.36 million square meters, representing a year-onyear decrease of 21.5%. The completion area of residential housing amounted to 208.58 million square meters, representing a year-on-year decrease of 20.6%. The commercial housing sales area amounted to 689.23 million square meters, representing a year-on-year decrease of 22.2%. The sales area of residential housing decreased by 26.6% year-on-year. The commercial housing sales amount amounted to RMB6,607.2 billion, representing a year-on-year decrease of 28.9%. The sales amount of residential housing decreased by 31.8% year-onyear. In the second half of the year, the policy of "promoting the steady and sound development of the real estate market by taking measures according to local conditions, ensuring the rigid demand for housing, and reasonably supporting the demand for improvement" will be further implemented, which, together with the lowering of medium- and long-term loan interest rate for the property market and the reduction of housing burden of residents will be conducive to the stability of the real estate market. Meanwhile, due to the gradual enhancement of the industry and population aggregation effect in the economic circle, the economic development modes of different economic circles and cities of different levels will continue to differentiate, and the differentiation of the real estate market will become normal.

Other businesses

Mining business

Since 2022, the stability of the global supply chain and industrial chain has been affected to certain extent by many factors, such as the Russia-Ukraine conflict, the sharp interest rate hikes by the Federal Reserve and the European Central Bank, and repeated outbreaks of COVID-19 in some countries and regions. The volatility of commodity prices has been further aggravated. In particular, since the second quarter, the copper-oil ratio, which reflects the changes in prosperity of the manufacturing sector, and the copper-gold ratio, which is a cyclical indicator of changes in prosperity of the service sector, have both dropped. The "copper oil ratio" has fallen into a historic low level, indicating the increased uncertainty of the market's expectation on future economy. Looking forward to the second half of the year, with the accelerated tightening of the overseas central banks (represented by the FED) and their approach to the recession cycle, the demand for copper and other commodities is likely to fall sharply. In contrast, there are inconsistency between China and overseas countries in the economic repair cycle and China's economy may enter a recovery cycle in the second half of the year. With clear target and demand for stable growth, and enhanced supports from fiscal and monetary policies, the industrial production is expected to bottom out. In particular, driven by the "dual carbon" and new energy industries, domestic demand for non-ferrous metals such as copper is expected to further improve. However, under the influence of the market's expectation of global economic recession, it is expected that the price of non-ferrous metal commodities represented by copper and iron may show a trend of gradually moving down for some time to come.

Financial business

Since 2022, the monetary policy shift of major developed economies has accelerated, the international financial market has experienced greater volatility, the epidemic has spread in many places in China, the macroeconomic downward pressure has been increased, and market entities have faced greater difficulties. Facing the complicated economic and financial situation at home and abroad, China has continued to balance epidemic prevention and control with economic and social development, effectively implemented macro policies, and stabilized the economic and social development to the maximum extent. China has adopted a prudent monetary policy that is flexible and appropriate, maintained continuity, stability, and sustainability, and properly managed the market expectations, with an aim to serve the real economy, and effectively prevent and control financial risks. The State Council issued a Package of Policies and Measures for Stabilizing the Economy, including 33 measures in six areas, covering five monetary and financial policies. While refraining from adopting indiscriminate policies and issuing excessive money, China enhanced the financing support for major projects through policy-based and development-oriented financial instruments to give a better play of the guiding role, and improve the transmission mechanism of monetary policy. China better matched the size and structure of bank deposits and loans to achieve the combined effect of expanding effective investment, creating jobs and boosting consumption. The legal system and basic institutions of the capital market have been enhanced, the investor protection system and mechanism have been improved, the "zero tolerance" law enforcement has been further highlighted, and the market ecosystem has been continuously purified. On the whole, the RMB exchange rate is basically stable at an appropriate and balanced level, and the real lending interest rate has stabilized and declined, with medium- and long-term funds of RMB530 billion released through cuts to required reserve ratios, and the net MLF release of RMB200 billion. China has increased the credit line of policy banks by RMB800 billion, promoted the establishment of policy-based development financial instruments of RMB300 billion, and supported the release of medium- and long-term infrastructure loans. The scope of pilot REITs has been steadily expanded, regular issuance has been accelerated, and multi-level market interaction continues to contribute to economic restructuring, which have laid the foundation for achieving steady and high-quality economic performance and consolidating the upward trend.

Merchandise trading business

With the rapid development of world economic integration and the comprehensive application of information technology, global cooperation in merchandise trading has been further promoted. Due to high variety of products, frequent price changes, high degree of homogeneity, relatively low entry threshold, fierce market competition and other factors, the overall profit margin of the merchandise trading industry is low. The trade price gap of traditional merchandise traders is gradually narrowing, which leads to the increasing demand for cost saving through supply chain management. More and more merchandise traders have begun to integrate the industrial chain, extending upstream and downstream. While obtaining upstream and downstream resources, they gradually penetrate into all links of the industrial chain and start to play the role of industrial chain manager and provide end-users with diversified, whole chain, and one-stop supply chain management services, in order to expand profit space and create value-added opportunities.

Infrastructure investment and operation

Since 2022, there have been increasing risks and challenges in the international and domestic economic environments. The complexity, severity and uncertainty of China's economic development environment have increased, and China faces new challenges to stabilize growth, employment and prices. Infrastructure investment, as an important starting point for stabilizing investment, has played an important role in stimulating the vitality of private investment and facilitating the implementation of major national strategies. According to the 2022 Semi-Annual Report of the National PPP Comprehensive Information Platform Management Database Project released by the PPP Center of the Ministry of Finance, as of 30 June 2022, there were 10,354 projects in database in the PPP comprehensive information platform, with a total investment of RMB16.5 trillion. The size of the projects in the database increases steadily, representing a huge market. In the first half of this year, 279 new projects were included in the database, with the investment of RMB458.6 billion, representing a yearon-year decrease of RMB114 billion; a total of 7,934 projects were signed, with an investment of RMB13.1 trillion, representing a year-on-year increase of RMB1 trillion; a total of 5,280 construction projects were started, with an investment of RMB8.7 trillion, representing a year-on-year increase of RMB1.7 trillion. In terms of statistical fields and criteria, the majority of the new PPP projects were in the fields of transportation and municipal engineering, and the investment in the "new infrastructure and new urbanization initiatives and major projects" fields accounted for more than 70%. In the first half of this year, 210 new projects of "new infrastructure and new urbanization initiatives and major projects" were included in the database, with an investment of RMB353.4 billion, accounting for 77% of the new projects included in the database. As of the end of June, there were a total of 8,764 projects of "new infrastructure and new urbanization initiatives and major projects" in the database, with an investment of RMB14.2 trillion; among them, a total of 6,804 projects were signed, with an investment of RMB11.4 trillion; a total of 4,586 projects were commenced construction, with an investment of RMB7.6 trillion. 123 new pollution prevention and control and green low-carbon projects were included in the database, with an investment of RMB126.3 billion. As of the end of June, there were a total of 5,943 projects in the database, with an investment of RMB5.7 trillion, accounting for 57.4% and 34.9% respectively of the total in the management database. These projects were highly consistent with the Company's main business, and laid a good market foundation for the Company to open up the "second curve" business. In addition, among the 2,763 administrative regions with PPP projects in the database, 2,729 administrative regions have annual financial affordability indexes below the 10% red line, accounting for 98.8% of the total. The PPP fiscal expenditure responsibility is generally within a safe range, and the foundation of the Company's infrastructure investment business is stable, so there is still room for further development.

2 Business Development Overview

In the first half of 2022, facing the increasingly complex and severe international environment, frequent outbreaks of COVID-19 in China and shocks from unexpected factors, the Group fully implemented the decision and deployment of the CPC Central Committee on "ensuring epidemic prevention and control, economic stability and safe development", and earnestly implemented the SASAC's requirements on further ensuring stable growth of central enterprises. Based on the general principle of "ensuring stability and seeking progress while maintaining stability", we anchored our work objectives for "Four Increases, Two Controls and Four Improvements", and focused on the two main lines of improving quality and efficiency and preventing and defusing major risks. We actively built the big business management system, promoted the improvement of project management benefits, maintained the stable running of production and operation, and achieved good results in stabilizing growth.

First, making solid progress in enterprise reform and development. The Group has always maintained strategic focus and implemented new development concepts in a complete, accurate and comprehensive manner. In accordance with the "14th Five-Year Plan" and the "123456" work strategy, we integrated the concept of high-quality development into the whole process of basic management, reform and innovation, process reengineering, performance assessment, risk prevention and control. We deeply carried out the Three-year Action of State-owned Enterprise Reform, constantly improved the modern enterprise system with Chinese characteristics, pressed ahead with the reform of the "three systems", systematically optimized the performance evaluation index system, deepened the reform of regional headquarters and investment companies, optimized the industrial deployment based on the market-oriented principle, vigorously carried out cutting-edge and original technology breakthroughs, accelerated practical and catch-up technology research, and enhanced competitive strength and profitability through reform and innovation. The Company won 1 first prize and 9 second prizes of national enterprise management modernization innovation achievements in 2021. China Railway was awarded "Model Enterprise of Corporate Governance for State-owned Enterprises". China Railway No. 4 Engineering, China Railway Major Bridge Engineering and China Railway Shanghai were elected as "Benchmark Enterprise for Management Improvement". The cash flow self-balance project of China Railway was elected as "Benchmark Project for Management Improvement". CREG and China Railway Major Bridge Engineering were awarded as "Benchmark" and "Excellent" in the Special Evaluation of "Science and Technology Reform Demonstration Action". China Railway No. 9 Engineering and China Railway No. 2 Engineering were awarded as "Excellent" and "Good" in the special evaluation of "Double Hundred Enterprises" and CREG was included in the "key propaganda scope of outstanding enterprises in SOE reform" by the SASAC.

Second, making steady improvement in operation and development quality. Centering on serving the major national strategy, the Group has constantly optimized and adjusted the operating management system and mechanism, rationally allocated operating resources, and continuously promoted the optimization of business structure. While consolidating traditional areas of strength such as railways, highways and urban rail transit, we have, based on the national macro policies, further expanded to new areas such as water conservancy and hydropower, and urban renewal, in order to enhance the overall competitiveness, increase the business scale, and steadily improve the business quality. In the first half of this year, the value of new contracts of the Group was RMB1,211.94 billion, representing a year-on-year increase of 17.2%. In the traditional infrastructure market, we obtained new contracts of RMB99.28 billion in the railway market, maintaining our leading position; obtained new contracts of RMB145.85 billion in the highway market, representing a year-onyear increase of 28.4%, maintaining our dominant market position; and obtained new contracts of RMB789.66 billion in municipal works and other businesses, representing a year-on-year increase of 16.7%, ensuring stable and orderly development. In the "second curve" market, the Group has taken multiple measures to actively promote development, and achieved remarkable improvement in water conservancy and hydropower, airport engineering and other business operations. We obtained new contracts of over RMB200 billion. In particular, we obtained new contracts of RMB74.22 billion in water conservancy and hydropower business, representing a year-on-year increase of 819.7%. With regard to the undertaking tasks, we have won bids for a number of clean energy, new infrastructure and major projects, such as the wind farm project of Guizhou Jidian New Energy, 800WM PV project of Zhengzhou Yingtai Energy, Huaibei – Suzhou – Bengbu intercity Railway, Qingdao Metro Line 9 Phase I, River-crossing channel of Pearl Bay Area in Nansha, Guangzhou and comprehensive improvement of central urban environment in Wulong District, Nanyang.

Third, ensuring robust growth of operation benefits and quality. The Group has carried out in-depth management improvement based on the world class standards, adhering to the principle of "ensuring down to earth works for each project", and firmly promoted the construction of the big business management system. Taking big business management as an important step to improve our ability to create and deliver results, we have introduced a series of measures to strengthen the management of all aspects of operation and development, project performance, cost control, and right confirmation and settlement, strengthen cash flow management, increase the weight of assessment and revealed that effective project management increased work effectiveness. In the first half of this year, with the outstanding contribution of output value of major projects undertaken by the Group, such as Shenzhen Metro Line 14 and Mengly Expressway, a number of key and difficult projects, such as Sichuan-Tibet Railway, Darui Railway, Yunnan Dianzhong Water Diversion, Beijing-Xiong'an Expressway, Shenzhen-Zhongshan Passage, and Yawan-Bandung high-speed Railway, have been smoothly promoted, effectively releasing the production capacity. The Group achieved revenue of RMB560.587 billion, representing a year-on-year increase of 12.5%; profit for the period of RMB16.825 billion, representing a year-on-year increase of 17.2%; profit for the period attributable to the owners of the Company of RMB15.126 billion, representing a year-on-year increase of 15.5%, increase of liquidity ratio from 1.02 at the beginning of the period to 1.06, and gearing ratio of 74.1%, within the annual budget target range.

Fourth, enhancing mutual complementation of corporate responsibility and brand. The Group has always fulfilled its commitment to benefit the society and return to shareholders, demonstrating its responsibility as a major central enterprise. Since 2022, we actively engaged in the prevention and control of the epidemic on a regular basis, organizing support for the prevention and control of the epidemic in Jilin, Shanghai and other places, and participating in the construction of local isolation medical facilities and anti-epidemic housing, with a total input of more than 13,000 people. We actively participated in the relief of flood disaster caused by heavy rainfall in Fujian, Jiangxi, Sichuan, Guangdong and other places, striving to protect the safety of people's lives and property. We actively implemented the national construction plans for major projects, and completed a large number of livelihood projects, such as the Zheng-Yu High-speed Railway, Darui Railway, Heluo Railway, Xiaoxiangling Tunnel, and the fourth phase of Nansha Port Area. We actively implemented the national requirements of "ensuring stability and expansion of employment", steadily expanded the recruitment scale of college and technical secondary school graduates, and provided a lot of opportunities for labor workers to obtain employment and income. We actively participated in the preservation, restoration and protection of Donghuamen Site in Chengdu, Zhouyuan Site, Qianfo Rock Grottoes in Tongjiang County and many other national cultural relics and world cultural heritage, contributing our wisdom and strength to retain the cultural roots and defend the soul of the nation. We earnestly learned the spirit of the important instructions of General Secretary Xi Jinping on consolidating and expanding the effective connection between the achievements of poverty alleviation and rural revitalization, strictly implemented the requirements of "eliminating poverty without evading responsibilities, policies, assistance or supervision", ensuring that every one has access to food and clothing, secure housing, compulsory education and basic medical care. Focusing on the five revitalization measures, ensuring the continuity of the measures, funds and forces of assistance, we actively engaged in the construction of photovoltaic power station in Shenshan Village of Baode County, dormitory building of No. 11 Primary School of Baode County, and the construction of white wool tea production base of Rucheng County, and strove to build the service brands of "Good Driver" and "Good Property Manager" of Baode. We carried out the training project of "Everyone has skills" in Rucheng County, bought agricultural products of RMB3.564 million and helped sell agricultural products of RMB213,000. We strengthened the assistance and dispatched two outstanding temporary cadres to Karuo District in Changdo City, Tibet, which was newly added as a target for poverty alleviation. The Group ranked 107th in the "Top 500 Global Brands by Value in 2022" published by Brand Finance, 15 places higher than 2021 ranking. The social image and brand value of the Group were further consolidated and improved.

During the first half of 2022, the value of new contracts of the Group was RMB1,211.94 billion, representing a year-on-year increase of 17.2%. In particular, the value of new contracts of domestic business was RMB1,132.11 billion, representing a year-on-year increase of 14.1%; the value of new contracts of overseas business was RMB79.83 billion, representing a year-on-year increase of 90.7%. As at the end of the reporting period, the value of contract backlog of the Company was RMB5,116.66 billion, with an increase of 12.57% as compared with the end of 2021. The details are as follows:

Value of New Contracts

			Unit: 100 millio	n Currency: RMB
				Year-on-
		The first	The first	year increase/
Business type		half of 2022	half of 2021	decrease
Infrastructure	construction	10,347.9	9,101.1	13.7%
Including:	Railways	992.8	1,197.2	-17.1%
meraanig.	Highways	1,458.5	1,135.7	28.4%
	Municipal works and	1,430.3	1,133.7	20.470
	others	7,896.6	6,768.2	16.7%
Survey, design and consulting services		209.6	95.7	119.0%
Engineering e	quipment and			
component	manufacturing	347.9	281.8	23.5%
Property deve	lopment	216.4	312.7	-30.8%
Other busines	ses	997.6	545.4	82.9%
Total		12,119.4	10,336.7	17.2%
Including:	Onshore	11,321.1	9,918.1	14.1%
	Offshore	798.3	418.6	90.7%

Infrastructure construction business

Engineering construction is the core segment of China Railway, the foundation for consolidating the leading position of China Railway in the infrastructure construction industry and enhancing brand strength, an important pillar for enlarging the market scale and improving the market influence, and a key field for improving the economic benefits and promoting the high-quality development of the Company. The engineering construction business of the Group involves railway, highway, municipal works, housing construction, urban rail transit, water conservancy and hydropower, port channel, airport wharf and other engineering fields, covering more than 90 countries and regions in the world. The Group has special grade qualification for general contracting of a variety of projects, such as railway engineering, highway engineering, municipal public engineering, and construction engineering. The basic operation mode is to obtain orders through market competition at home and abroad, complete the tasks of survey, design, procurement, construction and operation of projects by means of general engineering contracting, general construction contracting, BOT or PPP according to the contract, and be responsible for the quality, safety and construction period of the contracted project. The infrastructure investment business is the extension of the industrial chain of the traditional core business of infrastructure construction. Based on the principle of centering on main business, serving main business, driving main business and promoting main business, the infrastructure investment business of the Group keeps innovating the investment and construction modes in railway, highway, urban rail transit, underground utility tunnels, water and environmental protection and other areas of infrastructure, creating a more comprehensive industrial chain, and helping the Group maintain its advantages in construction contracting in the field of infrastructure construction.

The Group has always been a leader in infrastructure construction in China and is one of the largest construction contractors in the world. As of the end of the reporting period, the Company had 18 special grade general contracts for railway engineering construction, accounting for more than 50% of the total number of special grade general contracts for railway engineering construction in China; as well as 32 special grade general contracts for highway engineering construction, 19 special grade general contracts for building construction and 10 special grade general contracts for municipal public works construction. The Group is the largest construction group in the railway infrastructure field and urban rail transit infrastructure field in China. It has three national key laboratories: National Engineering Research Centre 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, representing the most advanced technology level in railway, bridge, underground space development and utilization and rail transit construction in China. In addition, 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 in the Belt and Road Initiative including China-Laos Railway, the Indonesian Jakarta-Bandung High-speed Railway, Budapest-Belgrade Railway and Padma Bridge in Bangladesh.

During the first half of 2022, the value of the Group's new contracts of infrastructure construction business was RMB1,034.79 billion, representing a year-on-year increase of 13.7%; the value of the contract backlog was RMB4,684.25 billion as at the end of the reporting period, representing an increase of 11.23% from the end of 2021. From a business segment perspective: ① In respect of railway construction business, due to the reduction of railway fixed assets investment in the first half of this year, the value of new contracts of railway construction business amounted to RMB99.28 billion, representing a year-on-year decrease of 17.1%; the value of the contract backlog as at the end of the reporting period was RMB696.26 billion, representing a decrease of 3.91% from the end of 2021. The Group's market share in domestic large and medium-sized railway construction reached 51.2% in the first half of 2022, maintaining the first place in China. 2 In respect of highway construction business, the value of new contracts of highway construction business amounted to RMB145.85 billion, representing a year-on-year growth of 28.4%; the value of the contract backlog as at the end of the reporting period was RMB743.45 billion, representing an increase of 7.51% from the end of 2021. 3 In respect of municipal works and other businesses, benefiting from the promotion of the construction of city clusters, metropolitan circle, and new towns and the acceleration of urban renewal, the Group has further strengthened the market development of urban construction. The value of new contracts signed for municipal works and other businesses reached RMB789.66 billion, representing a year-on-year increase of 16.7%. The contract backlogs as at the end of the reporting period amounted to RMB3,244.54 billion, representing an increase of 16.08% from the end of 2021.

Survey, design and consulting services business

Design consulting is the core segment of China Railway, an important engine for leading the upgrading of technology and industry of China Railway and driving the development of other businesses, an important basis for enhancing the brand influence of China Railway, and an important support for promoting industrial coordination and improving the innovation ability of the whole industrial chain. Our design consulting business covers the whole process of basic construction services such as research, planning, consulting, cost, survey and design, supervision, general engineering contracting, and product industrialization, mainly involving industries such as railways, urban rail transit, highways, municipal works, housing construction, water conservancy and hydropower, water transport survey and design. The Group constantly expands into new industries and new fields such as modern tramcars, medium and low speed maglev, intelligent transportation, civil airports, ports and wharfs, power, energy conservation and environmental protection. The basic operation mode is to obtain survey and design orders through market competition at home and abroad, and complete the survey, design and other relevant services of the engineering projects according to 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 and design and consulting service industry, the Company 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 35 International Engineering Consulting (FIDIC) and Engineering Design Awards. In ENR's 2022 ranking of the world's 150 largest design companies and 225 largest international design companies, China railway ranked 15th and 118th respectively.

In the first half of 2022, the value of new contracts of the Group regarding the survey, design and consulting service business amounted to RMB20.96 billion, representing a year-on-year increase of 119.0%. As a backbone enterprise in China's survey and design and consulting service industry, the Company has played an important leading role in the field of engineering construction. As at the end of the reporting period, the Group's contract backlog of survey, design and consulting services business was RMB60.6 billion, representing an increase of 21.69% from the end of 2021.

Engineering equipment and component manufacturing business

Equipment manufacturing is the core segment of China Railway, an important carrier for practicing the "three transformations" and promoting the high-end brand of China Railway, an important force to boost the transformation and upgrading of the Company, and an important support for making up the shortcomings and reinforcing the advantages as well as improving the core competitiveness. The Group's equipment manufacturing business mainly serves the infrastructure construction at home and abroad, and its products cover turnouts, tunnel construction equipment, bridge construction steel structure, engineering construction machinery, fabricated building components and rail transit electrification equipment, etc. The basic operation mode is mainly to obtain orders through market competition at home and abroad, and provide relevant products and services with guaranteed guality and guantity 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 TBM 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, girder carrier and handling machine, and other large-scale engineering machinery such as the lifting machinery. In terms of electrification equipment for railways and urban rail transits, the Group's rail transit electrification equipment mainly includes complete set of catenary equipment for the regular railway, acceleration railway, and high-speed railway, and complete set of power supply equipment of all power supply forms of urban rail transit. Among them, the catenary equipment for railway passenger lines and high-speed railways are at the international advanced level. In terms of prefabricated buildings, the Group is a supplier with rich product structures and a complete set of solutions for prefabricated buildings in the domestic prefabricated building component industry, devoting itself to creating a high-tech and innovative prefabricated building business platform.

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 machine/TBM R&D manufacturer in terms of sales volume, the world's largest steel structure manufacturer of turnouts and bridges, the largest railway specialized construction equipment manufacturer in China, and a global leading infrastructure construction service equipment manufacturer. For the domestic market, the Group maintained a market share of more than 50% in the high-speed turnout market that requires high techniques (speed over 250km/h), and in the acceleration turnout, regular turnout, and heavy-haul turnout market; a market share of more than 60% in the turnout market of urban rail transit business; a market share of more than 60% in the large steel structure bridge market, a market share of more than 60% in the catenary parts market of high-speed railway; and a market share of approximately 50% in the power supply products market of urban rail transit sector. In addition, the Group successfully developed the 600km/h high-speed maglev traction transformer, and 600km/h high-speed maglev turnout system, providing a strong technical support for the completion of 600km/h high-speed maglev traffic system in China. CRHIC (stock code: 600528.SH), a majority-owned subsidiary of the Company, has the most complete spectrum of products in the field of railway infrastructure equipment in China and is the only industrial enterprise in A share market that mainly engages in rail transit and underground excavation of high-end equipment. CRHEEC (stock code: 688285.SH) is an important supplier engaging in R&D, production and system integration of domestic electrified catenary components and power supply equipment for urban rail transit. CRPCC (stock code: 300374.SZ), a supplier with rich product structure portfolios and integrated service capability of prefabricated building in domestic housing prefabricated building parts and components industry, can provide a full set of prefabricated building solutions.

In the first half of 2022, the value of new contracts of the engineering equipment and component manufacturing business of the Group was RMB34.79 billion, representing a year-on-year increase of 23.5%. As at the end of the reporting period, the value of contract backlog of the engineering equipment and component manufacturing business of the Group was RMB122.07 billion, representing an increase of 25.06% from the end of 2021.

Property development business

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

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

In the first half of 2022, due to the repeated outbreaks of COVID-19 in China and the downturn of real estate market, the Group's property business achieved a sales amount of RMB21.64 billion, representing a year-on-year decrease of 30.8%, and its sales area was 1.497 million square meters, representing a year-on-year decrease of 27.5%. The area that we have commenced construction was 1.65 million square meters, representing a year-on-year decrease of 25.9%; the area that we have completed construction was 1.58 million square meters, representing a year-on-year decrease of 20.8%; and the newly acquired land reserve was 0.561 million square meters, representing a year-on-year decrease of 66.7%. As of the end of the reporting period, the Group's land reserve to be developed covered 18.745 million square meters.

Other businesses

Mining business

In the process of infrastructure construction at home and abroad, the Group has obtained a number of mineral resources projects through acquisitions and mergers based on "fiscalization of resources" and "exchange of resources for projects". China Railway Resources Group Co., Ltd., the Company's wholly-owned subsidiary, is responsible for the development business of mineral resources. The Group's mining business is mainly based on the management and development of self-owned mineral resources. Currently, it wholly owns, controls or holds shares to invest in construction of 5 modern mines at home and abroad, including Luming Molybdenum Mine in Yichun, Heilongjiang, Luishia Copper-Cobalt Mine, MKM Copper-Cobalt Mine and SICOMINES Copper-Cobalt Mine in Congo, and Wulan Lead and Zinc Mine in Mongolia, all of which are in good conditions. The main mineral products produced and sold by the Company include concentrates of copper, cobalt, molybdenum, lead and zinc, and copper cathode and cobalt hydroxide. As of the end of the reporting period, the retained resources/reserves of the aforesaid mines mainly include copper of approximately 8.05 million tons, cobalt of approximately 0.60 million tons, and molybdenum of approximately 0.65 million tons. In particular, it maintains the leading position in the same industry in China in terms of the retained reserves of copper, cobalt and molybdenum, and its mines' production capacity for copper and molybdenum has been at the forefront in the same industry in China.

In the first half of 2022, the cumulative output of resources from the mines controlled and invested by the Group were as follows: the copper metal production was 0.161 million tons, representing a year-on-year increase of 46.9%; cobalt metal production was 2,652.09 tons, representing a year-on-year increase of 89.7%; molybdenum metal production was 7,801.62 tons, representing a year-on-year increase of 0.07%; lead metal production was 4,488.79 tons, representing a year-on-year decrease of 29.68%; zinc metal production was 10,852.23 tons, representing a year-on-year increase of 1.08%; silver metal production was 23.15 tons, representing a year-on-year increase of 9.35%. The basic information of specific mine projects is shown in the table below.

Unit: 100 million Currency: RMB

N	Desire	Туре	Mineral reso	Resour	ce/Reserve ailable)	Equity ratio %	Planned total investment (RMB100	Accumulated investment (RMB100	Investment in the reporting period (RMB100	Product output in the reporting	Planned completion	Project
NO.	. Project name			Unit	Quantity	%	million)	million)	million)	period	date	progress
1	Luming Molybdenum Mine, Yichun City of Heilongjiang	Molybdenum Copper	0.086%	Ton Ton	646,430	83	60.17	60.26	0	7,801.62 546.55	Completed	In normal production
2	SICOMINES Copper-Cobalt Mine, La Sino-congolaise Des Mines S.A., Congo	Copper Cobalt	3.205% 0.248%	Ton Ton	7,528,646 583,538	41.72	45.86	32.86	0	134,861.69 1,644.97	Completed	In normal production
3	Luishia Copper-Cobalt Mine, Comagnie Minière de Luisha S.A.S, Congo	Copper Cobalt	2.244% 0.071%	Ton Ton	485,391 15,451	72	21.38	21.6	0	15,701.91 534.66	Completed	In normal production
4	MKM Copper-Cobalt Mine, La Minière De Kalumbwe Myunga sprl, Congo	Copper Cobalt	2.078% 0.211%	Ton Ton	31,049 3,159	80.2	11.95	12.35	0	9,916.18 472.46	Completed	In normal production
5	Wulan Lead and Zinc Mine, Xinxin Company, Mongolia	Lead Zinc Silver	1.127% 2.666% 52.564g/t	Ton Ton Ton	191,279 452,676 892	100	15.4	15.4	0	4,488.79 10,852.23 23.15	Completed	In normal production
6	Muhaer Lead and Zinc Mine, Xinxin Company, Mongolia	Lead Zinc Silver	0.63% 2.37% 118.17g/t	Ton Ton Ton	41,141 154,709 770	100	1	1	0	/ /	1	Not yet exploited
7	Wurile Ovoo and Zhanggai Tolgoi Gold Mine, Xinxin Company, Mongolia	Gold	3g/t	Ton	3	100	1	1	0	/	1	Not yet exploited
8	Silver-Lead-Zinc polymetallic Mine, Chafu, Xianglong Mineral Co., Ltd., Mongolia	Lead Zinc Silver	7% 5.09% 200.39g/t	Ton Ton Ton	89,693 65,190 257	100	3.3	3.3	0	/ /	1	Ceased production

Financial business

When carrying out financial business, the Group has always strictly implemented the regulatory policies of the "Financial Stability and Development Commission of the State Council, the People's Bank of China, the CSRC and the CBIRC" and adhered to the overall guidelines of integration of industry and finance. Centering on the target of serving internal financial needs, promoting the development of principal construction business and creating value and adhering to the principle of giving priority to benefits in the allocation of financial resources, our 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. We have built a multi-level, wide-covered and differentiated "finance, guasi-finance" institutional service system represented by China Railway Trust Co., Ltd. ("CRTC"), China Railway Finance Co., Ltd. ("CRFC"), and China Railway Capital Co., Ltd. ("CRCC"). These companies actively explore new ways for integrating industry and finance to serve internal financial needs. CRTC 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 guick response mechanism for counterparties and projects, and issued the "Guidelines on Normalized Risk Investigation", in order to minimize the potential risks and achieve the process management of "early discovery, early warning and early handling". CRFC 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. CRCC 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 and centralized purchase and supply based on the main businesses of the Company. It mainly serves the internal trading demand of the Group and provides external services in an appropriate manner. China Railway Material Trade Co., Ltd, a wholly-owned subsidiary of the Company, has established a national-wide operation and service network, and maintained good cooperative relationship with domestic large-scale production enterprises of steel, cement, petrochemical, components for communications engineering, signal engineering, electrical engineering and electrification engineering, building decoration materials and other products. It carries out centralized procurement and supply of major materials at the 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 fluctuation 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 operation business

Asset operation is the development priority of China Railway, an important carrier for optimizing industrial layout and strengthening the brand of the whole industry chain, and a key link for strengthening operational asset management, guaranteeing investment income and enhancing capital circulation capacity. As a leading domestic construction enterprise, the Group has a complete industrial chain, extensive investment business layout, sound investment and operation management and control system, and strong development capability integrating investment, construction and operation. The business scope of PPP (BOT) of the Group mainly covers operation, maintenance and management of infrastructure investment projects and asset operation, covering three modes of independent operation, joint operation and entrusted operation. At present, the Group operates such infrastructure projects as rail transit, expressway, water and environmental protection, municipal roads, industrial parks, underground pipe corridors, etc., with the operation period ranging from 8 to 40 years. As the infrastructure investment projects undertaken by the Group have been successively completed and entered into the operation period, the Group's infrastructure operation revenue and profit generally show a rising trend. On the whole, with the dual effect of the national policy of maintaining stable growth and the development concept of "centering on the main business, and promoting the integration of industrial chain resources development" of the Group's investment business, in the first half of the year, the investment business continued to expand into new fields while consolidating its presence in the traditional market, and optimized the investment industry structure, contributing to the upgrade and transformation of the Group.

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 State-owned Assets Supervision and Administration Commission of the State Council and the All-china Federation of Trade Unions, the Group has 3 national laboratories (National Engineering Research Centre of High Speed Railway Construction Technology, National Key Laboratory of Shield Tunneling and Drilling Technology and National Key Laboratory of Bridge Structural Stability and Safety), 10 postdoctoral workstations, 1 national local joint research center (National and Local Joint Engineering Research Center for Research and Application of Digital Rail Transit Technology), 44 provincial research and development centers (laboratories), 19 nationally recognized technology centers and 120 provincially recognized technology centers. It has also set up 20 professional R&D centers and invested in the national technology innovation center for Sichuan-Tibet railway.

In the first half of 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, long bridge construction, operation and maintenance and disaster prevention technology, tunnel and underground project construction technology, communications engineering, signal engineering, electrical engineering and electrification engineering technology, construction equipment and industrial product manufacturing technology, building construction technology, energy conservation and emissions reduction, intelligent manufacturing and information technology and other key areas. Based on the actual needs for the operation and engineering construction and relying on such key and difficult bridge projects as the Ningbo-Zhoushan Railway Xihoumen Highway-Railway Dual-use Bridge, the Qiongzhou Strait Sea-crossing Project, and the Fourth Sea-crossing Bridge of Aoshen and Ruba Cross-sea Bridge in Malaysia, the Group conducted technical research on bridge survey and design theories and methods, new bridge structures and materials, and bridge intelligent construction technologies and equipment. Based on a number of Sichuan-Tibet railway projects such as the Dadu River Bridge on the Sichuan-Tibet Railway, the Group carried out research on key technologies for railway suspension bridges spanning plateau canyons for a kilometer or above, drilling and blasting construction technology for high-altitude and deep-buried complex geological and environmental tunnels. Based on projects such as Sichuan-Tibet Railway, Chengdu-Chongqing Middle Line Ultra-High-speed Railway, Shenzhou-Huizhou Intercity Railway and major equipment such as "Caiyun" and "Longyan" TBMs, "Chunfeng" mud-water balance shield machine, "Yongning" and "Xueyu Xianfeng" hard rock roadheaders, the Group conducted research on key technologies for intelligent monitoring and maintenance in operating tunnel structures, quality improvement and intelligent construction of tunnel engineering. Based on Yinlan high-speed railway, Xilai high-speed railway, Chaoma intercity express line, Phoenix maglev sightseeing express line and other projects, the Group carried out research on intelligent construction technology of communications engineering, signal engineering, electrical engineering and electrification engineering.

Consolidated Results of Operations

For the six months ended 30 June 2022, the Group's revenue increased by 12.5% from the corresponding period of 2021 to RMB560.587 billion. The Group realized profit for the period of RMB16.825 billion, representing an increase of 17.2% from the same period of last year. For the six months ended 30 June 2022, profit for the period attributable to owners of the Company was 15.126 billion, representing an increase of 15.5% from the same period of last year while the basic earnings per share of the Company were RMB0.551, representing an increase of 21.4% from the same period of last year.

A comparison of the financial results for the six months ended 30 June 2022 and the corresponding period of 2021 is set forth below.

Revenue

In the first half of 2022, the Group's revenue increased year-on-year by 12.5% to RMB560.587 billion, mainly due to the increase in revenue from infrastructure construction business and property development business. Among which, the revenue generated from overseas region was RMB27.729 billion, representing a year-onyear increase of 10.4%.

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 cost), employee compensation and benefits and depreciation and amortization expenses. For the six months ended 30 June 2022, the Group's cost of sales and services increased year-on-year by 12.6% to RMB514.037 billion. In the first half of 2022, gross profit of the Group increased year-on-year by 11.5% to RMB46.550 billion. The gross profit margin for the first half of 2022 was 8.3%, basically remained the same as 8.4% for the same period of last year.

Other income

The Group's other income primarily consists of dividend income and subsidies from government. For the six months ended 30 June 2022, the Group's other income was RMB1.173 billion, representing a decrease of 23.4% from the same period of last year. It was mainly due to the decrease in dividend income.

Other expenses

The Group's other expenses primarily includes expenditures on research and development. For the six months ended 30 June 2022, other expenses increased by 22.3% to RMB8.980 billion from the same period of last year. Such increase was mainly due to the Group's continuous advancement on scientific research and technological innovation and further increased input in research and development.

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. For the six months ended 30 June 2022, the Group's net impairment losses on financial assets and contract assets was RMB1.413 billion, representing a year-on-year increase of 2.2%. It was mainly due to the increase in impairment losses on trade and other receivables.

Other gains, net

The Group's net other gains mainly include gains and losses on disposal/write-off of property, plant and equipment, lease prepayment, associates and subsidiaries, foreign exchange gains/losses, impairment losses on property, plant and equipment and other assets and changes in the fair value of financial assets/liabilities through profit and loss. The net other gains for the first half of 2022 was RMB735 million (first half of 2021: RMB6 million), which mainly includes deemed disposal gains of interest in associates of RMB504 million and foreign exchange gains of RMB454 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 and bills receivables which were transferred in accordance with asset-backed notes ("ABN") and asset-backed securities ("ABS") issuance, non-recourse factoring agreements and bills receivables discounting arrangements. In the first half of 2022, the Group's losses from derecognition of financial assets at amortised cost was RMB1.592 billion, representing a year-on-year increase of 7.1%. For the six months ended 30 June 2022, the Group transferred trade receivables of RMB23.643 billion and RMB3.937 billion under the issuance of ABN and ABS and non-recourse factoring agreements, respectively (first half of 2021: RMB21.678 billion and RMB6.925 billion, respectively).

Selling and marketing expenses

The Group's selling and marketing expenses primarily consist of employee compensation and benefits, and advertising costs. For the six months ended 30 June 2022, the Group's selling and marketing expenses was RMB2.706 billion, representing an increase of 14.1% from the same period of last year. It was mainly due to the increase in selling and commission expense of property development business and the increase of investment in marketing resulting from the Group's strengthened effort in business development. Selling and marketing expenses as a percentage of total revenue was 0.5% for the first half of 2022, basically remained the same as that for the same period of last year.

Administrative expenses

The Group's administrative expenses mainly consist of employee compensation and benefits and depreciation and amortization of its assets related to administration. For the six months ended 30 June 2022, the Group's administrative expenses was RMB12.512 billion, basically remained the same as that for the same period of last year. Administrative expenses as a percentage of total revenue for the first half of 2022 was 2.2%, representing a decrease from 2.5% for the first half of 2021.

Finance costs, net

For the six months ended 30 June 2022, the Group's net finance costs (finance costs less finance income) was RMB845 million, representing an increase of 12.4% from the same period of last year. It was mainly due to the increase in interest expense brought by the increase in balance of interest-bearing liabilities as compared to the same period of last year.

Profit before income tax

As a result of the foregoing factors, the Group's profit before income tax for the six months ended 30 June 2022 increased by 18.9% to RMB21.897 billion from RMB18.412 billion for the corresponding period of 2021.

Income tax expense

For the six months ended 30 June 2022, the Group's income tax expense was RMB5.072 billion, representing an increase of 24.9% from the same period of last year. By excluding the effect of land appreciation tax, the effective income tax rate of the Group was 19.2% for the first half of 2022, increasing 0.9 percentage point from 18.3% for the same period of last year.

Profit for the period attributable to owners of the Company

The profit for the period attributable to owners of the Company for the six months ended 30 June 2022 increased by 15.5% to RMB15.126 billion from RMB13.095 billion for the same period of 2021. The profit margin of the profit for the period attributable to owners of the Company for the first half of 2022 was 2.7%, increasing 0.1 percentage point from 2.6% for the same period of 2021.

5 Segment Results

The revenue and results of each segment of the Group's business for the six months ended 30 June 2022 are set forth in the table below.

Business segment	Revenue RMB million	Growth rate	Profit/(loss) before income tax RMB million	Growth rate	Profit/(loss) before income tax margin¹ (%)	Revenue as a percentage of total	Profit/(loss) before income tax as a percentage of total (%)
Infrastructure Construction	495,908	7.9	19,517	16.3	3.9	83.3	83.9
Survey, Design and Consulting Services	9,232	19.9	937	34.0	10.1	1.5	4.0
Engineering Equipment and Component							
Manufacturing	16,767	1.8	1,110	(3.6)	6.6	2.8	4.8
Property Development	23,709	67.9	(2,296)	346.7	(9.7)	4.0	(9.9)
Other Businesses	50,314	11.7	4,014	71.5	8.0	8.4	17.2
Inter-segment Eliminations and							
Adjustments	(35,343)	_	(1,385)				
Total	560,587	12.5	21,897	18.9	3.9	100.0	100.0

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

Infrastructure construction

Revenue from the Group's infrastructure construction business is mainly derived from railway, highway and municipal works construction. Revenue from the operation of the infrastructure construction business continues to account for a high percentage of total revenue of the Group. In the first half of 2022, the revenue from the infrastructure construction business accounted for 83.3% of the total revenue of the Group (first half of 2021: 84.7%). In the first half of 2022, the Group coordinated and promoted various tasks of production and operation, accelerated the progress of production and operation, and proceeded steadily and orderly. Revenue of the infrastructure construction business for the six months ended 30 June 2022 was RMB495.908 billion, an increase of 7.9% as compared to the same period of last year. Gross profit margin and profit before income tax margin of the infrastructure construction segment for the first half of 2021 was 7.3% and 3.9% respectively (first half of 2021: 7.0% and 3.7% respectively). Such increase was mainly due to the increase in proportion of revenue from highway and municipal works business with higher profitability.

Survey, design and consulting services

Revenue from the survey, design and consulting services business primarily derives from providing a full range of survey, design and consulting services, research and development, feasibility studies and compliance certification services on infrastructure construction projects. In the first half of 2022, the Group's survey, design and consulting services business developed continuously and steadily and its revenue recorded RMB9.232 billion, increased by 19.9% as compared to the same period of last year. For the first half of 2022, gross profit margin and profit before income tax margin for the segment was 27.4% and 10.1% respectively (first half of 2021: 26.5% and 9.1% respectively). Such decrease was mainly due to the decrease in scale of projects with lower profitability.

Engineering equipment and component manufacturing

Revenue from 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 engineering machinery. For the first half of 2022, the Group seized the dividends of the "stable growth" policy and the development opportunities of the equipment manufacturing industry, and continued to strengthen efforts in market development. Revenue of the engineering equipment and component manufacturing business of the Group increased by 1.8% year-on-year to RMB16.767 billion for the first half of 2022. Gross profit margin and profit before income tax margin for the first half of 2022 was 19.3% and 6.6% respectively, basically remained the same as 19.5% and 7.0% for the first half of 2021, respectively.

Property development

In the first half of 2022, the Group paid close attention to changes in policies and market conditions, accelerated the delivery of houses and destocking. For the first half of 2022, revenue of property development business increased by 67.9% year-on-year to RMB23.709 billion. Gross profit margin and profit before income tax margin for the first half of 2022 was 4.7% and -9.7% respectively (first half of 2021: 16.0% and -3.6% respectively). Such decrease was mainly due to ① selling price of certain projects were adjusted as a result of market downturn. ② profitability of the current period was affected by the changes in revenue mix in the reporting period.

Other businesses

In the first half of 2022, the Group has progressively implemented the "limited and interrelated" diversification strategy. Revenue of other businesses increased year-on-year by 11.7% to RMB50.314 billion for first half of 2022. In the first half of 2022, gross profit margin and profit before income tax margin were 16.6% and 8.0% respectively (first half of 2021: 19.5% and 5.2% respectively). Details are as follows: ① revenue from infrastructure operation business increased year-on-year by 89.2% to RMB1.741 billion with gross profit margin increased year-on-year by 8.9 percentage points to 18.2%; @ revenue from mining business increased year-onyear by 56.0% to RMB4.298 billion with gross profit margin increased year-on-year by 1.9 percentage points to 55.3%; ③ revenue from merchandise trading business increased year-on-year by 7.7% to RMB35.459 billion with gross profit margin decreased year-on-year by 4.0 percentage points to 2.4%; @ revenue from financial business decreased year-on-year by 10.1% to RMB2.044 billion.

6 Cash Flow

For the six months ended 30 June 2022, the net cash outflow from operating activities of the Group amounted to RMB37.716 billion, a decrease of net cash outflow from operating activities of RMB58.879 billion for the first half of 2021. It was mainly because the Group actively utilized the "steady growth" measures introduced by the State to speed up the recovery of funds, and at the same time strengthened cash flow control and strived to improve the funding position. For the six months ended 30 June 2022, the net cash outflow from investing activities of the Group amounted to RMB31.601 billion, an increase of net cash outflow from investing activities of RMB26.095 billion for the first half of 2021. It was mainly due to the increase of investment in infrastructure investment projects. For the six months ended 30 June 2022, the net cash inflow from financing activities of the Group amounted to RMB76.022 billion, an increase in the net cash inflow from financing activities of RMB64.419 billion for first half of 2021. It was primarily due to the increase in external financing.

Capital expenditure

The capital expenditure of the Group primarily comprises expenditure on purchases of equipment, upgrading of the Group's production facilities and investments in PPP projects under the intangible asset mode. The Group's capital expenditure for the first half of 2022 was RMB54.802 billion (among which, RMB18.590 billion is for purchase of intangible assets, RMB2.940 billion is for purchase of fixed assets, and RMB32.359 billion is for construction in progress), representing an increase of 181.09% as compared to RMB19.496 billion for the same period of last year. Such increase was mainly due to the increase of construction in progress of RMB28.53 billion arising from the acquisition of the equity interest in Yunnan Dianzhong Water Diversion Engineering Co., Ltd. during the reporting period.

Working capital

	As	at
	30 June 2022 RMB million	31 December 2021 <i>RMB million</i>
Inventories	65,969	45,371
Trade and bills receivables	192,156	157,025
Trade and bills payables	441,890	405,520
Turnover of inventory (days)	19	16
Turnover of trade and bills receivables (days)	56	50
Turnover of trade and bills payables (days)	148	147

As at 30 June 2022, the Group's inventories was RMB65.969 billion, increased by 45.4% as compared to the end of 2021. Such increase was mainly due to the increase in reserve of construction materials for ensuring the production progress of the project and coping with the rising price of raw materials. The inventory turnover days for the first half of 2022 increased to 19 days from 16 days for the year of 2021.

Trade and bills receivables

As at 30 June 2022, trade and bills receivables was RMB192.156 billion, an increase of 22.4% from RMB157.025 billion as at the end of 2021. Such increase was mainly due to ① the normal increase in balance of trade and bills receivable resulting from the increase in operating scale; 2 slow down in repayment from certain project owners. The turnover days of trade and bills receivables increased from 50 days for 2021 to 56 days for the first half of 2022. According to the ageing analysis of the 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 21.5% (31 December 2021: 24.5%) of the total amount, reflecting 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 30 June 2022 and 31 December 2021, based on invoice date.

	As at	As at		
	30 June	31 December		
	2022	2021		
	RMB million	RMB million		
Less than 1 year	150,927	118,517		
1 year to 2 years	16,586	14,919		
2 years to 3 years	9,417	10,297		
3 years to 4 years	5,753	4,562		
4 years to 5 years	2,155	1,407		
More than 5 years	7,318	7,323		
Total	192,156	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. As at 30 June 2022, the Group's trade and bills payables was RMB441.890 billion, an increase of 9.0% from the end of 2021. The main reason is the expansion of business scale led to a normal increase in trade payables. The turnover days of trade and bills payables for the first half of 2022 was 148 days, basically remained the same as 147 days for 2021. According to the ageing analysis of the 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 9.4% (31 December 2021: 8.6%) of the total amount.

The following table sets forth the ageing analysis of the Group's trade and bills payables as at 30 June 2022 and 31 December 2021, based on invoice date.

	As	at
	30 June 2022 <i>RMB million</i>	31 December 2021 <i>RMB million</i>
Less than 1 year	400,411	370,538
1 year to 2 years	22,799	19,622
2 years to 3 years	9,133	9,274
More than 3 years	9,547	6,086
Total	441,890	405,520

7 **Borrowings**

The following table sets forth the Group's total borrowings as at 30 June 2022 and 31 December 2021.

	As at	:
	30 June 2022 <i>RMB million</i>	31 December 2021 <i>RMB million</i>
		2
Bank borrowings		
Secured	96,572	81,976
Unsecured	214,195	152,824
	310,767	234,800
Long-term debentures, unsecured	50,512	55,007
Other borrowings		
Secured	3,320	1,992
Unsecured	22,297	20,128
Total	386,896	311,927
Long-term borrowings	252,915	198,503
Short-term borrowings	133,981	113,424
-		<u> </u>
Total	386,896	311,927

As at 30 June 2022, the Group's long-term borrowings was RMB252.915 billion, representing an increase of 27.4% from the end of 2021. It was mainly due to the increase in loans for infrastructure investment projects as construction progressed. As at 30 June 2022, the Group's short-term borrowings was RMB133.981 billion, representing an increase of 18.1% from the end of 2021, mainly due to the fulfillment of liquidity needs. The Group is generally capable of making timely repayments.

Bank borrowings carry interest rates ranging from 0.75% to 6.90% per annum (31 December 2021: 0.75% to 9.50%). Long-term debentures carry fixed interest rates ranging from 2.28% to 4.80% per annum (31 December 2021: 2.14% to 4.50%). Other borrowings carry interest rates ranging from 3.00% to 6.90% per annum (31 December 2021: 2.35%). For the first half of 2022, the average cost of financing was 3.85%, representing a year-on-year decrease of 0.29 percentage point.

The following table sets forth the maturity of the Group's borrowings as at 30 June 2022 and 31 December 2021.

	As at			
	30 June 2022 <i>RMB million</i>	31 December 2021 <i>RMB million</i>		
Less than 1 year	133,981	113,424		
1 year to 2 years	38,363	31,351		
2 years to 5 years	77,465	64,552		
More than 5 years	137,087	102,600		
Total	386,896	311,927		

As at 30 June 2022 and 31 December 2021, the Group's bank borrowings comprised floating-rate bank borrowings amounting to RMB201.954 billion and RMB156.440 billion, respectively. The Group's borrowings are primarily denominated in Renminbi and foreign currency borrowings are primarily denominated in U.S. dollars.

The following table sets forth the details of the Group's secured borrowings as at 30 June 2022 and 31 December 2021.

	As at 30 Ju	ne 2022	As at 31 December 2021		
	Secured borrowings <i>RMB million</i>	Carrying value of pledged assets RMB million	Secured borrowings <i>RMB million</i>	Carrying value of pledged assets RMB million	
Property, plant and equipment	1,837	4,695	295	1,715	
Intangible assets	54,171	82,614	45,894	64,728	
Properties under development for sale	6,885	17,436	7,699	30,698	
Trade and bills receivables	19	19	221	221	
Trade receivables from fellow					
subsidiaries of the Group	24	375	34	375	
Contract assets	34,515	60,444	29,825	48,320	
Total	97,451	165,583	83,968	146,057	

Besides, the Group has secured borrowings, with amount of RMB2,441 million, were secured by the future collection right of the subsidiaries of the Group.

As at 30 June 2022, the Group's unused credit line facilities from banks amounted to approximately RMB1,304.973 billion (31 December 2021: RMB1,201.491 billion).

As at 30 June 2022, the Group's gearing ratio (total liabilities/total assets) was 74.1%, an increase of 0.4 percentage point from 73.7% as at 31 December 2021.

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	
	30 June 2022 <i>RMB million</i>	31 December 2021 <i>RMB million</i>
Pending lawsuits (Note 1) – arising in the ordinary course of business	5,388	5,256

Note 1: The Group has been named 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 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.

9 **Business Risks**

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

- (1) Investment and operation risk: It refers to the risk that due to the uncertainty of investment results arising from uncontrollable external factors, insufficient feasibility analysis and argument prior to project investment, inappropriate project implementation and management, significant changes in external macro environment and policies and other factors, which may lead to an investment return lower than expected or an investment failure of the Group, and the scale risk brought about by the increase in the Group's investment projects; among which, the overseas investment risk refers to the risk that overseas investment is affected by factors including local society, politics, economy, culture, policies and regulations, as well as relevant domestic policies and the corporate internationalization talent pool, which may lead to investment failure, lower-than-expected investment return, lower personnel security, damage to the reputation of the enterprise, etc.
- (2) International operation risk: It refers to the risk that due to the influence of international political situation, foreign policy changes, administrative intervention from government, economic, social, environmental or technological changes and other factors, which may lead to the failure to normally carry out the Group's overseas construction projects.
- (3) Cash flow risk: It refers to the possibility that the Group may incur economic losses or damage of reputation in the event of failure to meet the requirements of timely payment, investment expenses or timely repayment of the Group's debts in its operations due to improper management of cash flow.
- Health, safety and environmental protection risk: The health, safety and environmental protection risks faced by the Group are mainly concentrated in the construction safety risks of construction engineering projects, which mainly refer to the risk that due to the lack of effective management in management system implementation, measure implementation, technical management, subcontract management, equipment management and accident management of the Group, which may lead to major production safety accidents and safety hazards in the enterprise.

(5) **Major pandemic prevention and control risk**: Due to the impact of a major uncontrollable pandemic, some national and local governments have issued policies that regard the major pandemic as safety accidents and adopted strict control and punishment measures. Consequently, the Group cannot proceed with normal construction of projects under construction or even suffers from suspension of work, which brings great risk of contract performance and severe loss of economic benefits to the Group.

To prevent the occurrence of various types of risks, the Group 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 Group strictly supervises the important control aspects of earlier stage of feasibility study, planning, reviewing, auditing, approval and decision-making; enhances process control and post-assessment work, and develops strategies and contingency plans to deal with risks, which guarantees the overall controllability of the Group'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.

Overview of General Meeting

Session of meeting	Date of meeting	References of designated websites for the publication of resolutions	Date of publication of the resolutions
2021 First H Share Class Meeting	12 January 2022	China Securities Journal, Shanghai Securities News, Securities Daily, Securities Times and the website of the Shanghai Stock Exchange	13 January 2022
		The website of the Hong Kong Stock Exchange	12 January 2022
2021 Annual General Meeting	22 June 2022	China Securities Journal, Shanghai Securities News, Securities Daily, Securities Times and the website of the Shanghai Stock Exchange	23 June 2022
		The website of the Hong Kong Stock Exchange	22 June 2022

Description of the general meeting:

- On 12 January 2022, the Company held the 2021 First H Share Class Meeting with onsite voting. During the meeting, "Proposal on the 2021 Restricted Share Incentive Scheme of China Railway Group Limited (Draft) and its Summary" and other proposals were reviewed and approved and resolutions were formed. The announcement of the resolutions was published in China Securities Journal, Shanghai Securities News, Securities Daily and Securities Times and on the website of the Shanghai Stock Exchange on 13 January 2022 and on the website of Hong Kong Stock Exchange on 12 January 2022.
- The 2021 annual general meeting of the Company was held on 22 June 2022 with a combination of onsite meeting and online voting. During the meeting, "Proposal on the Report of the Board of Directors of the Company for the Year Ended 31 December 2021", "Proposal on Amendments to the Articles of Association of the Company" and other proposals were reviewed and approved and resolutions were formed. The announcement of the resolutions was published in China Securities Journal, Shanghai Securities News, Securities Daily and Securities Times and on the website of the Shanghai Stock Exchange on 23 June 2022 and on the website of Hong Kong Stock Exchange on 22 June 2022.

2 The Plan for Profit Distribution or Capitalisation of Capital Reserves

(1) The interim plan for profit distribution and capitalisation of capital reserves

Whether distributed or capitalised	No
Number of bonus shares for every 10 shares (share)	0
Dividend amount per 10 shares (RMB) (tax inclusive)	0
Number of shares capitalised for every 10 shares (share)	0
Information on the plan for profit distribution or capitalisation of capital reserves	Not applicable

(2) Formulation and implementation of the cash dividend policy

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 RMB1.96 (tax inclusive) per 10 shares based on the total share capital of 24,741,653,683 shares of the Company as at 30 March 2022 was declared by the Company, totaling RMB4,849,364,121.87 (tax inclusive) and representing approximately 17.5% of net profit attributable to the listed 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 in China Securities Journal, Shanghai Securities News, Securities Times, Securities Daily and on the website of Shanghai Stock Exchange (www.sse.com. cn). As at 9 August 2022, the implementation of the profit distribution plan of the Company for 2021 has been completed.

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

(1) Share incentives which were disclosed in announcement without subsequent progress or changes

Matter overview

Query index

At the 2021 first H share class meeting, the Proposal on the 2021 Restricted Share Incentive Scheme (Draft) and its Summary of China Railway Group Limited, the Proposal on the Appraisal Management Measures for Implementation of the 2021 Restricted Share Incentive Scheme of China Railway Group Limited, the Proposal on the Management Measures of the 2021 Restricted Share Incentive Scheme of China Railway Group Limited and the Proposal on Requesting the Shareholders' Meeting to Authorize the Board of Directors to Handle Matters Relating to the Company's Restricted Share Incentive Scheme were considered and approved.

For details, please refer to the Announcement on Resolutions of 2021 First H Share Class Meeting of China Railway Group Limited disclosed on 13 January 2022.

The thirteenth meeting of the fifth session of the Board of Directors and the tenth meeting of the fifth session of the Supervisory Committee of the Company considered and approved the Proposal on the First Grant of Restricted Shares to the Incentive Recipients of the Company's 2021 Restricted Share Incentive Scheme, and independent directors expressed their independent opinion on the proposal.

For details, please refer to the Announcement on Resolutions of the Thirteenth Meeting of the Fifth Session of the Board of Directors of China Railway Group Limited, the Announcement on Resolutions of the Tenth Meeting of the Fifth Session of the Supervisory Committee of China Railway Group Limited, and the Independent Opinion of Independent Directors of China Railway Group Limited on the First Grant of Restricted Shares to the Incentive Recipients of the Company's 2021 Restricted Share Incentive Scheme disclosed on 18 January 2022.

Matter overview Query index

The conditions for the grant of restricted shares under the 2021 Restricted Share Incentive Scheme (Draft) of China Railway Group Limited were fulfilled. According to the authorization of the 2021 second extraordinary general meeting, the 2021 first A share class meeting and the 2021 first H share class meeting of China Railway Group Limited, the thirteenth meeting of the fifth session of the Board of Directors held by the Company on 17 January 2022 considered and approved the Proposal on the First Grant of Restricted Shares to the Incentive Recipients of the Company's 2021 Restricted Share Incentive Scheme, determining the first grant date of restricted shares as 17 January 2022. Number of initial grant:180.0000 million shares. Initial grant price: RMB3.55/share. The Supervisory Committee of the Company verified the matters such as the incentive recipients, grant date and first grant arrangement determined for the first time in the incentive scheme. Jia Yuan Law Offices issued a legal opinion on the grant.

For details, please refer to the Announcement of China Railway Group Limited on the First Grant of Restricted Shares to the Incentive Recipients of the Company's 2021 Restricted Share Incentive Scheme, the Verification Opinion of the Supervisory Committee of China Railway Group Limited on the List of Incentive Recipients on the Grant Date of the Company's 2021 Restricted Share Incentive Scheme and the Legal Opinion issued by Jia Yuan Law Offices on Matters related to the Grant of Restricted Shares of 2021 Restricted Share Incentive Scheme of China Railway Group Limited which were disclosed on 18 January 2022.

According to the provisions of the Measures for the Administration of Share Incentives of Listed Companies and as required by Shanghai Stock Exchange and the China Securities Depository and Clearing Corporation Limited ("CSDC") Shanghai Branch, the Company completed the registration of the first grant of the Company's 2021 Restricted Share Incentive Scheme at the CSDC Shanghai Branch on 23 February 2022.

For details, please refer to the Announcement on Results of the First Grant of the 2021 Restricted Share Incentive Scheme of China Railway, which was disclosed on 25 February 2022.

(2) Incentives which were undisclosed in announcement or might have had subsequent progress
Not applicable.

Performance Status of Undertakings

(1) Undertakings made by undertaking parties, including the ultimate controller, shareholders, related parties, acquirers of the Company and the Company given or subsisting in the reporting period or continuing during 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 performed	If not duly performed, describe the specific reasons	If not duly performed, 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 business opportunity, assets or interests will first be offered to China Railway or its subsidiaries.	None	No	Yes		
Undertakings related to refinancing	Others	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	l	l

Note:

- 1. For details of the relevant undertakings made by the Company and CREC during the material asset restructuring of China Railway Erju Co., Ltd. (renamed as CRHIC in March 2017, stock code: 600528), a subsidiary of the Company, please refer to the Report on the Material Asset Swap and Share Issuance for Asset Acquisition, Fundraising and Related Party Transaction of China Railway Erju Co., Ltd. (Revision) published 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.
- 2. The Company issued the Letter on Modifying the Undertakings on Certain Contingencies to CRHIC on 25 November 2020, pursuant to which, the performance term of the undertaking in relation to apply for ownership certificates for defective real estate was changed to long term, which was considered and approved by the first extraordinary general meeting for 2020 of CRHIC on 25 December 2020. For details of the relevant undertakings, please refer to the Announcement of CRHIC on Modifying the Performance Term of Undertakings on Certain Contingencies by the Controlling Shareholder of CRHIC published at the website of Shanghai Stock Exchange (http://www.sse.com.cn) on 8 December 2020. The Company is currently duly complying with all the undertakings.
- 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.
- 4. When acquiring the control of CRPCC, the Company and CREC respectively issued the Undertakings on Avoiding Horizontal Competition with Beijing Hengtong Innovation Luxwood Technology Co Ltd., the Undertakings on Regulating the Related Party Transactions with Beijing Hengtong Innovation Luxwood Technology Co Ltd., and the Undertakings on Ensuring the Independence of Beijing Hengtong Innovation Luxwood Technology Co Ltd. The Company and CREC are currently duly complying with all the undertakings.
- 5. When spinning off and listing CRHEEC on the STAR Market, the Company and CREC respectively issued the Undertakings on Avoiding Horizontal Competition, the Undertakings on Reducing and Regulating the Related Party Transactions, and the Undertakings on Covering the Diluted Immediate Return. For details of the relevant undertakings, please refer to the Plan for China Railway Group Limited on the Spin-off of Its Subsidiary China Railway Highspeed Electrification Equipment Corporation Limited to Go Listing on the STAR Market (Revised) published 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 Non-operating Appropriation of Funds by the Controlling Shareholder and Other Related Parties during the Reporting Period

Not applicable

6 Illegal Guarantee

Not applicable

7 **Auditors**

(1) Appointment and removal of auditors

Resolutions including the Resolution on the Appointment of Auditors for 2022 and Resolution on the Appointment of Internal Control Auditors for 2022 were considered and passed at the fourteenth meeting of the fifth session of the Board of Directors held on 29 and 30 March 2022. For details of the appointment of auditors, please see the Announcement of China Railway Group Limited on Reappointment of Auditors published on the website of the Shanghai Stock Exchange on 31 March 2022. These resolutions were then considered and passed 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 auditor 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.

(2) Explanation of the company on the "Modified Audit Report" from auditors Not applicable

Changes in and handling of the matters related to the qualified auditing opinions in the annual report for the previous year

Not applicable

9 Matters Relating to Insolvency or Restructuring

Not applicable

10 Material Litigation and Arbitration

The Company had no material litigation or arbitration during the reporting period.

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

Not applicable

12 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 requirements 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.

13 Significant Related Party Transactions

- (1) Related party transactions in ordinary course of business
 - (i) Matters which were disclosed in an announcement without subsequent progress or changes
 Not applicable
 - (ii) Matters which were disclosed in an announcement with subsequent progress or changes

Unit: Thousand Currency: RMB

Related Party	Related relationship	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 subsidiaries of the parent company	Leasing service	Lease of office premises, etc.	Contract price	3,278	3,278	Less than 1%
China Railway State Assets Management Co., Ltd.	Wholly-owned subsidiaries of the parent company	Receipt of labor services	Receipt of comprehensive services	Contract price	9,671	9,671	Less than 1%
Total					12,949	12,949	

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 12th meeting of the fifth 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 minimise exemption under the Hong Kong Listing Rules.

(iii) Matters undisclosed in announcement

Not applicable

(2) Related party transactions in relation to acquisition and disposal of assets or equity interests

- Matters which were disclosed in an announcement without subsequent progress or changes Not applicable
- (ii) Matters which were disclosed in an announcement with subsequent progress or changes Not applicable
- (iii) Matters undisclosed in announcement

Not applicable

(iv) Discloseable performance for the reporting period of related party transactions with agreed-upon performance targets

Not applicable

(3) Significant related party transactions in relation to joint external investment

- Matters which were disclosed in an announcement without subsequent progress or changes Not applicable
- (ii) Matters which were disclosed in an announcement with subsequent progress or changes Not applicable
- (iii) Matters undisclosed in announcement Not applicable

(4) Amounts due from/to related parties

- Matters which were disclosed in an announcement without subsequent progress or changes
- (ii) Matters which were disclosed in an announcement with subsequent progress or changes Not applicable
- (iii) Matters undisclosed in announcement

Not applicable

(5) Financial business between the Company and the finance company with a related relationship, and between the Company's controlling finance company and related parties

China Railway Finance Co., Ltd. provides financial services to the Company's controlling shareholder, CREC and its subsidiaries, which enables the Company to use part of its financing funds to improve the efficiency of capital utilization and increase the benefits through the net interest and service fees earned by China Railway Finance Co., Ltd.. The Proposal on the Related Party 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.

(i) Deposit business

Unit: Thousand Currency: RMB

						nt for the t period	
Related Party	Related relationship	Maximum daily deposit limit	Range of deposit interest rate	Opening balance	Total deposits for the current period	Total withdrawals for the current period	Closing balance
CREC China Railway State	Parent company		1.265%	127,147	1,690,462	1,360,264	457,345
Assets Management Co., Ltd. Party school of China	Wholly-owned subsidiaries of the parent company	20,000,000	1.265%	591,196	439,047	980,293	49,950
Railway Engineering Group Co., Ltd.	Wholly-owned subsidiaries of the parent company		1.265%	29,972	15,132	27,543	17,561
Total				748,315	2,144,641	2,368,100	524,856

(ii) Loan business

Unit: Thousand Currency: RMB

					Amount current		
Related Party	Related relationship	Line of credit	Range of loan interest rate	Opening balance	Total loans for the current period	Closing balance	
CREC	Parent company	5,000,000	3.3%-3.45%	980,000	1,100,000	750,000	1,330,000
Total				980,000	1,100,000	750,000	1,330,000

(iii) Credit granting business or other financial business

Unit: Thousand Currency: RMB

Related Party	Related relationship	Business type	Total	Amount incurred
CREC	Parent company	Comprehensive credit granting	5,000,000	1,330,000
Total			5,000,000	1,330,000

(iv) Others

Unit: Thousand Currency: RMB

			Amount of
		Amount for	the corresponding
Item	Related Party	the current period	period last year
Interest income	CREC	22,785	34,515
Interest expenses	CREC	3,581	6,384
Interest expenses	China Railway State Assets Management Co., Ltd.	822	1,097
Interest expenses	Party school of China Railway Engineering		
	Group Co., Ltd.	98	2

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.

(6) Other significant related party transactions

Unit: Thousand Currency: RMB

Guarantor	Secured party	Guarantee amount	Guarantee start date	Guarantee expiration date	Whether the guarantee has been fulfilled
CREC	China Railway	3,500,000	October 2010	April 2026	No

Note: These are unconditional and irrevocable joint and several liability guarantees provided by CREC for the entire amount of the 15-year 2010 Corporate Bonds (Tranche 2) issued 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 30 June 2022, the guarantee liability undertaken by CREC as the guarantor of the 15-year 2010 Corporate Bonds (Tranche 2) has not expired. As at 30 June 2022, the remaining payable amount of the above-mentioned bonds was RMB3,603,363 thousand (31 December 2021: RMB3,524,444 thousand). For details, please refer to the financial statements.

14 Material Contracts and Their Performance

(1) Trusteeship, contracting and leasing

Not applicable

(2) Material guarantees performed and not performed during the reporting period

Unit: 0'000 Currency: RMB

					Guarantees provide	ed by the Company (excluding the guarante	ees to subsidiaries)							
Guarantor	Relationship between guarantor and the listed company	Secured party	Guarantee amount	Commencement date of guarantee (date of the agreement)	Commencement date of guarantee	Expiry date of guarantee	Type of guarantee	Main debt condition	Collateral (if any)	Guarantee fully performed	Guarantee overdue	Overdue amount	Counter guarantee available	Guarantee provided to related parties	Related relationship
China Railway	The Company	Linha Railway Co., Ltd.	41,789.00	30 June 2008	30 June 2008	20 June 2027	Joint and several	Normal performance	None	No	No	1	Yes	No	1
China Railway No.4 Engineering Group Co., Ltd.	Wholly-owned subsidiary	Xuzhou Yingbin Expressway Construction Co., Ltd.	119,000.00	22 October 2018	30 October 2018	29 October 2028	Joint and several liability guarantee	Normal performance	Equity pledge	No	No	1	None	No	1
China Railway No.5 Engineering Group Co., Ltd.	Wholly-owned subsidiary	Qinghai Minmetals China Railway Highway Construction Management Co., Ltd.	14,850.00	14 January 2020	14 January 2020	30 December 2045	Joint and several liability guarantee	Normal performance	Equity pledge	No	No		None	No	1
China Railway No.5 Engineering Group Co., Ltd.	Wholly-owned subsidiary	Jiangxi Chengke Yunchuang Real Estate Co., Ltd.	3,900.00	22 September 2021	22 September 2021	21 September 2029	Joint and several liability guarantee	Normal performance	None	No	No	-	None	No	1
China Railway No.10 Engineering Group Co., Ltd.	Wholly-owned subsidiary	Chongqing CREC Renzhi Pension Industry Co., Ltd.	50,000.00	12 January 2017	12 January 2017	30 November 2024	Joint and several liability guarantee	Normal performance	None	No	No	-	None	No	1
China Railway Major Bridge Engineering Group Co., Ltd.	Wholly-owned subsidiary	Wuhan Yangsigang Bridge Co., Ltd.	156,604.33	24 December 2015	24 December 2015	27 June 2023	Joint and several liability guarantee	Normal performance	None	No	No	1	None	No	1

	*1.0 II				Guarantees provid	ed by the Company (excluding the guarant	ees to subsidiaries)						
Guarantor	Relationship between guarantor and the listed company	Secured party	Guarantee amount	Commencement date of guarantee (date of the agreement)	Commencement date of guarantee	Expiry date of guarantee	Type of guarantee	Main debt condition	Collateral (if any)	Guarantee fully performed	Guarantee overdue	Overdue amount	Counter guarantee available	Guarantee provided to related parties	Related relationship
China Railway Major Bridge Engineering Group Co., Ltd.	Wholly-owned subsidiary	Shantou Niutianyang Expressway Investment Development Co., Ltd.	6,325.93	14 November 2019	14 November 2019	23 August 2039	Joint and several liability guarantee	Normal performance	Equity pledge	No	No	1	None	No	1
China Railway Tunnel Group Co., Ltd.	Wholly-owned subsidiary	China Shanghai (Group) Corporation for Foreign Economic & Technological	5,691.75	29 December 2012	29 December 2012	30 June 2023	Joint and several liability guarantee	Normal performance	None	No	No	1	None	No	/
China Railway Shanghai Engineering Group Co. Ltd.	Wholly-owned subsidiary	Cooperation Fangchenggang China Railway Diluyuan Investment Development Co., Ltd.	500.00	8 May 2019	8 May 2019	31 December 2030	Joint and several liability guarantee	Normal performance	Equity pledge	No	No	1	None	No	1
China Railway International	Wholly-owned subsidiary	MontagProp Proprietary	6,195.00	3 July 2015	3 July 2015	3 November 2023	Joint and several liability guarantee	Normal performance	None	No	No	1	None	No	1
Group Co., Ltd. China Southern Investment Group Co., Ltd	Wholly-owned subsidiary	Limited Shantou Niutianyang Expressway Investment Development	301,934.26	30 August 2019	30 August 2019	23 August 2039	Joint and several liability guarantee	Normal performance	Equity pledge	No	No	1	None	No	I
Total balance of guarantees provided Total amount of guarantees	erantees as at the e ed by the Compa erantees provided t		riod (A) (exclud ; ne reporting per												-111,158.05 706,790.27 439,994.72 ,547,203.22
Total amount of g Total amount of gua	uarantees provido arantees (A+B)		including the	guarantees for subsid	diaries)										,253,993.49
Amount of debt gua Total amount of gua Total amount of the	arantees directly or arantees exceeding above three types	reholders, de facto cor indirectly provided to 50% of net assets (E) of guarantees (C+D+E several liability in conr	the parties with	the gearing ratio exce	eding 70% (D)									13	0.00 ,554,991.35 0.00 ,554,991.35 ot applicable
Explanations on gua		Section making in coll		and good office			1. The total amount RMB99,794.6370		ded the shortfall	payments gi	en to the se	nior tranches	in respect of		
							2. As at 30 June 20 RMB48,666.6994		guarantee of C	hina Railway	Group Limite	d (consolidate	d) in relation	to real estate	mortgage was

(3) Other material contracts

(i) Infrastructure construction business

No.	Signatory	Name of Contract	Date of signature	Contract sum (RMB'0,000)	Construction period
Railway 1	business China Railway Shanghai, China Railway No. 1 Engineering, China Railway No. 4 Engineering	Construction for bid 2, bid 3 and bid 4 of Huaibei - Suzhou - Bengbu Intercity Railway station in Huaibei - Suzhou - Bengbu Intercity Railway Project	March 2022	746,938	1,461 days
2	China Railway Construction, China Railway No. 8 Engineering	Bids CQDZZF-2 and CQDZZF-3 of New Chongqing East Railway station building and supporting comprehensive transportation hub project for Chongqing – Guizhou Railway	May 2022	636,634	1,096 calendar days
3	China Railway Beijing, China Railway No. 10 Engineering	Unit cost contracting for construction of bids BYZQ- 06 and BYZQ-09 of new station and building construction for Linhe to the provincial boundary section of Baotou - Yinchuan high-speed railway	March 2022	530,663	1,401 calendar days
Highwa 1	ys business China Railway No. 4 Engineering, China Railway Tunnel	Franchising project tenders for social investors for Laoying - Banqiao section rerouting project of Yunnan Dabao Expressway, Changning to Lianzi Bridge Expressway, and Midu to Changning Expressway (Baoshan section)	June 2022	735,000	Implemented by 3 sections, 3-5 years for each section
2	China Railway No. 7 Engineering	General contracting for construction of Da Wulan - Leng Kou (Qintang Boundary) Highway	June 2022	281,090	24 months
3	China Railway No. 1 Engineering	General contracting for design and construction of Qiantun bend to old Cheyenne Line construction project for Tonghua to Wuhan Highway of National Road G230	May 2022	213,877	21 months
Municip 1	al works and others China Railway No. 7 Engineering	Xinyang Times Square - Beihu Spring Project	March 2022	720,000	By three phases, 720 days for each phase
2	China Railway No. 1 Engineering	Warehouses No. 1 and 2 of Qingdao cold chain, Qihe International Cold Chain Logistics Park construction project	March 2022	527,700	913 days
3	China Railway Beijing	Contracting of development, design, installation and construction of 800WM household PV projects of Zhengzhou Yingtai Energy Development	May 2022	315,200	7 months

(ii) Survey, design and consulting services business

No.	Signatory	Name of Contract	Date of signature	Contract sum (RMB'0,000)	Construction period
1	China Railway Eryuan Engineering	General contracting for survey and design of Urban (suburban) railway Chengdu to Deyang line project	March 2022	48,590	Till the project is completed and accepted
2	China Railway Eryuan Engineering	General contracting for survey and design of Urban (suburban) railway Chengdu to Meishan line project	March 2022 t	36,739	Till the project is completed and accepted
3	China Railway Consulting	Survey and design of Zhengzhou hub Longhaiwai routing and Xiaolizhuang station project	May 2022	25,139	Till the project is completed and accepted

(iii) Engineering equipment and component manufacturing business

No.	Signatory	Name of Contract	Date of signature	Contract sum (RMB'0,000)
Tunnel Co	onstruction Equipment			
1	CRHIC	TBM Purchase and Sales Contract for Pumped Storage Power Station	February 2022	7,389
2	CRHIC	Purchase and sales of shield machine equipment	April 2022	10,260
Turnout F	Products			
1	CRHIC CRHIC	Railway turnout distribution contract Railway high-speed turnout purchase and supply	May 2022 June 2022	4,893 21,916
Manufact	uring and installation o	f steel structures		
1	CŘHIC	Manufacturing and installation of steel anchor beam, steel truss beam and auxiliary structure for section HHDQ-3 for the construction of Jinan Yellow River Highway Bridge Extension Project (approach bridge and main bridge section) of G104 JingLan Line	May 2022	50,022
2	CRHIC	Yellow River super high speed bridge steel structure project	June 2022	119,213

(iv) Property development business

(1) Acquisition of land

No.	Project name	Location	Project type	Planned area (sq.m.)
1	Plot D, Shilihetan Phase II, Huaxi District, Guiyang	Guiyang	Residential	294,700
2	Plot 8, Unit Portfolio 105, Lingang New Area, Shanghai	Shanghai	Residential	199,498
3	Plots No. DG1503020 and DG1503021, Nansha District, Guangzhou	Guangzhou	Residential	181,669

(2) Properties held for development

Unit: 10,000 sqm

Name of building or project	Specific address	Current land use	Site area	Floor area	State of completion	Expected completion date	Interests of the Company and its subsidiaries
Sichuan Heilongtan International Ecotourism Resort Project	Renshou County, Meishan, Sichuan	Comprehensive	2,266	1,418	Under construction	2027	100%
Guiyang China Railway Yueshan Lake	Guanshan Lake District, Guiyang, Guizhou	Commercial, residential	236	266	Under construction	2024	80%
Qingdao West Coast Project	West Coast Central Vitality Zone, Qingdao	Comprehensive	86.39	148.3	Under construction	2029	100%
Taiyuan China Railway Nuode Mall	Chaoyang Street, Yingze District, Taiyuan	Commercial, residential	27.66	125	Under construction	2024	100%
Guiyang Qingzhen Project	Xiangchou Residential Quarters, Vocational Education Area, Qingzhen, Guiyang City, Guizhou	Commercial, residential	45.47	104.8	Under construction	2027	90%

(3) Properties held for investment

			Holding	Interests of the Company and its
Name	Location	Use	Tenure	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%
Chengdu Nuode No. 1	Intersection of Guangxi Road and Huanhu Road, Shuangliu District, Chengdu City, Sichuan Province	Commercial	January 2065	100%
Guangzhou Nuode Center	No. 477 East Hanxi Avenue, Nancun Town, Panyu District, Guangzhou City, Guangdong	Commercial	May 2053	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%
Plot No.AT090904, starting area of International Financial City, Tianhe District	Plot No.AT090904, starting area of International Financial City, Huangpu Avenue, Tianhe District, Guangzhou City, Guangdong	Commercial	December 2068	100%
Reeda Plaza	No. 46 South Shengli Street, 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%
Victoria Nuode Center	Street 45B, Kinondoni District, Dar es Salaam, Tanzania	Commercial	June 2114	100%

(v) 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	Signing date	Construction period	Concession period
1	Investment Agreement for PPP Project of Longsheng- Dongzhong Port Highway (Yizhou to Shanglin Section)		166.56	100% held by China Railway and its member enterprises	January 2022	Construction period: 3 years	30 years
2	Investment Agreement for PPP Project of CenXi (Guangdong- Guangxi Boundary) to Daxin Highway (Nanning to Daxin section)	Transportation Department of Guangxi Zhuang Autonomous Region, China Railway Communications Investment Group Co., Ltd. and other member enterprises of China Railway	144.56	100% held by member enterprises of China Railway		Construction period: 3 years	30 years
3	Franchise Agreement for Chongqing – Chishui – Xuyong Highway (Chongqing section)	China Railway Group Limited and other member enterprises of China Railway, Chongqing Transportation Bureau, Sichuan Road & Bridge (Group) Corporation Ltd., China 19th Metallurgical Corporation, Chongqing Zhonghuan Construction Co., Ltd., Chongqing Tongli Expressway Maintenance Engineering Co., Ltd., Chongqing Shouxun Technology Co., Ltd.	108.90	43.1% held by member enterprises of China Railway 45.92% by Chongqing Expressway, 10.98% by other investor	<i>l</i> ,	Construction period: 4 years	29.5 years

(vi) Investment projects (BOT and PPP projects) that were operating during the reporting period

No.	Name of Contract	Signatory	Contract sum (RMB 100 million)	Signing date	Time of entering the operation period	Operation period
1	Yinchuan tap water equity transfer project (merged with the west line water supply project)	China Railway No. 1 Engineering and other parties	73.8	August 2010	May 2011	30 years
2	PPP project of Phase I of Hohhot Metro Line 1	China Railway and other parties	146.79	September 2016	December 2019	25 years
3	Government and social capital cooperation project of the Xundian-Zhanyi Expressway (Kunming section)	China Railway and other parties	61.1	August 2018	January 2020	30 years
4	PPP project of the Dongchuan-Gele section of the S25 Kunming-Qiaojia Expressway	China Railway and other parties	56.9	April 2017	January 2020	30 years
5	Section 2 of the PPP project of Shijiazhuang Hutuo River ecological restoration (Zhonghua Street to east Gaocheng city)	China Railway and other parties	23.9	February 2019	June 2020	13 years
6	Phase I (section B) of Taiyuan Metro Line 2	China Railway Electrification Engineering Group Co., Ltd. and other parties	60.9	September 2019	December 2020	25 years
7	PPP project of phase I of Xi'an Subway Lintong Line (Line 9)	China Railway and other parties	138.9	September 2017	January 2021	26 years
8	PPP project of Weng'an to Kaiyang section of Jiangkou to Duge Highway, Guizhou	China Railway and other parties	78.1	June 2018	January 2021	30 years
9	PPP project of phase I of Chengdu Metro Line 9	China Railway and other parties	193.9	June 2018	January 2021	22 years
10	PPP project of Zunyi to Yuqing Highway, Guizhou	China Railway and other parties	147.2	September 2017	July 2021	30 years

(vii) Strategic framework agreements signed during the reporting period

No.	Signing date	Agreement name	Main contents of the Agreement
1	March 2022	Strategic Cooperation Agreement between the People's Government of Shandong Province and China Railway Group Limited	1.To establish strategic partnership 2.To cooperate in such key areas as high-speed railways, municipal railways, urban rail transit, ordinary speed railways, highways, airports, ecological governance, water conservancy and hydropower, water supplies and transport, urban construction, new infrastructure and new energy 3.To support China Railway to establish direct subsidiaries in Shandong
2	March 2022	Strategic Cooperation Agreement between Guanghua School of Management of Peking University and China Railway Group Limited	1.To support the development of China Railway 2.To support Guanghua School of Management of Peking University to promote the policy transformation and economic practice of theoretical achievements 3.To carry out scientific cooperation and achievement transformation 4.To carry out talent training and integration of production and education
3	May 2022	Strategic Cooperation Agreement between the People's Government of Tangshan City and China Railway Group Limited	1.To establish long-term strategic partnership 2.To cooperate in such areas as expressway, municipal engineering, rail transit, intercity railway, local railway, water conservancy, environmental protection, urban renewal, comprehensive development of key areas, and new infrastructure
4	April 2022	Strategic Cooperation Agreement between CITIC Group and China Railway Group Limited	1.Cooperation in comprehensive financial field 2.Cooperation in infrastructure field 3.Cooperation in equipment and material manufacturing field 4.Cooperation in ecological and environmental protection field 5.Cooperation in knowledge services, red education, information communication and document management outsourcing fields
5	June 2022	Strategic Cooperation Agreement between China United Network Communications Corporation Limited and China Railway Group Limited	1.IT service and digital transformation field2.Infrastructure business cooperation field3.New infrastructure construction field

No.	Signing date	Agreement name	Main contents of the Agreement
6	April 2022	Strategic Cooperation Agreement between China Academy of Building Research and China Railway Group Limited	1.To jointly serve the key development strategies of the state 2.To jointly lead the industry technology development 3.To jointly enhance the in-depth culture exchange 4.Key cooperation projects implemented in priority (1) Internationalization of standards (2) Greening (3) BIM field (4) Intelligent manufacturing and construction (5) Achievement transformation and promotion (6) Urban renewal
7	March 2022	Strategic Cooperation Agreement between China National Pharmaceutical Group Corporation and China Railway Group Limited	1. Health and retirement cooperation 2. Investment, construction and operation management of medical institutions cooperation 3. Pharmaceutical manufacturing and industrial park development cooperation 4. International business development cooperation 5. Duty free business development cooperation 6. Other innovative businesses cooperation 7. Staff welfare cooperation
8	April 2022	Strategic Cooperation Agreement between People's Insurance Company (Group) of China Limited and China Railway Group Limited	1.Resources sharing2.Construction business cooperation3.Insurance and annuity business cooperation4.Investment and financing cooperation
9	June 2022	Strategic Cooperation Agreement between State Power Investment Corporation Limited and China Railway Group Limited	1.To cooperate in market development, green energy and scientific research and innovation fields2.To promote the cooperation in equipment manufacturing, highway and multi-scene, water conservancy and environmental protection and joint market development fields

15 Compliance with Corporate Governance Code

During the six months ended 30 June 2022, the Company had complied with all code provisions set out in Part II, Appendix 14 to the Hong Kong Listing Rules.

16 Review of Interim Financial Report

The 2022 interim financial statements for the six months ended 30 June 2022 of the Company prepared in accordance with CAS and the 2022 interim financial information prepared in accordance with IAS 34 (collectively referred as "2022 Interim Financial Report") have not been audited. The 2022 Interim Financial Report has been reviewed by the Board of Directors and the Audit and Risk Management Committee under the Board of Directors of the Company.

17 Event after the Reporting Period

On 6 July 2022, China Railway Xunjie Co., Limited, a subsidiary of the Company, has issued the corporate bond in a principal amount of USD0.5 billion with the maturity date of 6 July 2027. The interest rate is 4% per annum, payable semi-annually.

On 2 August 2022, the Company has issued the first tranche of the medium-term notes in 2022 in a principal amount of RMB3 billion, with a maturity date of 3 August 2025. The interest rate is 2.58% per annum, payable annually.

Environmental and Social Responsibilities

- Description of environmental protection efforts of the highly polluting companies and their (1) principal subsidiaries as announced by the environmental protection authorities Not applicable
- Description of environmental protection efforts of companies other than highly polluting (2)
 - (i) Administrative penalties due to environmental issues

In the first half of the year, due to the failure to strictly implement measures to control the dust, sewage discharge and construction environment noise generated in certain construction projects during construction, the Company's subsidiaries were subject to administrative penalties by local environmental protection regulatory authorities. The penalty totaled approximately RMB1.1617 million and involved 26 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 the ecological environment around the projects.

- (ii) Disclosure of other environmental information with reference to highly polluting companies Not applicable
- (iii) Reasons for not disclosing other environmental information Not applicable
- Description of follow-up progress or changes in the disclosure of environmental information (3) during the reporting period

Not applicable

(4) Information on ecological protection, pollution prevention and fulfillment of environmental responsibilities

The Company strictly abode by the Environmental Protection Law of the People's Republic of China, the Law on Energy Conservation of the People's Republic of China, the Regulations on the Administration of Construction Project Environmental Protection and other laws and regulations. The Company thoroughly implemented thoughts on ecological civilization, established the concept of green development, and implemented the polices of the Party Central Committee and the State Council on the construction of ecological civilization and environmental protection. Guided by "Ecological Priority and Green Development", the Company continued to improve the environmental management system and clarified the environmental protection management mode. With regards to environmental management, the Company upheld the principle of "Territorial Management", "Prevention First, Combined with Prevention and Control" and "Who Pollutes, Who Controls". As for the management mode, the Company implemented unified leadership while subsidiaries and branches at each level are responsible, to ensure the orderly and controllable environmental protection. In terms of assessment, the Company earnestly implements the assessment and reward and punishment system for energy resource conservation and ecological environmental protection, strengthens assessment targets, and takes accountability seriously for ecological and environmental protection issues. Based on systematic environmental management, the Company obtained ISO14001 environmental management system certification issued by China Certification Center Co., Ltd.

Continuing to strengthen the identification and evaluation of the environmental factors of projects under construction and workplaces during the reporting period, the Company has formulated and implemented the plan for project environment management, and established a system for monitoring ecological and environmental protection. The Company also strengthened the control over the risk sources and emissions of ecological and environmental pollution during operation, and made consistent efforts to strengthen the supervision and inspection. To meet the requirements of "scientific planning, technical support, ecological protection, safety and reliability", the Company took the opportunity of national key projects including the Sichuan-Tibet Railway, to ensure ecological and environmental protection as planned and designed in these projects with a high starting point, high standard and high quality.

The main types of energy consumed by the Company include electricity, gasoline, diesel, natural gas, etc. during the construction and office processes. The Company has made solid progress in energy conservation and efficiency improvement. In accordance with the requirements of the Measures for Supervision and Management on Energy Conservation and Emission Reduction, the "14th Five-Year Plan" for Energy Conservation and Emission Reduction and the Quantitative Indicators of Energy Conservation and Ecological Environmental Protection in 2022, the Company has determined that the quantitative assessment index of energy conservation in 2022 is that the comprehensive energy consumption per RMB10,000 of operating revenue (comparable price) shall decrease by 3.2% on the basis of 2021, and the carbon dioxide per RMB10,000 of operating revenue (comparable price) shall decrease by 3.89% on the basis of 2021. In accordance with the latest requirements of SASAC on energy conservation and ecological and environmental protection for central enterprises, the Company has also made comprehensive arrangements and implemented relevant work from the aspects of adjusting the management and organizational structure, upgrading the monitoring system, issuing indicators of rewards and punishments for assessment, and carrying out technological research and development.

Key Performance Indicators for Energy and Resource Consumption

Type of energy/resource	Indicator	First half of 2022	First half of 2021	Increase/ Decrease as compared to the same period (%)
Direct energy consumption	Gasoline (10,000 tons)	23.435	22.936	2.18
	Diesel (10,000 tons)	79.098	78.052	1.34
	Natural gas (10,000 cubic meters)	1,550	1,487	4.24
Indirect energy consumption	Electricity (10,000 kWh)	515,550	483,430	6.64
Integrated energy consumption	Integrated energy consumption (10,000 tons of standard coal)	215.16	211.4	1.78
	Integrated energy consumption (ton of standard coal/RMB10,000)	0.0402	0.043	-6.51
	Integrated energy consumption (10,000 kWh)	515,550	483,430	6.64
	Integrated energy consumption (kWh/ income of RMB10,000)	96.27	100.5	-4.21
Water	Total new water consumption (10,000 tons)	13,111.12	12,427.6	5.50

Note: In the first half of 2022, the Company's operating revenue increased, and energy consumption increased accordingly, but the growth rate is lower than that of operating revenue.

Measures taken to reduce carbon emissions during the reporting period and their effects (5)

Climate change is a major global challenge for mankind today. China has put forward the targets of peak carbon dioxide emissions and carbon neutral to respond to the climate change. Since the fourth quarter of 2020, the Central Economic Working Conference, the 5th plenary session of 19th CPC Central Committee and other important meetings have emphasized the carbon neutral task. To implement the national policies on energy conservation and emission reduction, the Company has thoroughly implemented the concept of green development, promoted green planning and design and introduced a full life-cycle green design model. The efforts aim to control energy consumption from the source and integrate the concept of green, low-carbon and ecological design into the entire process of project planning and design. The Company attaches great importance to energy conservation and ecological and environmental protection system construction. First, the Company has improved the energy conservation and ecological and environmental protection system. Since 2022, the Company carried out special improvement work of safety, quality and environmental protection, and put forward new requirements for the improvement of the management system of energy conservation and environmental protection. We plan to revise and improve the current management methods for energy conservation and environmental protection, and promote the overall improvement of the management system and management work of energy conservation and environmental protection. Second, the Company will ensure the effective operation of the statistical monitoring system for energy conservation and ecological and environmental protection. The Company attaches great importance to energy conservation and ecological and environmental protection system construction. We have developed the energy conservation and ecological environment protection system of China Railway based on the new energy conservation and emission reduction system standards for central enterprises issued by the SACAC. At present, online filling has become the norm. The Company will pay close attention to the subsequent requirements of the SACAC for energy conservation and environmental protection of central enterprises during the 14th Five-Year Plan period, consolidate and improve the statistical monitoring system, and ensure effective statistics of energy conservation and environmental protection data. Third, the Company has clarified the targets of energy conservation and ecological environment protection during the 14th Five-Year Plan period. Since 2022, the Company calculated energy conservation and environmental protection indicators according to the requirements of the SASAC, developed the recommended values of energy conservation and emission reduction indicators and reported to SASAC, clarified and released the targets of energy conservation and ecological environment protection during the 14th Five-Year Plan period according to the recommended values of the indicators. The Company will carry out strict assessment, reward and punishment, earnestly implement the energy conservation and environmental protection work for the 14th Five-Year plan, so as to ensure the achievement of the set targets. In the first half of 2022, nearly 80 paperless meetings were held at the headquarters of the Company, with a total attendance of about 2,500 people, 1,500 meeting documents filed, and about 830,000 sheets of paper saved.

Key Performance Indicators for Emissions and Waste

Indicator	First half of 2022	First half of 2021	Increase/ Decrease as compared to the same period (%)
Total carbon dioxide emissions (10,000 tons)	763.7	732.3	4.29
CO ₂ emission intensity (tons/RMB10,000)	0.1426	0.0675	111.26
NOx emissions (tons)	0.2	0.2	0
Smoke (powder) dust emissions (tons)	3	3	0
SO ₂ (tons)	0	0	0
Total hazardous wastes (tons)	255	260	-1.92
Discharge of hazardous waste per RMB10,000 (kg/RMB10,000)	0.0045	0.005	-10
Total non-hazardous waste (10,000 tons)	235	240	-2.08
Discharge of non-hazardous waste per RMB10,000 (kg/RMB10,000)	44	49.09	-10.37

Note: The Company attaches great importance to the data statistics of "peak carbon dioxide emission and carbon neutrality" In the first half of 2022, the Company investigated the problems of carbon emission data, comprehensively upgraded the statistical monitoring system, and timely corrected the existing data problems according to the requirements of the SASAC. The emissions of nitrogen oxides, sulfur dioxide, smoke (powder) dust and volatile organic compounds are calculated according to the pollutant discharge permit. The emissions were basically flat with the same period of last year. The Company's operating revenue increased, and energy consumption and total CO2 emissions increased accordingly, but the growth rate is lower than that of operating revenue. CRHIC, subsidiary of the Company, has completed the renovation of boilers and other industrial equipment in an orderly manner and purchased new equipment to collect the smoke dust in the manufacturing process and reduce the risk of air pollution.

(6) Details of consolidating the results of poverty alleviation and rural revitalization

Since 2022, guided by the meeting spirits of the CPC Central Committee, the State Council and the SASAC, China Railway has strictly implemented the decision deployments of consolidating poverty alleviation results and effectively linking poverty alleviation with rural revitalization and promoting the 14th Five-Year Plan for Development. Actively adapting to new situations, new tasks, and new changes, focusing on rural revitalization and development, and adhering to the principle of "ensuring effective implementation of all works", we made every effort to achieve more achievements in rural revitalization, in order to contribute the force of China Railway to the high-quality development of the target regions for support and assistance.

- (i) Enhancing policy learning and making overall planning and deployment. Guided by the spirits of the important instructions of General Secretary Xi Jinping, we organized the leadership team members, affiliated departments and units and the temporary cadres for targeted support and assistance to learn the latest policy documents, such as the Guidelines on the Key Work of Comprehensively Promoting Rural Revitalization in 2022, Implementation Plan for Rural Construction Action, Notice on Providing Targeted Support and Assistance in 2022, and earnestly unified our thinking and actions into the decisions and deployments of the CPC Central Committee. We took initiative to follow the new tasks and requirements of the CPC Central Committee, thoroughly researched the needs of the regions we helped, and accurately understood the responsibilities and key tasks of our work. We developed the Report on Targeted Assistance Work in 2021 and Assistance Work Arrangement in 2022 and the Plan for the Use of Funds for Targeted Assistance and Key Assistance Projects in 2022, in order to ensure that targeted assistance work for the year has rules to follow and is practical and efficient.
- (ii) Enhancing the management of temporary cadres and giving full play to their roles as bridges. In accordance with the spirit of the meeting of the CPC Central Committee on the adjustment and collaboration of the relationship between the central enterprises and the partners for targeted assistance to Tibet, in combination with the requirements of the Organization Department of the CPC Central Committee for the selection of cadres to assist Tibet, the Company selected two outstanding temporary cadres to Karuo District of Qamdo City, Tibet, which was newly added as a designated assistance target of the Company. They would serve as deputy district governor and deputy director of the local branch of NDRC respectively. They went to Karuo District in advance to get familiar with the work, and actively connected with the local government and Chinalco Group to prepare for the handover. Finally, on 29 June, a tripartite memorandum was signed for the partnership adjustment and handover of the targeted assistance to Tibet. The Company regularly inspected and examined the duty performance of the 6 designated temporary cadres selected to help the counties in 2021, grasping the progress of their work and difficulties in time, and supervising them to go to the grass-roots level and find out the situation. We constantly improved the multi-party communication mechanism, and continuously enhanced efforts to ensure that the role of talents in revitalizing rural areas is fully realized. In addition, facing the severe outbreak of COVID-19, the temporary cadres fought at the frontline of epidemic prevention and control with a high sense of responsibility and mission according to the local epidemic prevention and control rules. They resolutely blocked the spread of the epidemic in their "responsible fields", and made every effort to protect the happiness and well-being of the local people, fulfilling the mission of China Railway People.

(iii) Focusing on key tasks, earnestly promoting the rural revitalization work. We strictly implemented the requirements of "eliminating poverty without evading responsibilities, policies, assistance or supervision", giving priority to preventing the reoccurrence of poverty, and ensuring that everyone has access to food and clothing, secure housing, compulsory education and basic medical care. Focusing on the five revitalization measures, and ensuring the continuity of the measures, funds and forces of assistance, We carried out special actions to support industries with special features, improve the living environment in rural areas, and create employment opportunities, in order to achieve more tangible results in promoting rural revitalization across the board. First, we enhanced our efforts to support the development of industries in poverty-stricken areas. In Baode County, Shanxi Province, we invested RMB20 million to construct a 5MW photovoltaic power plant in Shenshan Village, in order to make full use of the local advantages of abundant solar resources to create sustainable profits. Second, we continued to carry out poverty alleviation through education. The construction progress of the dormitory building project of Baode County No. 11 Primary School assisted by the Company is under full control, and will be completed and put into use as soon as possible. We plan to invest RMB8.15 million in Karuo District, Qamdo City, for the reconstruction and expansion of the first phase of the primary school in Naitong Village, Yueba Township, in order to improve the local teaching conditions. Third, we deepened and expanded the efforts in poverty alleviation through consumption. In accordance with the principle of no reduction in poverty alleviation through consumption, we organized the trade unions of all affiliated units to prepare special funds and made every effort to realize poverty alleviation through consumption according to laws and regulations and the principle of thrift and practicality. We continued to expand the agricultural product sales channels of the target counties for assistance. In the first half of 2022, we bought agricultural products of RMB3.564 million and helped sell agricultural products of RMB213,000. Fourth, we continued to ensure the employment. On the basis of successfully building the "Good Driver" service brand of Baode, we worked with the local government to establish companies and build the "Good Property Manager" service brand of Baode. We provided special labor training for the property industry in the county, opening up a new way for the local people to improve skills and transfer jobs to get rich. We continued to carry out the training project of "Everyone has skills" in Rucheng County, Hunan, planning to train more than 300 persons in the year. Fifth, we worked hard to build beautiful villages and improve the living environment. We selected 8 villages in Rucheng County as pilot villages for the implementation of the special project of rural construction and improvement of living environment, including renovation of dilapidated houses, hardening of village (lane) roads, construction of sewage canals, renovation of dry toilets, and construction of people's activity squares, striving to create a number of rural revitalization model villages. Sixth, our assistance cases were highly recognized. The short video "Nest of Happiness" based on Baode County won the "nomination award" in the national rural revitalization case election activity of "Listening to the comments of villagers on well-off", and was reported in the media such as xuexi.cn and Xinhua Finance. The classic practice of "Baode Good Driver" has been incorporated into the classic cases of the China Foundation for Poverty Alleviation and designated as a typical case for promotion and publicity.

DEFINITION AND GLOSSARY OF TECHNICAL TERMS

1	ВОТ	"Build-Operate-Transfer" mode
2	Company, China Railway	China Railway Group Limited
3	CREC	China Railway Engineering Group Company Limited, formerly known as China Railway Engineering Corporation
4	CREG	China Railway Engineering Equipment Group Co., Ltd.
5	CRHEEC	China Railway High-Speed Electrification Equipment Corporation Limited (stock code: 688285.SH)
6	CRHIC	China Railway Hi-Tech Industry Co., Ltd. (stock code: 600528.SH)
7	CRPCC	China Railway Prefabricate Construction Co., Ltd. (stock code: 300374. SZ)
8	Group	the Company and its subsidiaries
9	New infrastructure and new urbanization initiatives and major projects	New infrastructure construction, new urbanization initiatives and major engineering construction projects including transportation construction and water conservancy construction
10	PPP	"Public-Private-Partnership" mode
11	Shield machine	a kind of special construction machinery for tunnel excavation. It is a full-section tunnel boring machine for soft soil or water-rich strata construction
12	TBM	Tunnel Boring Machine
13	Three Transformations	the transformation from "made in China" to "created in China", the transformation from speed-oriented to quality-oriented and the transformation from Chinese product to Chinese brand
14	Three-year Action of State-owned Enterprise Reform	the "1+N" policy system for the reform of state-owned enterprises and top-level design action $\ensuremath{\mathcal{C}}$
15	TOD	Transit-Oriented Development
16	Turnout	a component used for changing the route of a train where a single track splits into two tracks. Turnout is applied in railway tracks

DEFINITION AND GLOSSARY OF TECHNICAL TERMS

17 Work objectives for "Four Increases, Two Controls and Four Improvements"

"Four Increases" means a positive growth in newly signed contract value, operating revenue, total profit and net profit; "Two Controls" means controlling the asset-liability ratio and controlling the scale of "housing fund and enterprise annuity"; "Four Improvements" means an increase in the operating revenue margin, overall labour productivity, average project profitability, and investment in research and development

"123456" work strategy 18

Focusing on "one big task", emphasizing "two principles", adhering to "three bottom lines", realising "four strong capabilities and five excellent aspects", and coordinating "six keys"

COMPANY INFORMATION

Directors

Executive directors

CHEN Yun *(Chairman)* CHEN Wenjian WANG Shiqi

Non-executive director

WEN Limin

Independent non-executive directors

CHUNG Shui Ming Timpson ZHANG Cheng XIU Long

Supervisors

JIA Huiping *(Chairman)*YUAN Baoyin
LI Xiaosheng
WANG Xinhua
WAN Ming

Joint company secretaries

HE Wen TAM Chun Chung *CPA*, *FCCA*

Authorized representatives

WANG Shiqi TAM Chun Chung CPA, FCCA

Audit and risk management committee

CHUNG Shui Ming Timpson *(Chairman)*WEN Limin
ZHANG Cheng

Remuneration committee

XIU Long *(Chairman)* WEN Limin ZHANG Cheng

Strategy and investment committee

CHEN Yun *(Chairman)*CHEN Wenjian
CHUNG Shui Ming Timpson
ZHANG Cheng
XIU Long

Nomination committee

CHEN Yun (Chairman)
CHUNG Shui Ming Timpson
XIU Long

Safety, health and environmental protection committee

CHEN Wenjian (Chairman)
WANG Shiqi
WEN Limin
ZHANG Cheng
XIU Long

COMPANY INFORMATION

Registered office

918, Block 1

No. 128 South 4th Ring Road West

Fengtai District Beijing 100070

PRC

Principal place of business in Hong Kong

Unit 1201-1203 12/F, APEC Plaza 49 Hoi Yuen Road, Kwun Tong Kowloon, Hong Kong

Auditors

Domestic

PricewaterhouseCoopers Zhong Tian LLP 11/F, PricewaterhouseCoopers Center Link Square 2, 202 Hu Bin Road Huangpu District Shanghai, PRC

International

PricewaterhouseCoopers 22/F, Prince's Building Central, Hong Kong

Legal advisors

For PRC Law

Jia Yuan Law Firm F407, Ocean Plaza 158, Fuxing Men Nei Street Beijing 100031 PRC

For Hong Kong Law

Linklaters 11/F, Alexandra House Chater Road Hong Kong

Shares registrars

A Shares

China Securities Depository and Clearing Corporation Limited, Shanghai Branch No.188, South Yanggao Road Pudong New Area, Shanghai PRC

H Shares

Computershare Hong Kong Investor Services Limited 17M Floor, Hopewell Centre 183 Queen's Road East Wanchai, Hong Kong

Listing information

A Shares

Place of listing: Shanghai Stock Exchange Stock name: China Railway Stock code: 601390

H Shares

Place of listing: The Stock Exchange of Hong Kong

Limited

Stock name: China Railway

Stock code: 390

Principal bankers

The Export-Import Bank of China Industrial and Commercial Bank of China China Construction Bank Agricultural Bank of China Bank of China Bank of Communications China Minsheng Bank China Merchants Bank

Company website

http://www.crec.cn

China CITIC Bank

REPORT ON REVIEW OF INTERIM FINANCIAL INFORMATION

TO THE BOARD OF DIRECTORS OF CHINA RAILWAY GROUP LIMITED

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

Introduction

We have reviewed the interim financial information set out on pages 84 to 140, which comprises the interim condensed consolidated balance sheet of China Railway Group Limited (the "Company") and its subsidiaries (together, the "Group") as at 30 June 2022 and the related interim condensed consolidated statement of profit or loss, comprehensive income, changes in equity and cash flows for the six-month period then ended, and notes, comprising significant accounting policies and other explanatory information. The Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited require the preparation of a report on interim financial information to be in compliance with the relevant provisions thereof and International Accounting Standard 34 "Interim Financial Reporting". The directors of the Company are responsible for the preparation and presentation of this interim financial information in accordance with International Accounting Standard 34 "Interim Financial Reporting". Our responsibility is to express a conclusion on this interim financial information based on our review and to report our conclusion solely to you, as a body, in accordance with our agreed terms of engagement and for no other purpose. We do not assume responsibility towards or accept liability to any other person for the contents of this report.

Scope of Review

We conducted our review in accordance with International Standard on Review Engagements 2410, "Review of Interim Financial Information Performed by the Independent Auditor of the Entity". A review of interim financial information consists of making inquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures. A review is substantially less in scope than an audit conducted in accordance with International Standards on Auditing and consequently does not enable us to obtain assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an audit opinion.

Conclusion

Based on our review, nothing has come to our attention that causes us to believe that the interim financial information of the Group is not prepared, in all material respects, in accordance with International Accounting Standard 34 "Interim Financial Reporting".

PricewaterhouseCoopers

Certified Public Accountants

Hong Kong, 30 August 2022

INTERIM CONDENSED CONSOLIDATED STATEMENT OF PROFIT OR LOSS

		Unaud	dited
		Six month en	
	Note	2022	2021
		RMB million	RMB million
Revenue	6	560,587	498,227
Cost of sales and services	13	(514,037)	(456,460)
Gross profit		46,550	41,767
Other income	7	1,173	1,532
Other expenses	7	(8,980)	(7,344)
Net impairment losses on financial assets and contract assets	8	(1,413)	(1,382)
Other gains, net	9	735	6
Losses from derecognition of financial assets at amortised cost	10	(1,592)	(1,487)
Selling and marketing expenses	13	(2,706)	(2,371)
Administrative expenses	13	(12,512)	(12,516)
Operating profit		21,255	18,205
Finance income	11	3,276	2,236
Finance costs	11	(4,121)	(2,988)
Share of post-tax losses of joint ventures		(564)	(216)
Share of post-tax profits of associates		2,051	1,175
Profit before income tax		21,897	18,412
Income tax expense	12	(5,072)	(4,062)
Profit for the period		16,825	14,350
Profit attributable to:			
– Owners of the Company		15,126	13,095
Non-controlling interests		1,699	1,255
J J		,,,,,	,
		16,825	14,350
Earnings per share for profit attributable to owners of the Company (expressed in RMB per share)			
– Basic	15	0.551	0.454
– Diluted	15	0.551	0.454

The accompanying notes are an integral part of this condensed consolidated interim financial information.

INTERIM CONDENSED CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

		Unaudited Six month ended 30 June				
Note	2022	2021				
	RMB million	RMB million				
Profit for the period Other comprehensive (expenses)/income, net of income tax Items that will not be reclassified to profit or loss:	16,825	14,350				
Changes in the fair value of equity investments at fair value through other comprehensive income Income tax relating to changes in the fair value of	(27)	(8)				
equity investments at fair value through other comprehensive income	4	_				
	(23)	(8)				
Items that may be reclassified subsequently to profit or loss:						
Exchange differences on translating foreign operations Share of other comprehensive income of associates	35 368	17 (34)				
	403	(17)				
Other comprehensive income/(expenses) for the period,						
net of tax	380	(25)				
Total comprehensive income for the period	17,205	14,325				
Total comprehensive income for the period attributable to:						
Owners of the CompanyNon-controlling interests	15,471 1,734	13,096 1,229				
	17,205	14,325				

The accompanying notes are an integral part of this condensed consolidated interim financial information.

INTERIM CONDENSED CONSOLIDATED BALANCE SHEET

	Note	Unaudited 30 June 2022 RMB million	Audited 31 December 2021 RMB million
ASSETS			
Non-current assets			
Property, plant and equipment	16	108,200	77,368
Right-of-use assets		1,747	1,659
Lease prepayments		14,396	14,561
Deposits for investments		649	441
Investment properties		11,816	12,065
Intangible assets	17	128,623	110,496
Mining assets	2.4	3,380	3,479
Contract assets	21	178,114	161,377
Investments in joint ventures Investments in associates		50,543 47,035	49,831 46,181
Goodwill		47,033 1,771	1,568
Financial assets at fair value through other comprehensive		1,771	1,500
income	19	13,310	12,164
Other financial assets at amortised cost	20	19,988	22,960
Financial assets at fair value through profit or loss	23	15,656	12,294
Deferred tax assets		11,345	10,372
Other prepayments		387	332
Trade and other receivables	22	20,655	23,374
		627,615	560,522
Current assets			
Lease prepayments		241	269
Properties held for sale		50,293	48,745
Properties under development for sale	18	113,162	109,330
Inventories		65,969	45,371
Financial assets at fair value through other			
comprehensive income	19	629	526
Trade and other receivables	22	294,995	249,169
Contract assets	21	175,034	149,142
Current income tax recoverable		3,919	3,736
Other financial assets at amortised cost	20	11,263	8,553
Financial assets at fair value through profit or loss	23	6,873	7,304
Restricted cash		27,090	30,797
Cash and cash equivalents		155,483	148,116
		904,951	801,058
Total assets		1,532,566	1,361,580

INTERIM CONDENSED CONSOLIDATED BALANCE SHEET

	Note	Unaudited 30 June 2022	Audited 31 December 2021
		RMB million	RMB million
EQUITY			
Equity attributable to owners of the Company			
Share capital	24	24,742	24,571
Shares held for restricted share incentive scheme	25	(573)	- 204.027
Share premium and reserves	27	214,506	204,927
Perpetual notes	27	45,368	45,624
		204.042	275 122
Non-controlling interests		284,043 112,986	275,122 83,072
Non-controlling interests		112,900	03,072
Total equity		397,029	358,194
Total equity		397,029	330,194
LIABILITIES			
Non-current liabilities			
Trade and other payables	28	20,684	10,263
Borrowings Lease liabilities	29	252,915 1,058	198,503 972
Retirement and other supplemental benefit obligations		2,204	2,293
Provisions		767	761
Deferred government grants and income		1,147	1,087
Deferred tax liabilities		2,428	1,647
			·
		281,203	215,526
			,
Current liabilities			
Trade and other payables	28	578,592	522,411
Contract liabilities	21	134,127	144,095
Current income tax liabilities		6,928	7,100
Borrowings	29	133,981	113,424
Lease liabilities		303	360
Retirement and other supplemental benefit obligations	2.2	261	300
Financial liabilities at fair value through profit or loss	23	104	122
Provision		38	48
		854,334	787,860
Total liabilities		1,135,537	1,003,386
Total equity and liabilities		1,532,566	1,361,580

The accompanying notes are an integral part of this condensed consolidated interim financial information.

The condensed consolidated interim financial information on pages 84 to 140 was approved by the Board of Directors on 30 August 2022 and were signed on its behalf.

> **CHEN Yun** Director

CHEN Wenjian Director

INTERIM CONDENSED CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

			Unaudited										
					Attri	butable to ow	ners of the Co	ompany					
	Note	Share capital RMB million	Share premium RMB million	Shares held for restricted share incentive scheme (Note 25) RMB million	Capital reserve RMB million	Statutory reserve <i>(Note 26)</i> RMB million	translation reserve	Investment revaluation reserve	Retained earnings RMB million	Perpetual notes <i>(Note 27)</i> RMB million	Total RMB million	Non- controlling interests RMB million	Total RMB million
Balance at 1 January 2022		24,571	51,930	-	3,222	16,664	(935)	(88)	134,134	45,624	275,122	83,072	358,194
Profit for the period Other comprehensive (expenses)/		-	-	-	-	-	-	-	15,126	-	15,126	1,699	16,825
income		-					(10)	355			345	35	380
Total comprehensive (expenses)/ income for the period ended 30 June 2022		-		-	-	-	(10)	355	15,126	-	15,471	1,734	17,205
Total transactions with owners, recognised directly in equity Issuance of shares for restricted share													
incentive scheme Amount recorded in shareholders' equity arising from restricted	24	171	435	(606)	-	-	-	-	-	-	-	-	-
share incentive scheme Capital contributions from non- controlling shareholders of		-	-	33	65	-	-	-	-	-	98	-	98
subsidiaries Transaction with non-controlling interests resulting from acquisition of equity interests of certain		-	-	-	-	-	-	-	-	-	-	12,532	12,532
subsidiaries		-	_	_	_	_	_	_	_	_	_	(205)	(205)
Acquisition of subsidiaries		-	-		-	-	-	-	-	-	-	17,381	17,381
Disposal of subsidiaries		-	-	-	-	-		-	-	_	-	(216)	(216)
Dividends declared to shareholders	14	-	-	-	-	-	-	-	(4,849)	-	(4,849)	-	(4,849)
Dividends declared to non-controlling shareholders of subsidiaries		-	-		-	-	-	-	-	-	-	(699)	(699)
Dividends declared to perpetual notes holders	27								/4 EA2\	(255)	(4 700)	(642)	(2.442)
Transferred to reserves	2/	-	-	-	-	20	-	-	(1,543) (20)	(256)	(1,799)	(613)	(2,412)
Balance at 30 June 2022		24,742	52,365	(573)	3,287	16,684	(945)	267	142,848	45,368	284,043	112,986	397,029

The accompanying notes are an integral part of this condensed consolidated interim financial information.

INTERIM CONDENSED CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

							Unaudited					
					Attributable	e to owners of t	he Company					
	Note	Share capital	Share premium	Capital reserve	Statutory reserve (Note 26) RMB million	Foreign currency translation reserve	Investment revaluation reserve	Retained earnings RMB million	Perpetual notes (Note 27) RMB million	Total	Non- controlling interests	Total
Balance at 1 January 2021		24,571	51,936	3,128	14,562	(886)	(42)	115,190	46,738	255,197	57,849	313,046
Profit for the period		-	-	-	-	-	-	13,095	-	13,095	1,255	14,350
Other comprehensive income/(expenses)			_	-	_	24	(23)	-	-	1	(26)	(25)
Total comprehensive income/(expenses) for the period ended 30 June 2021				-	_	24	(23)	13,095		13,096	1,229	14,325
Total transactions with owners, recognised directly in equity Capital contributions from non-controlling shareholders of subsidiaries Transaction with non-controlling interests resulting from acquisition		-	-	-	-	-	-	-	-	-	9,369	9,369
of equity interests of certain subsidiaries Share of capital reserve and loss on dilution of equity interests in an associate resulting from capital contributions from its		-	-	(45)	-	-	-	-	-	(45)	45	-
controlling shareholders Acquisition of subsidiaries Disposal of subsidiaries Issuance of perpetual notes		- - -	- - -	(73) - - -	- - -	- - -	- - -	- - -	- - - 5,996	(73) - - 5,996	(76) 132 (2,059)	(149) 132 (2,059) 5,996
Dividends declared to shareholders Dividends declared to non-	14	-	-	-	-	-	-	(4,423)	-	(4,423)	-	(4,423)
controlling shareholders of subsidiaries Dividends declared to		-	-	-	-	-	-	-	-	-	(655)	(655)
perpetual notes holders Transferred to reserves		-	-	-	22	-	-	(1,930) (22)	(266)	(2,196)	(187)	(2,383)
Balance at 30 June 2021		24,571	51,936	3,010	14,584	(862)	(65)	121,910	52,468	267,552	65,647	333,199

The accompanying notes are an integral part of this condensed consolidated interim financial information.

INTERIM CONDENSED CONSOLIDATED STATEMENT OF CASH FLOWS

	Unaudited Six months ended 30 June			
	2022	2021		
	RMB million	RMB million		
Net cash used in operating activities	(37,716)	(58,879)		
Cash flows from investing activities				
– Additions of property, plant and equipment	(4,991)	(6,774)		
– Disposal of property, plant and equipment	343	622		
– Additions of lease prepayments	(6)	(38)		
– Disposal of lease prepayments	13	72		
– Additions of intangible assets	(16,342)	(12,814)		
– Disposal of intangible assets	54	9		
– Additions of mining assets	(4)	(2)		
– Disposal of mining assets	_	4		
 Purchase of investment properties 	(245)	(82)		
– Disposal of investment properties	1	16		
– Acquisition of subsidiaries	(1,026)	(151)		
– Disposal of subsidiaries	_	(780)		
– Investments in associates	(4,618)	(3,108)		
– Investments in joint ventures	(1,720)	(3,094)		
– Disposal of joint ventures	1	(1)		
– Disposal of associates	393	45		
– Deposits paid for investments	(196)	(123)		
– Purchase of financial assets at fair value through other				
comprehensive income	(1,264)	(837)		
– Disposal of financial assets at fair value through other				
comprehensive income	91	79		
– Purchase of financial assets at fair value through profit or loss	(9,251)	(5,323)		
– Disposal of financial assets at fair value through profit or loss	6,038	4,008		
 Net flow in/(out) respect of financial assets at amortised cost 	389	(1,490)		
– Interests received	220	918		
– Dividends received	511	251		
– Decrease of term deposits with initial term of over three months	271	3,313		
– Increase of term deposits with initial term of over three months	(431)	(815)		
– Other investing cashflows	168	-		
Net cash used in investing activities	(31,601)	(26,095)		

INTERIM CONDENSED CONSOLIDATED STATEMENT OF CASH FLOWS

	Unaudited Six months ended 30 June				
	2022	2021			
	RMB million	RMB million			
Cash flows from financing activities					
 Capital contributions from non-controlling shareholders 					
of subsidiaries	12,532	9,369			
– Issuance of shares for restricted share incentive scheme	606	_			
– Transaction with non-controlling interests resulting from					
acquisition of equity interests of certain subsidiaries	(421)	_			
– Proceeds from debentures	5,692	5,497			
 Repayment of debentures 	(10,490)	(8,721)			
– Proceeds from issuance of perpetual notes	_	5,996			
– Proceeds from bank borrowings	137,245	103,440			
– Repayments of bank borrowings	(59,037)	(41,517)			
– Proceeds from other borrowings	1,342	927			
– Repayment of other borrowings	(3,645)	(2,896)			
– Interests paid	(6,123)	(5,994)			
– Dividends paid to non-controlling shareholders of subsidiaries	(992)	(712)			
– Dividends paid to holders of perpetual notes	(471)	(247)			
 Advances from non-controlling shareholders of subsidiaries 	366	40			
– Repayments of advances from non-controlling					
shareholders of subsidiaries	(253)	(234)			
– Repayments of lease liabilities	(329)	(529)			
Net cash generated from financing activities	76,022	64,419			
		·			
Net increase/(decrease) in cash and cash equivalents	6,705	(20,555)			
Cash and cash equivalents at beginning of the period	148,116	145,464			
Effect of foreign exchange rate changes	662	(125)			
Cash and cash equivalents at end of the period	155,483	124,784			

The accompanying notes are an integral part of this condensed consolidated interim financial information.

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.

The condensed consolidated interim financial information was approved for issue on 30 August 2022.

This condensed consolidated interim financial information is presented in Renminbi ("RMB"), unless otherwise stated.

2. Basis of preparation

This condensed consolidated interim financial information for the six months ended 30 June 2022 has been prepared in accordance with International Accounting Standard ("IAS") 34, "Interim Financial Reporting". The condensed consolidated interim financial information should be read in conjunction with the annual consolidated financial statements for the year ended 31 December 2021, which have been prepared in accordance with International Financial Reporting Standards ("IFRS").

3. Accounting policies

Except as described below, the accounting policies applied are consistent with those of the annual consolidated financial statements for the year ended 31 December 2021, as described in the annual consolidated financial statements.

(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" Amendments to IAS 37 "Onerous contracts – costs of fulfilling a contract"	1 January 2022 1 January 2022
Amendments to IFRS 3 "Update reference to the Conceptual framework" Annual Improvements to IFRS Standards 2018-2020 affecting IFRS 1, IFRS 9, IFRS 16 and IAS 41	1 January 2022 1 January 2022

3. Accounting policies (Continued)

(a) Amended standards adopted by the Group (Continued)

In addition, the Group has early applied the Amendment to IFRS 16 "Covid-19-Related Rent Concessions" from 1 January 2021.

The adoption of above did not have any material impact on the Group's results for the six months ended 30 June 2022 and the Group's financial position as at 30 June 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 applied by the Group

The following new standards and amendments to standards are effective for annual periods beginning after 1 January 2022, and have not been applied in preparing the condensed consolidated interim financial information.

	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.

4. Estimates

The preparation of interim financial information requires management to make judgements, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets and liabilities, income and expense. Actual results may differ from these estimates.

In preparing the condensed consolidated interim financial information, the significant judgements made by management in applying the Group's accounting policies and the key sources of estimation uncertainty were the same as those that applied to the consolidated financial statements for the year ended 31 December 2021.

5. Financial risk management and financial instruments

5.1 Financial risk factors

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

The condensed consolidated interim financial information does not include all financial risk management information and disclosures required in the annual consolidated financial statements, and should be read in conjunction with the Group's annual consolidated financial statements for the year ended 31 December 2021.

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

5.2 Credit risk

Credit risk arises from cash and bank balances, trade and other receivables except for prepayments, contract assets, debt investments carried at amortised cost, financial assets at fair value through profit or loss ("FVPL"), and the nominal value of the guarantees provided on liabilities.

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

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

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

		As	at	
		ne 2022 Expiry period		nber 2021 Expiry period
	(Unaudited)		(Audited)	
Guarantees given to banks in respect of banking facilities to:				
– Joint ventures	4,777	2022-2039	2,969	2022-2037
Associates	1,815	2023-2045	4,730	2023
 Government-related entities 	475	2022-2027	480	2021-2030
 Properties purchasers 	48,667	2022-2027	51,313	2021-2026
Shortfall payments given to the senior				
tranches in respect of ABN & ABS	99,795	2022-2037	93,898	2021-2036
	155,529		153,390	

5. Financial risk management and financial instruments (Continued)

5.3 Liquidity risk

The Group finances its working capital requirements through a combination of funds generated from operations and bank and other borrowings.

The table below analyses the Group's non-derivative financial liabilities into relevant maturity groupings based on the remaining period at the balance sheet date to the contractual maturity date. The amounts disclosed in the table are the contractual undiscounted cash flows.

The table includes both interest and principal cash flows. To the extent that interest flows are floating rate, the undiscounted amount is derived from interest rate at the end of the reporting period.

	On demand or Less than 1 year RMB million	Between 1 and 2 years RMB million	Between 2 and 5 years RMB million	Over 5 years RMB million	Total undiscounted cash flows RMB million	Carrying amount RMB million
At 30 June 2022 Trade and other payables (excluding statutory and non-financial liabilities) (Note 28) Borrowings (Note 29)	541,009 143,962	6,265 48,519	3,347 99,453	12,827 194,330	563,448 486,264	562,803 386,896
Lease liabilities Financial guarantee contracts and shortfall payments Financial liabilities at FVPL	331 155,529	265	429	397	1,422 155,529	1,361
(Note 23)	104	-	-	-	104	104
	840,935	55,049	103,229	207,554	1,206,767	951,164
	On demand or Less than 1 year RMB million	Between 1 and 2 years RMB million	Between 2 and 5 years RMB million	Over 5 years RMB million	Total undiscounted cash flows RMB million	Carrying amount RMB million
At 31 December 2021 Trade and other payables (excluding statutory and non-financial liabilities)						
(Note 28)	487,681	6,427	3,377	1,096	498,581	497,930
Borrowings (Note 29)	123,005	38,882	81,143	154,193	397,223	311,927
Lease liabilities Financial guarantee contracts	421	291	306	390	1,408	1,332
and shortfall payments Financial liabilities at FVPL	153,390	-	-	-	153,390	-
(Note 23)	122	_	_	-	122	122
	764,619	45,600	84,826	155,679	1,050,724	811,311

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

5. Financial risk management and financial instruments (Continued)

5.3 Liquidity risk (Continued)

As at 30 June 2022, there is no bank borrowing that contains a repayment on demand clause.

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

(i) As of the balance sheet date, the maximum exposure of those financial guarantees and shortfall payments provided by the Group are listed below in accordance with the earliest payments period claimed by the counterparties.

	On demand or Less than 1 year RMB million	Between 1 and 2 years RMB million	Between 2 and 5 years RMB million	Over 5 years RMB million	Total undiscounted cash flows RMB million	Carrying amount RMB million
At 30 June 2022 Financial guarantees and shortfall payments	155,529	-	-	-	155,529	-
	On demand or Less than 1 year RMB million	Between 1 and 2 years RMB million	Between 2 and 5 years RMB million	Over 5 years RMB million	Total undiscounted cash flows RMB million	Carrying amount RMB million
At 31 December 2021 Financial guarantees and shortfall payments	153,390	-	-	-	153,390	-

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

5. Financial risk management and financial instruments (Continued)

5.3 Liquidity risk (Continued)

(ii) As the lessee, the Group's undiscounted amount of cash flows of the lease contracts signed but not yet executed are shown below at maturity date as follows.

	On demand or Less than 1 year RMB million	Between 1 and 2 years RMB million	Between 2 and 5 years RMB million	Over 5 years RMB million	Total undiscounted cash flows RMB million	Carrying amount RMB million
At 30 June 2022 Lease contracts	550	36	5	-	591	-

	On demand or Less than 1 year RMB million	Between 1 and 2 years RMB million	Between 2 and 5 years RMB million	Over 5 years RMB million	Total undiscounted cash flows RMB million	Carrying amount RMB million
At 31 December 2021 Lease contracts	215	1	-	-	216	-

5.4 Fair value estimation

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

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

5. Financial risk management and financial instruments (Continued)

5.4 Fair value estimation (Continued)

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

	ncial assets/ ncial liabilities	30 June (Unauc	e 2022	at (RMB million) 31 Decem (Audi		Fair value hierarchy	Valuation technique(s) and key input(s)	Significant unobservable input(s)	Range of inputs (probability- weighted average)	Relationship of unobservable inputs to fair value
1)	Derivative financial instruments	Assets/Liabilities	Amount	Assets/Liabilities	Amount					
	instruments	Assets	149	Assets	149	Level 3	Option pricing model	Risk-free interest, Volatility	3.04%, 28.31%	The higher the risk-free interest rate, the higher the option value. The higher the volatility, the higher the option value.
2)	2) Listed equity securities Held-for-trading financial assets in Held-for-trading financial assets in Mainland China: Held-for-trading financial assets in Mainland China:									
	securities investment funds at FVPL	Industry	Amount	Industry	Amount					
		Finance Manufacturing Transportation Others	5,854 60 1	Finance Manufacturing Transportation Others	5,791 65 1					
			5,915		5,858	Level 1	Quoted bid prices in active markets.	N/A	N/A	N/A
3)	Listed equity securities at fair value through	Listed equity securitie China:	es in Mainland	Listed equity securitie China:	es in Mainland					
	other comprehensive income ("FVOCI")	Industry	Amount	Industry	Amount					
		Finance	504	Finance	522					
		Listed equity securities in Hong Kong: Listed equity securities in Hong Kong:		es in Hong Kong:						
		Industry	Amount	Industry	Amount					
		Manufacturing	276	Manufacturing	288	Level 1	Quoted bid prices in active markets.	N/A	N/A	N/A

5. Financial risk management and financial instruments (Continued)

5.4 Fair value estimation (Continued)

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

	ncial assets/ ncial liabilities	30 June . (Unaudi	2022	a t (RMB million) 31 Decemb (Audit		Fair value hierarchy	Valuation technique(s) and key input(s)	Significant unobservable input(s)	Range of inputs (probability- weighted average)	Relationship of unobservable inputs to fair value
4)	Unlisted open-end equity funds at FVPL	Unlisted opened equity Mainland China:	y funds in	Unlisted open-end equ Mainland China:	uity funds in					
		Assets Industry	Amount	Assets Industry	Amount					
		Finance	422	Finance	396	Level 1	Quoted bid prices in active markets.	N/A	N/A	N/A
		Finance -	2,305	Finance	1,870	Level 3	Discounted cash flow. Future cash flows are estimated	Expected future cash flow,	2.57%	The higher the future cash flow, the higher the fair
		Total	2,727	Total	2,266		based on expected recoverable amounts, discounted at rates	Discount rates that correspond to the		value. The lower the discount rate,
							that reflect management's best estimation of the expected risk level.	expected risk level.		the higher the fair value.
		Liabilities Industry	Amount	Liabilities Industry	Amount					
		Finance -	36	Finance	54	Level 3	Discounted cash flow. Future cash flows are estimated based on expected recoverable amounts, discounted at rates that reflect management's best estimation of the expected risk level.	Expected future cash flow, Discount rates that correspond to the expected risk level.	2.57%	The higher the future cash flow, the higher the fair value. The lower the discount rate, the higher the fair value.
5)	Unlisted entrusted products and other financial assets at FVPL	Unlisted entrusted pro China:	ducts in Mainland	Unlisted entrusted pro China:	ducts in Mainlan	d				
	mundu assets at 1112	Industry	Amount	Industry	Amount					
		Construction Real estate Finance Mining	2,343 1,214 2,517 3	Construction Real estate Finance Mining	846 1,662 3,485					
		Others -	6,315	Others		Level 3	Discounted cash flow. Future cash flows that are estimated based on expected recoverable amounts, discounted at rates that reflect management's best estimation of the expected risk level.	Expected future cash flow, Discount rates that correspond to the expected risk level.	8.19%-10.67%	The higher the future cash flow, the higher the fair value. The lower the discount rate, the higher the fair value.

5. Financial risk management and financial instruments (Continued)

5.4 Fair value estimation (Continued)

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

Financial assets/ financial liabilities		Fair value as ne 2022 udited)		mber 2021 dited)	Fair value hierarchy	Valuation technique(s) and key input(s)	Significant unobservable input(s)	Range of inputs (probability- weighted average)	Relationship of unobservable inputs to fair value
6) Unlisted equity investments at FVOCI	Unlisted equity inve	stment in Mainland	Unlisted equity inv China:	estment in Mainland	d				
	Industry	Amount	Industry	Amount					
	Construction Finance Manufacturing Real estate Mining Others	9,230 132 1,172 13 5 1,978	Construction Finance Manufacturing Real estate Mining Others	8,228 132 947 13 5 2,029					
	Total	12,530	Total	11,354	Level 3	Market valuation method by reference to P/B ratio, P/S ratio, P/E ratio, discount rate that reflects the liquidity level; and cost method by reference to the original investment cost.	P/B ratio, P/S ratio, P/E ratio, Discount rates that reflect the liquidity level, Original investment cost	0.84-1.37, 2.39, 16.04, 26.52%-33.56%, n/a	The higher the P/B ratio, P/S ratio, P/E ratio, P/E ratio, the higher the fair value. The lower discount rate, the higher the fair value. The original investment cost is positively correlated with the fair value of unlisted equity instruments.
7) Unlisted equity investments at FVPL	Unlisted equity inve China:	stment in Mainland	Unlisted equity inv China:	estment in Mainland	d				
	Industry	Amount	Industry	Amount					
	Finance	7,423	Finance	5,066	Level 3	Market valuation method by reference to P/B ratio, discount rate that reflects the liquidity level; and cost method by reference to the original investment cost.	P/B ratio, Discount rates that reflect the liquidity level, Original investment cost	0.84-1.37, 26.52%-33.56%-, n/a	The higher the P/B ratio, the higher the fair value. The lower discount rate, the higher the fair value. The original investment cost is positively correlated with the fair value of unlisted equity instruments.
8) Bills receivables at FVOCI	Bills receivables in M	Mainland China:	Bills receivables in	Mainland China:					
TVOCI	Industry	Amount	Industry	Amount					
	Construction	629	Construction	526	Level 3	Discounted cash flow with future cash flows that are estimated based on expected recoverable amounts, discounted at rates that reflect management's best estimation of the expected risk level.	Expected future cash flow, Discount rates that correspond to the expected risk level.	3.85%	The higher the future cash flow, the higher the fair value. The lower the discount rate, the higher the fair value.

5. Financial risk management and financial instruments (Continued)

5.4 Fair value estimation (Continued)

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

There were no transfer between Level 1 and 2 during the current interim period.

Reconciliation of Level 3 fair value measurements:

	Unlisted entrusted products RMB million (Unaudited)	Unlisted open-end funds RMB million (Unaudited)	Unlisted equity investments RMB million (Unaudited)	Listed equity securities RMB million (Unaudited)	Others RMB million (Unaudited)	Total RMB million (Unaudited)
30 June 2022						
Opening balance at 1 January	3,125	1,816	16,420	_	3,809	25,170
Acquisitions	422	556	3,593	-	563	5,134
(Losses)/gains recognised in						
profit or loss	(30)	(11)	26	-	(99)	(114)
Gains recognised in other						
comprehensive income	-	-	13	-	-	13
Disposals	(553)	(92)	(99)	-	(144)	(888)
Closing balance at 30 June	2,964	2,269	19,953	-	4,129	29,315

	Unlisted entrusted products RMB million (Unaudited)	Unlisted open-end funds RMB million (Unaudited)	Unlisted equity investments RMB million (Unaudited)	Listed equity securities RMB million (Unaudited)	Others RMB million (Unaudited)	Total RMB million (Unaudited)
30 June 2021						
Opening balance at 1 January	4,057	1,319	13,008	1,175	1,645	21,204
Acquisitions	2,485	380	1,827	-	559	5,251
(Losses)/gains recognised in						
profit or loss	(182)	(24)	(6)	(125)	120	(217)
Gains recognised in other						
comprehensive income	-	_	1	-	-	1
Disposals	(1,650)	(261)	(378)	(1,050)	(219)	(3,558)
Closing balance at 30 June	4,710	1,414	14,452		2,105	22,681

5. Financial risk management and financial instruments (Continued)

5.4 Fair value estimation (Continued)

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

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

		As	at	
	30 Jun	ie 2022	31 Decem	ber 2021
	Carrying		Carrying	
	amount	Fair value	amount	Fair value
	RMB million	RMB million	RMB million	RMB million
	(Unaudited)	(Unaudited)	(Audited)	(Audited)
Financial assets Other financial assets at amortised cost – fixed rate	29,252	30,267	29,513	30,849
Financial liabilities Long-term bank borrowings				
– fixed rate	51,969	54,024	43,674	45,638
Long-term debentures – fixed rate	50,512	51,628	55,007	55,657

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

6. Segment information

The board of directors of the Company (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:

- 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
- Mining, financial business, operation of service concession arrangements, merchandise trading and other (e) ancillary business ("Other businesses").

Revenue between segments is carried out at actual transaction prices.

6. Segment information (Continued)

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:

	Six months ended 30 June 2022 (Unaudited)						
	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	Elimination RMB million	Total RMB million
External revenue Inter-segment revenue Other revenue Inter-segment other revenue	483,701 10,169 1,875 163	8,705 440 87 -	12,756 3,686 325	23,447 - 262 -	28,180 20,852 1,249 33	(35,147) - (196)	556,789 - 3,798 -
Segment revenue	495,908	9,232	16,767	23,709	50,314	(35,343)	560,587
Segment results Profit before tax	19,517	937	1,110	(2,296)	4,014	(2,259)	21,023
Segment results included: Share of losses of joint ventures Share of profits/(losses) of associates Interest income Interest expenses	(326) 365 719 (1,153)	(8) (3) 39 (17)	(18) 16 49 (44)	(41) (23) 65 (687)	(171) 1,696 2,445 (2,641)	- (361) 560	(564) 2,051 2,956 (3,982)

		Six months ended 30 June 2021 (Unaudited) Engineering Survey, equipment design and and					
	Infrastructure construction RMB million	consulting services RMB million	component manufacturing RMB million	Property development RMB million	Other businesses RMB million	Elimination RMB million	Total RMB million
External revenue	442,994	7,390 249	11,921	13,866	19,034	- (44,391)	495,205
Inter-segment revenue Other revenue	15,072 1,319	62	4,284 261	- 256	24,786 1,124	(44,391)	3,022
Inter-segment other revenue	131	_	_		95	(226)	
Segment revenue	459,516	7,701	16,466	14,122	45,039	(44,617)	498,227
Segment results							
Profit before tax	16,775	699	1,152	(514)	2,340	(2,727)	17,725
Segment results included: Share of (losses)/profits of joint							
ventures	(66)	-	31	(27)	(154)	-	(216)
Share of profits/(losses) of associates Interest income	293 487	1 62	12 35	(11) 167	880 1,163	(506)	1,175 1,408
Interest income Interest expenses	(545)	(98)	(33)	(869)	(1,940)	642	(2,843)

6. Segment information (Continued)

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

	Six months en 2022 RMB million (Unaudited)	nded 30 June 2021 RMB million (Unaudited)
(i) Segment interest income, before inter-segment elimination Inter-segment elimination	3,317 (361)	1,914 (506)
Reconciling item: Reclassification of finance income obtained from	2,956	1,408
other financial assets at amortised cost (Note 11)	320	828
Total consolidated finance income, as reported	3,276	2,236
(ii) Segment interest expenses, before inter-segment elimination Inter-segment elimination	4,542 (560)	3,485 (642)
Reconciling item: Imputed interest expenses on retention payables (Note 11)	3,982	2,843
Total consolidated finance costs, as reported	4,121	2,988
(iii) Segment results, before inter-segment elimination Inter-segment elimination	23,282 (2,259)	20,452 (2,727)
Reconciling item: Land appreciation tax (a) (Note 12)	21,023 874	17,725
Total consolidated profit before tax, as reported	21,897	18,412

⁽a) Land appreciation tax is included in operating expenses under segment reporting and is classified as income tax expense in the condensed consolidated statement of profit or loss.

6. Segment information (Continued)

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

Segment assets

	As at		
	30 June 2022 RMB million	31 December 2021 RMB million	
	(Unaudited)	(Audited)	
Infrastructure construction	898,262	751,756	
Survey, design and consulting services	30,186	27,476	
Engineering equipment and component manufacturing	65,064	62,116	
Property development	286,113	281,252	
Other businesses	582,391	559,696	
Inter-segment elimination	(343,417)	(333,527)	
Total segment assets	1,518,599	1,348,769	

Segment liabilities

	As at		
	30 June 2022 RMB million (Unaudited)	31 December 2021 RMB million (Audited)	
Infrastructure construction Survey, design and consulting services Engineering equipment and component manufacturing Property development Other businesses Inter-segment elimination	779,797 14,922 37,630 255,943 381,707 (340,606)	626,780 12,324 35,318 254,905 392,472 (324,002)	
Total segment liabilities	1,129,393	997,797	

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

- 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.

6. Segment information (Continued)

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

	As	at
	30 June 2022	31 December 2021
	RMB million	RMB million
	(Unaudited)	(Audited)
Segment assets, before inter-segment elimination	1,862,016	1,682,296
Inter-segment elimination	(343,417)	(333,527)
, and the second		
	1,518,599	1,348,769
Reconciling items:		
Deferred tax assets	11,345	10,372
Non-tradable shares reform of subsidiaries (Note (a))	(148)	(148)
Current income tax recoverable	3,919	3,736
Prepaid land appreciation tax included in current income tax recoverable	(1,149)	(1,149)
current income tax recoverable	(1,143)	(1,143)
	13,967	12,811
	,	,
Total consolidated assets, as reported	1,532,566	1,361,580
Segment liabilities, before inter-segment elimination	1,469,999	1,321,799
Inter-segment elimination	(340,606)	(324,002)
	1,129,393	997,797
Reconciling items:		
Deferred tax liabilities	2,428	1,647
Current income tax liabilities	6,928	7,100
Land appreciation tax payable included in	3,523	.,
current income tax liabilities	(3,212)	(3,158)
	6,144	5,589
Total consolidated liabilities, as reported	1,135,537	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 profit or loss in prior years.

6. Segment information (Continued)

(i) Disaggregation of revenue from contracts with customers

Type of services and products	Infrastructure construction RMB million	Survey, design and consulting services RMB million	e months ended 30 Ju Engineering equipment and component manufacturing RMB million	ne 2022 (Unaudited Property development RMB million	Other businesses RMB million	Total RMB million
Infrastructure construction contracts	483,701	-	-	-	-	483,701
Manufacturing and sales of engineering			42.750			42.750
equipment and component	-	0 705	12,756	-	2,002	12,756
Rendering of services Sales of properties	-	8,705	-	23,447	2,993	11,698 23,447
Sales of goods and others	1,875	- 87	325	25,447	26,436	28,985
Suics of goods and others	1,073		<u> </u>	202	20,130	20,303
Total	485,576	8,792	13,081	23,709	29,429	560,587
Timing of revenue recognition:						
– At a point of time	1,875	87	8,506	23,098	28,456	62,022
– Over time	483,701	8,705	4,453	611	-	497,470
Rental income	-	-	122	-	973	1,095
Total revenue from contracts with						
customers	485,576	8,792	13,081	23,709	29,429	560,587

6. Segment information (Continued)

Disaggregation of revenue from contracts with customers (Continued) (i)

Type of services and products	Infrastructure construction RMB million	Sirvey, design and consulting services RMB million	x months ended 30 Ju Engineering equipment and component manufacturing RMB million	ne 2021 (Unaudited) Property development RMB million	Other businesses RMB million	Total RMB million
Infrastructure construction contracts Manufacturing and sales of engineering	442,994	-	-	-	-	442,994
equipment and component	-	-	11,921	_	-	11,921
Rendering of services	-	7,390	-	-	2,538	9,928
Sales of properties	-	-	-	13,866	-	13,866
Sales of goods and others	1,319	62	261	256	17,620	19,518
Total	444,313	7,452	12,182	14,122	20,158	498,227
Timing of revenue recognition:						
– At a point of time	1,319	62	8,882	12,294	19,258	41,815
– Over time	442,994	7,390	3,300	1,828	-	455,512
Rental income	_	-	_		900	900
Total revenue from contracts with customers	444,313	7,452	12,182	14,122	20,158	498,227

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

	Six months ended 30 June	
	2022 RMB million	2021 RMB million
	(Unaudited)	(Unaudited)
Mainland China	532,858	473,100
Other regions (including Hong Kong and Macau)	27,729	25,127
	560,587	498,227

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

	As at	
	30 June 2022 RMB million (Unaudited)	31 December 2021 RMB million (Audited)
Mainland China Other regions (including Hong Kong and Macau)	431,275 17,159	368,413 14,492
	448,434	382,905

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

7. Other income and expenses

	Six months ended 30 June		
	2022	2021	
	RMB million (Unaudited)	RMB million (Unaudited)	
Other income from:			
Government subsidies (a)	670	664	
Dividends from financial assets at FVPL	245	420	
Compensation and claims	181	241	
Income from the sale of waste and materials	17	56	
Dividends from financial assets at FVOCI	4	64	
Others	56	87	
	1,173	1,532	
Other expenses on:			
Research and development expenditures	8,980	7,344	

(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 condensed 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.

8. Net impairment losses on financial assets and contract assets

	Six months ended 30 June	
	2022 20	
	RMB million	RMB million
	(Unaudited)	(Unaudited)
Trade and other receivables (excluding advance to suppliers)	659	607
Contract assets	458	452
Other financial assets at amortised cost	296	323
	1,413	1,382

9. Other gains, net

	Six months ended 30 June	
	2022	2021
	RMB million	RMB million
	(Unaudited)	(Unaudited)
Gains on disposal and/or write-off of:		
– Interests in subsidiaries	_	70
– Interests in associates	36	_
– Lease prepayments	13	25
– Property, plant and equipment	10	98
Deemed disposal gains of interest in associates	504	_
Losses arising on change in fair value of financial		
assets/liabilities at FVPL	(306)	(210)
Gains on disposal of financial assets at FVPL	-	68
Foreign exchange gains/(losses), net	454	(104)
Gains on debt restructurings	50	59
Impairment losses recognised on:		
– Property, plant and equipment	(17)	_
– Advance to suppliers	(9)	_
	735	6

10. Losses from derecognition of financial assets at amortised cost

	Six months ended 30 June	
	2022 2	
	RMB million	RMB million
	(Unaudited)	(Unaudited)
ABN and ABS	1,301	1,337
Factoring expenses	192	150
Bills receivables discounted expenses	99	_
	1,592	1,487

11. Finance income and costs

	Six months ended 30 June		
	2022	2021	
	RMB million	RMB million	
	(Unaudited)	(Unaudited)	
Finance income from:			
Trade receivables and contract assets	2,519	854	
Cash and cash equivalents and restricted cash	437	554	
Other financial assets at amortised cost	320	828	
Total financial income	3,276	2,236	
Interest expenses on:			
Bank borrowings	5,444	4,387	
Long-term debentures	894	657	
Other long-term borrowings	193	180	
Other short-term borrowings	18	194	
Total borrowing costs	6,549	5,418	
Less: amount capitalised	(2,584)	(2,695)	
	3,965	2,723	
Lease	3	52	
Imputed interest expenses on retention payables	139	145	
Others	14	68	
Total financial costs	4,121	2,988	

11. Finance income and costs (Continued)

Borrowing costs directly attributable to the construction and acquisition of qualifying assets were capitalised as part of the costs of those assets. Borrowing costs of RMB2,584 million (six months ended 30 June 2021: RMB2,695 million) were capitalised in the six months period ended 30 June 2022, of which approximately RMB1,259 million was charged to properties under development for sale, approximately RMB197 million was included in cost of construction-in-progress and approximately RMB1,128 million was included in cost of intangible assets (six months ended 30 June 2021: approximately RMB2,053 million was charged to properties under development for sale, approximately RMB8 million was included in cost of construction-in-progress and approximately RMB634 million was included in cost of intangible assets). A general capitalisation rate of 3.50%~5.70% (six months ended 30 June 2021: 3.60%~6.65%) per annum was used, representing the costs of the borrowings used to finance the qualifying assets.

12. Income tax expense

	Six months ended 30 June	
	2022	2021
	RMB million	RMB million
	(Unaudited)	(Unaudited)
Current income tax – Enterprise income tax ("EIT")	4,667	4,123
Land appreciation tax ("LAT")	874	687
 Under/(over) provision in prior years 	100	(56)
Deferred income tax	(569)	(692)
	5,072	4,062

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% (six months ended 30 June 2021: 25%) is applied to the Group except for certain subsidiaries which were either exempted from EIT or entitled to the preferential tax rate of 20% or 15% (six months ended 30 June 2021: 20%, 15%) during the current interim period.

Certain of the Group's overseas entities are located in 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 17%, 24%, 24%, 30%, 20%, 35%, 30% and 30% (six months ended 30 June 2021: 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.

13. Expenses by nature

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

	Six months ended 30 June	
	2022	2021
	RMB million	RMB million
	(Unaudited)	(Unaudited)
Employee benefit expenses & subcontracting costs	223,087	199,072
Raw materials and consumables used	200,949	183,879
Cost of property development	20,082	9,762
Equipment usage costs	17,183	17,077
Cost of production safety	7,956	7,332
Depreciation of property, plant and equipment (Note 16),		
right-of-use assets and investment properties	4,913	4,621
Amortisation of intangible assets (Note 17)	451	373
Amortisation of lease prepayments	366	365
Amortisation of mining assets	103	25

14. Dividends

The final dividend of RMB0.196 per share in respect of the year ended 31 December 2021, amounting to RMB4,849 million in aggregate, was approved by the Company's shareholders in the Annual General Meeting on 22 June 2022, and subsequently paid off in August 2022.

The final dividend of RMB0.180 per share in respect of the year ended 31 December 2020, amounting to RMB4,423 million in aggregate, was approved by the Company's shareholders in the Annual General Meeting on 23 June 2021, and subsequently paid off in August 2021.

The Directors do not recommend the payment of an interim dividend for the current interim period (six months ended 30 June 2021: nil).

15. Earnings per share

(a) Basic

Basic earnings per share for the six months ended 30 June 2022 is calculated by dividing the profit attributable to owners of the Company, after deducting the profit attributable to holders of perpetual notes and the impact of 2021 Restricted Share Incentive Scheme(Note 24), of RMB13,549 million (six months ended 30 June 2021: RMB11,165 million) by 24,570,929,283 shares (six months ended 30 June 2021: 24,570,929,283 shares) in issue during the period.

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

16. Property, plant and equipment

	Six months ended 30 June 2022 RMB million (Unaudited)
At 30 June 2022	
Opening net book amount	77,368
Additions (a)	6,547
Transfer from investment properties	325
Transfer from properties held for sale	11
Acquisition of subsidiaries	28,908
Disposals	(465)
Transfer to investment properties	(38)
Disposal of subsidiaries	(10)
Depreciation	(4,529)
Impairment losses recognised	(17)
Currency translation differences	100
Closing net book amount	108,200

	Six months ended 30 June 2021 RMB million (Unaudited)
At 30 June 2021	
Opening net book amount Additions (a) Transfer from properties held for sale Acquisition of subsidiaries Disposals Transfer to investment properties Depreciation Currency translation differences	74,384 4,848 127 346 (554) (126) (4,002) (30)
Closing net book amount	74,993

16. Property, plant and equipment (Continued)

Additions to property, plant and equipment include: (a)

	Six months ended 30 June	
	2022 RMB million	2021 RMB million
	(Unaudited)	(Unaudited)
Construction in process	3,518	2,448
Buildings	19	76
Infrastructure construction equipment	1,484	1,225
Transportation equipment	526	465
Manufacturing equipment	245	105
Testing equipment and instruments	180	165
Other equipment	575	364
	6,547	4,848

- (b) As at 30 June 2022, bank borrowings amounting to RMB711 million (31 December 2021: RMB295 million) are secured by certain property, plant and equipment with an aggregate book carrying amount of approximately RMB3,795 million (31 December 2021: RMB1,715 million), other borrowings amounting to RMB1,126 million (31 December 2021: nil) are secured by certain property, plant and equipment with an aggregate book carrying amount of approximately RMB900 million (31 December 2021: nil) (Note 29).
- (c) As at 30 June 2022, the Group is in the process of applying for registration of the ownership certificates for certain of its properties with an aggregate book carrying amount of approximately RMB2,708 million (31 December 2021: RMB2,657 million). The Directors of the Company are of the opinion that the Group is entitled to lawfully and validly occupy or use these properties.

17. Intangible assets

	Six months ended 30 June 2022 RMB million (Unaudited)
At 30 June 2022	
Opening net book amount Acquisition of subsidiaries Additions (a) Disposals Amortisation Currency translation differences	110,496 1 18,552 (2) (451) 27
Closing net book amount	128,623

	Six months ended 30 June 2021 RMB million (Unaudited)
At 30 June 2021	
Opening net book amount Acquisition of subsidiaries Additions (a) Disposals Disposal of subsidiaries Amortisation Currency translation differences	62,599 1 14,643 (9) (2,620) (373) (6)
Closing net book amount	74,235

17. Intangible assets (Continued)

(a) Additions to intangible assets include:

	Six months ended 30 June 2022 2021 RMB million RMB million (Unaudited) (Unaudited)	
Service concession arrangements Patents Computer software Others	18,472 1 59 20	14,530 - 102 11
Total	18,552	14,643

As at 30 June 2022, bank borrowings amounting to RMB54,171 million (31 December 2021: RMB45,894 million) are secured by concession assets with carrying amount of approximately RMB82,614 million (31 December 2021: RMB64,728 million) (Note 29).

18. Properties under development for sale

As at 30 June 2022, properties under development for sale amounting to RMB17,436 million (31 December 2021: RMB30,698 million) have been pledged to secure borrowings amounting to RMB6,885 million (31 December 2021: RMB7,699 million) (Note 29).

19. Financial assets at fair value through other comprehensive income

	As at	
	30 June 2022	31 December 2021
	RMB million	RMB million
	(Unaudited)	(Audited)
Non-current assets		
Unlisted equity investments	12,530	11,354
Listed equity securities		
– Mainland China	504	522
– Hong Kong	276	288
	13,310	12,164
Current assets		
Bills receivables	629	526

20. Other financial assets at amortised cost

	As at	
	30 June 2022	31 December 2021
	RMB million	RMB million
	(Unaudited)	(Audited)
Debt investments		
– Short-term	12,305	9,369
– Long-term	24,636	27,541
	36,941	36,910
	(=)	(=)
Less: credit loss allowance for debt investments	(5,690)	(5,397)
Total other financial assets at amortised cost	31,251	31,513
Less: Amount due within one year included in current assets	(11,263)	(8,553)
Amount due after one year	19,988	22,960

The other financial assets at amortised cost carry fixed-rate interests within a range of 1.25% to 24% (31 December 2021: 1.25 % to 24.00%) per annum.

As at 30 June 2022, other financial assets at amortised cost amounting to RMB5,623 million (31 December 2021: RMB4,881 million) are secured by property, plant and equipment, lease prepayments, investment properties and/or guaranteed by a third party.

21. Assets and liabilities related to contracts with customers

The Group has recognised the following assets and liabilities related to contracts with customers:

	As at	
	30 June 2022	31 December 2021
	RMB million	RMB million
	(Unaudited)	(Audited)
Contract assets		
 Amount due from contract customers for 		
contract work and retentions	222,321	197,140
– Primary land development	7,097	7,024
– Financial assets under concession arrangements (a)	127,524	109,694
	356,942	313,858
Less: credit loss allowance (b)	(3,794)	(3,339)
Less: Amount due after one year included in non-current assets	(178,114)	(161,377)
,	,	· , , ,
Amount due within one year included in current assets	175,034	149,142
Contract liabilities		
– Sale of properties	48,689	56,551
– Infrastructure construction and engineering contracts	46,351	43,668
– Amount due to contract customers for contract work	19,626	27,801
 Sales of manufacturing products 	6,406	7,049
– Design and consulting services	3,609	4,253
– Sales of materials	1,996	1,263
– Others	7,450	3,510
Total current contract liabilities	134,127	144,095

- (a) Financial assets under concession arrangements represent the contract assets recognised when the related projects were under construction or have been put into operations before the Group has an unconditional contractual right to receive cash from or at the direction of the granting authority.
- (b) As at 30 June 2022, a provision of RMB3,794 million was made against the gross amount of contract assets (31 December 2021: RMB3,339 million).
- (c) As at 30 June 2022, bank borrowings amounting to RMB34,515 million (31 December 2021: RMB29,825 million) are secured by contract assets with carrying amount of approximately RMB60,444 million (31 December 2021: RMB48,320 million) (Note 29).

22. Trade and other receivables

	As at	
	30 June 2022 RMB million	31 December 2021 RMB million
	(Unaudited)	(Audited)
Trade and bills receivables	192,156	157,025
Less: credit loss allowance	(14,267)	(13,935)
Trade and bills receivables – net	177,889	143,090
Other receivables (net of impairment)	87,388	81,688
Advance to suppliers (net of impairment)	50,373	47,765
	315,650	272,543
Less: Amount due after one year included in non-current assets	(20,655)	(23,374)
Amount due within one year included in current assets	294,995	249,169

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

	As at	
	30 June 2022 RMB million (Unaudited)	31 December 2021 RMB million (Audited)
Less than 1 year	150,927	118,517
1 year to 2 years	16,586	14,919
2 years to 3 years	9,417	10,297
3 years to 4 years	5,753	4,562
4 years to 5 years	2,155	1,407
More than 5 years	7,318	7,323
Total	192,156	157,025

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.

22. Trade and other receivables (Continued)

- Trade and bills receivables of RMB19 million (31 December 2021: RMB221 million) were pledged to secure (b) borrowings amounting to RMB19 million (31 December 2021: RMB221 million) (Note 29).
- (c) For the six months ended 30 June 2022, trade receivables of RMB23,643 million (six months ended 30 June 2021: RMB21,678 million) had been transferred in accordance with relevant ABN and ABS issuance, and trade receivables of RMB3,937 million (six months ended 30 June 2021: RMB6,925 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 30 June 2022, bills receivables bank acceptance and commercial acceptance notes of RMB349 million (31 December 2021: RMB310 million) were endorsed to suppliers and RMB66 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 30 June 2022, bills receivables - bank acceptance notes of RMB416 million (31 December 2021: RMB670 million) were endorsed to suppliers, and 58 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 30 June 2022, trade receivables net of credit loss allowance, which were collectively assessed for impairment, are as follows:

Central-governmental enterprises

	As at	
	30 June 2022 RMB million (Unaudited)	31 December 2021 RMB million (Audited)
Less than 1 year	11,669	8,165
1 year to 2 years	1,442	970
2 years to 3 years	430	438
3 years to 4 years	216	195
4 years to 5 years	97	134
More than 5 years	152	123
Total	14,006	10,025

22. Trade and other receivables (Continued)

(e) As at 30 June 2022, trade receivables net of credit loss allowance, which were collectively assessed for impairment, are as follows: (Continued)

Locally-administrated state-owned enterprises

	As at		
	30 June 2022 RMB million (Unaudited)	31 December 2021 RMB million (Audited)	
Less than 1 year	74,544	53,164	
1 year to 2 years	9,614	8,511	
2 years to 3 years	2,861	2,975	
3 years to 4 years	1,805	1,195	
4 years to 5 years	674	444	
More than 5 years	628	662	
Total	90,126	66,951	

China State Railway Group Co., Ltd.

	As at		
	30 June 2022 RMB million (Unaudited)	31 December 2021 RMB million (Audited)	
Less than 1 year	10,829	9,522	
1 year to 2 years	774	780	
2 years to 3 years	356	703	
3 years to 4 years	352	167	
4 years to 5 years	80	89	
More than 5 years	141	155	
Total	12,532	11,416	

22. Trade and other receivables (Continued)

As at 30 June 2022, trade receivables net of credit loss allowance, which were collectively assessed for impairment, are as follows: (Continued)

Overseas enterprises

	As at		
	30 June 2022 RMB million (Unaudited)	31 December 2021 RMB million (Audited)	
Locathon 4 was	4.760	1 722	
Less than 1 year	1,768	1,723	
1 year to 2 years	119	56	
2 years to 3 years	22	12	
3 years to 4 years	4	230	
4 years to 5 years	175	25	
Total	2,088	2,046	

Other entities

	As at		
	30 June 2022 RMB million (Unaudited)	31 December 2021 RMB million (Audited)	
Less than 1 year 1 year to 2 years 2 years to 3 years 3 years to 4 years 4 years to 5 years More than 5 years	25,024 2,645 1,752 720 350 243	17,339 1,908 1,345 835 207 288	
Total	30,734	21,922	

As at 30 June 2022, the amount of individually impaired trade receivables was RMB15,831 million (31 December 2021: RMB15,884 million) with the provision for credit loss allowance of RMB6,239 million (31 December 2021: RMB6,123 million).

As at 30 June 2022, bills receivables – bank acceptance notes of RMB1,489 million (31 December 2021: RMB1,108 million) were not impaired. Commercial acceptance notes, which were collectively assessed for impairment, were RMB1,727 million (31 December 2021: RMB1,480 million) with the provision for credit loss allowance of RMB4 million (31 December 2021: RMB4 million). The amount of individually impaired commercial acceptance notes was RMB514 million (31 December 2021: RMB2,832 million) with the provision for credit loss allowance of RMB133 million (31 December 2021: RMB467 million).

22. Trade and other receivables (Continued)

(e) As at 30 June 2022, trade receivables net of credit loss allowance, which were collectively assessed for impairment, are as follows: (Continued)

As at 30 June 2022, the amount of collectively impaired long-term trade receivables was RMB15,236 million (31 December 2021: RMB16,041 million) with the provision for credit loss allowance of RMB44 million (31 December 2021: RMB44 million). The amount of individually impaired long-term trade receivables was RMB3,291 million (31 December 2021: RMB3,291 million) with the provision for credit loss allowance of RMB3,264 million (31 December 2021: RMB3,268 million).

23. Financial assets/(liabilities) at fair value through profit or loss

(a) Financial assets at FVPL include the following:

	As at		
	30 June 2022 RMB million (Unaudited)	31 December 2021 RMB million (Audited)	
Non-current assets Equity instruments			
Equity securities listed in Mainland China Unlisted equity investments	68 7,423	51 5,066	
	7,491	5,117	
Debt instruments			
Unlisted entrusted products Unlisted open-end equity funds	2,890 2,215	2,712 1,642	
Others	3,060	2,823	
	8,165	7,177	
		.,	
	15,656	12,294	
Current assets			
Equity instruments Equity securities listed in Mainland China	836	1,039	
Debt instruments			
Money-market securities investment funds	5,011	4,768	
Unlisted open-end equity funds	512	624	
Unlisted entrusted products	74	413	
Others	291	311	
	5,888	6,116	
Derivative financial instruments			
- Option contract	149	149	
	6,873	7,304	
Total	22,529	19,598	

23. Financial assets/(liabilities) at fair value through profit or loss (Continued)

(b) Financial liabilities at FVPL include the following:

	As at		
	30 June 2022	31 December 2021	
	RMB million	RMB million	
	(Unaudited)	(Audited)	
Current liabilities			
Unlisted open-end equity funds	104	122	

24. Share capital

			Nomina	Nominal value	
	Six months		Six months		
	ended	Year ended	ended	Year ended	
	30 June	31 December	30 June	31 December	
	2022	2021	2022	2021	
	(thousands)	(thousands)	RMB million	RMB million	
			(Unaudited)	(Audited)	
A Shares of RMB1.00 each					
At beginning and end of period/year	20,363,539	20,363,539	20,364	20,364	
Registered, issued and fully paid	170,725	_	171	_	
At end of period/year	20,534,264	20,363,539	20,535	20,364	
H Shares of RMB1.00 each					
At beginning and end of period/year	4,207,390	4,207,390	4,207	4,207	
	24,741,654	24,570,930	24,742	24,571	

As at 30 June 2022, the A Shares (20,534,264 thousands shares) and H Shares (4,207,390 thousands shares) issued are the ordinary shares in the share capital of the Company. All cash dividends in respect of the H Shares are to be declared in Renminbi and paid by the Company in Hong Kong dollars whereas all cash dividends in respect of A Shares are to be paid by the Company in Renminbi.

In addition, A Shares and H Shares are regarded as different classes of shares under the Company's Articles of Association. The differences between the two classes of shares, including provisions on class rights, the dispatch of notices and financial reports to shareholders, dispute resolution, registration of shares on different branches of the registers of shareholders, the method of share transfer and appointment of dividend receiving agents are set out in the Company's Articles of Association.

A Shares and H Shares however rank pari passu with each other in all other respects.

24. Share capital (Continued)

The terms of scheme and the relevant grants of the Company 2021 Restricted Shares ("2021 Restricted Shares") Incentive Scheme") were approved at the Extraordinary General Meeting, the A Share Class Meeting and the H Share Class Meeting (together, the "Meetings") held by the Company on 30 December 2021 and 12 January 2022, respectively. On 17 January 2022, the Board approved the grant of 2021 Restricted Share Incentive Scheme to participants who have met the prerequisite criteria at the grant price of RMB3.55 per Restricted Share in accordance with the terms of the Scheme as approved at the Meetings on the Grant Date of 17 January 2022. A total of 697 incentive participants were actually granted, and the total number of shares granted was 170,724,400 shares. On 23 February 2022, the share registration procedures were completed in the Shanghai Branch of China Securities Depository and Clearing Corporation Limited, and the listing date was 23 February 2022. The total amount of capital contributions received by the Company from 697 incentive participants for restricted shares is RMB606 million, of which RMB171 million was added to the share capital and the remaining RMB435 million was credited to share premium. The share capital of the Company was accordingly changed to RMB24,742 million.

25. Shares held for restricted share incentive scheme

	Number of Six months	of shares	Nomina Six months	ıl value
	ended	Year ended	ended	Year ended
	30 June	31 December	30 June	31 December
	2022	2021	2022	2021
	(thousands)	(thousands)	RMB million	RMB million
			(Unaudited)	(Audited)
At beginning of period/year Issuance of shares for restricted share incentive scheme Amount recorded in shareholders' equity arising from restricted share incentive scheme	- (170,725) -	- - -	- (606) 33	- - -
Shares held for restricted share incentive scheme	(170,725)	-	(573)	-

In accordance with the 2021 Restricted Share Incentive Scheme, the Company is responsible to purchase the restricted shares if certain service and performance conditions are not met. Therefore, the Company recognised the shares held for restricted share incentive scheme repurchase obligation of RMB606 million on 23 February 2022. On 22 June 2022, pursuant to the resolution of the 2021 annual general meeting of shareholders, the 2021 Restricted Share Incentive Scheme participants received cash dividends, resulting in the reduction of shares held for restricted share incentive scheme repurchase obligation of RMB33 million.

26. Statutory Reserves

The statutory reserves comprise the statutory surplus reserve, trust compensation reserve and general risk reserve.

According to the PRC Company Law and the Company's article of association, the Company is required to make an appropriation at 10 percent of the profit for the year as shown in the PRC statutory financial statements, prepared in accordance with the PRC accounting standards, to the statutory surplus reserve fund until the balance reached 50 percent of the registered capital of the Company. The statutory surplus reserve can only make up losses or use to increase the registered capital of the Company and is not distributable.

According to the relevant laws and regulations for financial institutions and trust management entities in the PRC, certain subsidiaries of the Company are required to set aside certain amounts to trust compensation reserve and general risk reserve to address unidentified potential impairment risks.

27. Perpetual notes

	Year ended 31 December 2021 RMB million (Audited)	Additions RMB million	Declaration RMB million	Six months ended 30 June 2022 RMB million (Unaudited)
Public medium notes (a) Public renewable corporate bonds (b) Dividends (c)	9,725 35,643 256	- - -	- - (256)	9,725 35,643 –
Total	45,624		(256)	45,368

27. Perpetual notes (Continued)

In November and December 2021, the Company redeemed the public medium notes ("Medium Notes") (category one) issued from 26 November 2018 to 27 November 2018, 11 December 2018 to 12 December 2018 and on 17 December 2018 in cash consideration of RMB1.6 billion, RMB2 billion and RMB2.2 billion, respectively.

From 26 November 2018 to 27 November 2018, 11 December 2018 to 12 December 2018 and on 17 December 2018, the Company issued three tranches of Medium Notes (category two) with an aggregate principal amount of RMB1.4 billion, RMB1 billion and RMB0.8 billion, respectively. The Medium Notes are unsecured or unquaranteed. Pursuant to the terms and conditions of the Medium Notes, the Medium Notes bear the initial interest rate of 4.8%, 4.8% and 4.8% per annum, respectively and has no maturity date. The interest rate will be reset every five years from issuance date. The interest is payable annually in arrears. As long as the compulsory interest payment events have not occurred, the Company may, at its sole discretion, elect to defer the distribution of interest, and is not subject to any restriction as to the number of times the distribution can be deferred. The Medium Notes are subject to redemption in whole, at the option of the Company, five years after the issue date, at their principal amount together with accrued interest. The Directors of the Company are of the opinion that the Group has no contractual obligation to repay the principal or to pay the distribution for the Medium Notes, the Medium Notes should be classified as equity.

From 21 November 2019 to 22 November 2019, the Company issued two tranches of Medium Notes with an aggregate principal amount of RMB2.5 billion, respectively. The Medium Notes are unsecured or unguaranteed. Pursuant to the terms and conditions of the Medium Notes, the Medium Notes bear the initial interest rate of 4.11% per annum (category one) and 4.41% per annum (category two), respectively, and has no maturity date. The interest rate will be reset every three years (category one) and every five years (category two) from issuance date. The interest is payable annually in arrears. As long as the compulsory interest payment events have not occurred, the Company may, at its sole discretion, elect to defer the distribution of interest, and is not subject to any restriction as to the number of times the distribution can be deferred. The Medium Notes are subject to redemption in whole, at the option of the Company, three years (category one) and five years (category two) after the issue date, at their principal amount together with accrued interest. The Directors of the Company are of the opinion that the Group has no contractual obligation to repay the principal or to pay the distribution for the Medium Notes, the Medium Notes should be classified as equity.

On 16 September 2020 and from 29 December 2020 to 30 December 2020, the Company issued two tranches of Medium Notes with an aggregate principal amount of RMB1.5 billion and RMB2.5 billion, respectively. The Medium Notes are unsecured or unquaranteed. Pursuant to the terms and conditions of the Medium Notes, the Medium Notes bear the initial interest rate of 4.45% per annum and 3.94% per annum, respectively, and has no maturity date. The interest rate will be reset every three years and two years, respectively, from issuance date. The interest is payable annually in arrears. As long as the compulsory interest payment events have not occurred, the Company may, at its sole discretion, elect to defer the distribution of interest, and is not subject to any restriction as to the number of times the distribution can be deferred. The Medium Notes are subject to redemption in whole, at the option of the Company, three years and two years, respectively, after the issue date, at their principal amount together with accrued interest. The Directors of the Company are of the opinion that the Group has no contractual obligation to repay the principal or to pay the distribution for the Medium Notes, the Medium Notes should be classified as equity.

27. Perpetual notes (Continued)

In October, November and December 2021, the Company redeemed four tranches of the public renewable corporate bonds ("Renewable Bonds") (category one) issued on 5 November 2018, 14 November 2018, 26 November 2018, 17 December 2018 and 28 October 2020 in cash consideration of RMB2.3 billion, RMB1.2 billion, RMB1.6 billion, RMB1.2 billion and RMB0.9 billion, respectively.

On 5 November 2018, 14 November 2018, 26 November 2018 and 17 December 2018, the Company issued four tranches of Renewable Bonds (category two) with an aggregate principal amount of RMB0.7 billion, RMB1.8 billion, RMB1.4 billion and RMB0.8 billion, respectively. The Renewable Bonds are unsecured or unguaranteed and listed on the Shanghai Stock Exchange by way of bond issues to qualified investors. Pursuant to the terms and conditions of the Renewable Bonds, the Renewable Bonds bear the initial interest rate of 4.99%, 4.90%, 4.80% and 4.78% per annum, respectively, and has no maturity date. The interest rate will be reset every five years from the issuance date. The interest is payable annually in arrears. As long as the compulsory interest payment events have not occurred, the Company may, at its sole discretion, elect to defer the distribution of interest, and is not subject to any restriction as to the number of times the distribution can be deferred. The Renewable Bonds are subject to redemption in whole, at the option of the Company, five years after the issue date, at their principal amount together with accrued interest. The Directors of the Company are of the opinion that the Group has no contractual obligation to repay the principal or to pay the distribution for the Renewable Bonds, the Renewable Bonds should be classified as equity.

On 26 May 2020, 23 June 2020, 23 July 2020 and 18 August 2020, the Company issued four tranches of Renewable Bonds with an aggregate principal amount of RMB2.6 billion, RMB1 billion, RMB3.5 billion, RMB3.5 billion, respectively. The Renewable Bonds are unsecured or unguaranteed and listed on the Shanghai Stock Exchange by way of bond issues to qualified investors. Pursuant to the terms and conditions of the Renewable Bonds, the Renewable Bonds bear the initial interest rate of 3.11%, 3.60%, 3.95% and 3.95% per annum, respectively, and has no maturity date. The interest rate will be reset every three years from the issuance date. The interest is payable annually in arrears. As long as the compulsory interest payment events have not occurred, the Company may, at its sole discretion, elect to defer the distribution of interest, and is not subject to any restriction as to the number of times the distribution can be deferred. The Renewable Bonds are subject to redemption in whole, at the option of the Company, three years after the issue date, at their principal amount together with accrued interest. The Directors of the Company are of the opinion that the Group has no contractual obligation to repay the principal or to pay the distribution for the Renewable Bonds, the Renewable Bonds should be classified as equity.

27. Perpetual notes (Continued)

(b) (Continued)

On 15 June 2020, 16 October 2020 and 28 October 2020, the Company issued three tranches of Renewable Bonds with an aggregate principal amount of RMB3.5 billion, RMB3 billion and RMB2 billion, respectively. The Renewable Bonds are unsecured or unquaranteed and listed on the Shanghai Stock Exchange by way of bond issues to qualified investors. Pursuant to the terms and conditions of the Renewable Bonds, the Renewable Bonds bear the initial interest rate of 3.50% and 4.20% per annum (category one), respectively, and 3.99%, 4.47% and 3.94% per annum (category two), respectively, and has no maturity date. The interest rate will be reset every three years and two years (category one), respectively, and every five years, three years and two years (category two), respectively, from the issuance date. The interest is payable annually in arrears. As long as the compulsory interest payment events have not occurred, the Company may, at its sole discretion, elect to defer the distribution of interest, and is not subject to any restriction as to the number of times the distribution can be deferred. The Renewable Bond are subject to redemption in whole, at the option of the Company, three years and two years (category one), respectively and five years, three years and two years (category two), respectively after the issue date, at their principal amount together with accrued interest. The Directors of the Company are of the opinion that the Group has no contractual obligation to repay the principal or to pay the distribution for the Renewable Bond, the Renewable Bond should be classified as equity.

On 2 June 2021, 17 June 2021, 9 November 2021 and 23 November 2021, the Company issued four tranches Renewable Bonds with an aggregate principal amount of RMB3 billion, RMB3 billion, RMB3 billion and RMB2.9 billion respectively. The Renewable Bonds are unsecured or unguaranteed and listed on the Shanghai Stock Exchange by way of bond issues to qualified investors. Pursuant to the terms and conditions of the Renewable Bonds, the Renewable Bonds bear the initial interest rate of 3.63%, 3.73%, 3.15% and 3.14% per annum (category one), respectively, and 3.85%, 4.05%, 3.37% and 3.30% per annum (category two), respectively, and has no maturity date. The interest rate will be reset every three years, three years, two years and two years (category one), respectively and every five years, five years, three years and three years (category two), respectively from the issuance date. The interest is payable annually in arrears. As long as the compulsory interest payment events have not occurred, the Company may, at its sole discretion, elect to defer the distribution of interest, and is not subject to any restriction as to the number of times the distribution can be deferred. The Renewable Bonds are subject to redemption in whole, at the option of the Company, three years, three years, two years and two years (category one), respectively and five years, five years, three years and three years (category two), respectively, after the issue date, at their principal amount together with accrued interest. The Directors of the Company are of the opinion that the Group has no contractual obligation to repay the principal or to pay the distribution for the Renewable Bonds, the Renewable Bonds should be classified as equity.

For the six months period ended 30 June 2022, as a consequence of the compulsory interest payment event, i.e. the final dividend declared to the shareholders of the Company, the Company declared dividends to perpetual notes holders totaling RMB1,799 million, including the interest of RMB1,543 million which was generated during the period was deducted from retained earnings, and RMB256 million represented the accrued interest in the balance of perpetual notes as at 31 December 2021.

28. Trade and other payables

	As at		
	30 June 2022	31 December 2021	
	RMB million	RMB million	
	(Unaudited)	(Audited)	
Trade and bills payables <i>(a)</i>	441,890	405,520	
Dividend payables	7,201	702	
Other taxes	3,880	4,100	
Accrued payroll and welfare	3,838	4,622	
Deposits (b)	1,132	1,048	
Deposits received in advance	1,533	3,243	
Advance from customers	775	446	
Other payables	139,027	112,993	
	599,276	532,674	
Analysed for reporting purposes as:			
Non-currents	20,684	10,263	
Current	578,592	522,411	
		,	
	599,276	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 RMB11,342 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.

The ageing analysis of trade and bills payables (including amounts due to related parties of trading nature) based on invoice date is as follows:

	As at	
	30 June 2022 RMB million (Unaudited)	31 December 2021 RMB million (Audited)
Less than 1 year 1 year to 2 years 2 years to 3 years More than 3 years	400,411 22,799 9,133 9,547	370,538 19,622 9,274 6,086
	441,890	405,520

28. Trade and other payables (Continued)

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%.

29. Borrowings

	As at		
	30 June 2022 RMB million (Unaudited)	31 December 2021 RMB million (Audited)	
Bank borrowings:			
Secured	96,572	81,976	
Unsecured	214,195	152,824	
	310,767	234,800	
Long-term debentures, unsecured	50,512	55,007	
Other borrowings: Secured Unsecured	3,320 22,297	1,992 20,128	
	25,617	22,120	
	386,896	311,927	
Analysed for reporting purposes:			
Non-current	252,915	198,503	
Current	133,981	113,424	
	386,896	311,927	

(a) Bank borrowings carry interest at rates ranging from 0.75% to 6.90% (31 December 2021: 0.75% to 9.50%) per annum.

Long-term debentures were issued at fixed rates ranging from 2.28% to 4.80% (31 December 2021: 2.14% to 4.50%) per annum.

Other borrowings carry interest at rates ranging from 3.00% to 6.90% (31 December 2021: 2.35%) per annum.

29. Borrowings (Continued)

(b) Movements in borrowings is analysed as follows:

	RMB million (Unaudited)
Six months ended 30 June 2022	
Opening amount as at 1 January 2022 Proceeds from borrowings Acquisition of subsidiaries Repayments of borrowings and interests Net foreign exchange gains on borrowings Accrued interest on borrowings Others	311,927 144,279 247 (79,295) 80 6,790 2,868
Closing amount as at 30 June 2022	386,896

	RMB million (Unaudited)
Six months ended 30 June 2021	
Opening amount as at 1 January 2021	250,055
Proceeds from borrowings	117,775
Acquisition of subsidiaries	503
Repayments of borrowings and interests	(59,962)
Disposal of subsidiaries	(9,418)
Net foreign exchange losses on borrowings	(32)
Accrued interest on borrowings	5,418
Closing amount as at 30 June 2021	304,339

⁽c) As at 30 June 2022, the Group has undrawn borrowing facilities of RMB1,304,973 million (31 December 2021: RMB1,201,491 million).

29. Borrowings (Continued)

(d) The details of secured borrowings are set out below:

	As at				
	30 June 2022 31 Dece		31 Decem	ember 2021	
		Carrying amount		Carrying amount	
	(of pledged assets		of pledged assets	
		and contract		and contract	
	Secured	value of	Secured	value of	
	borrowings	certain rights	borrowings	certain rights	
	RMB million	RMB million	RMB million	RMB million	
	(Unaudited)	(Unaudited)	(Audited)	(Audited)	
Property, plant and equipment (Note 16)	1,837	4.695	295	1,715	
Intangible assets (Note 17)	54,171	82,614	45,894	64,728	
Properties under development			, , ,	,	
for sale (Note 18)	6,885	17,436	7,699	30,698	
Trade and bills receivables (Note 22)	19	19	221	221	
Trade receivables from					
subsidiaries of the Group	24	375	34	375	
Contract assets (Note 21)	34,515	60,444	29,825	48,320	
			·		
	97,451	165,583	83,968	146,057	

Besides, the Group has secured borrowings, with amount of RMB2,441 million, were secured by the future collection right of the subsidiaries of the Group.

30. Contingencies liabilities

	As at	
	30 June 2022 RMB million (Unaudited)	31 December 2021 RMB million (Audited)
Pending lawsuits <i>(a)</i> – arising in the ordinary course of business	5,388	5,256

(a) The Group has been named 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 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.

31. Commitments

(a) Capital expenditure

Capital expenditure contracted for but not yet incurred at the balance sheet date is as follows:

	As at	
	30 June 2022	31 December 2021
	RMB million	RMB million
	(Unaudited)	(Audited)
Property, plant and equipment	115	2,418

31. Commitments (Continued)

(b) Investment commitment

According to relevant agreements, the Group has the following commitments:

	As	As at	
	30 June 2022	31 December 2021	
	RMB million	RMB million	
	(Unaudited)	(Audited)	
Investment commitment to associates, joint ventures and others	59,181	53,024	

It includes the Group's investment in certain mining projects (including development and construction expenditures) of an associate in the Democratic Republic of the Congo pursuant to co-operation agreements signed between the co-operation partners. Since the signing of relevant co-operation agreements, the co-operation partners have carried out continuous negotiation on the details of the cooperation and gradually promoted the mining development and infrastructure construction. The amount of investment commitment disclosed above was based on the latest situation of the mining projects which is subject to change based on the projects progress in the future.

32. Related-party transactions

The Company is controlled by the following entity:

Name	Relationship	Place of incorporation and operation	As	p interest at 31 December 2021
CREC	Parent and ultimate holding company	PRC	46.93%	47.21%

The Company is controlled by CREC, the parent company and a state-owned enterprise established in the PRC. CREC is controlled by the PRC government (CREC and its subsidiaries other than the Group are referred to as the "CREC Group"). The Group operates in an economic environment currently predominated by entities controlled, jointly controlled or under significant influence by the PRC government ("government-related entities").

During the period, the Group had transactions with government-related entities including, but not limited to, the provision of infrastructure construction services, survey, design and consulting services and sales of goods. The Directors consider that the transactions with these government-related entities are activities in the ordinary course of the Group's business and that the dealings of the Group have not been significantly or unduly affected by the fact that the Group and these government-related entities are ultimately controlled or owned by the PRC government. The Group has also established pricing policies for services and products, and such pricing policies do not depend on whether or not the customers are government-related entities. For the purpose of the related party transaction disclosures, management believes that meaningful information relating to related party transactions has been adequately disclosed.

32. Related-party transactions (Continued)

The following is a summary of significant related party transactions between the Group and its related parties during the period and balances arising from related party transactions at the end of the reporting period.

Significant related party transactions

The following transactions were carried out with related parties other than government-related entities:

	Six months e 2022 RMB million (Unaudited)	nded 30 June 2021 RMB million (Unaudited)
Transactions with the CREC Group - Rental expense - Interest income - Interest expense - Provision of borrowings - Repayment of borrowings - Service expenses paid	3 23 5 1,100 750 9	6 35 7 750 1,500
Transactions with joint ventures - Revenue from construction contracts - Revenue from sales of goods - Rental income - Rental expense - Interest income - Interest expense - Proceeds of borrowings - Lending funds - Repayment of borrowings - Purchases	11,603 150 2 22 81 1 39 200 1,586 620	15,940 166 - - 177 3 - 852 1,300 634
Transactions with associates - Revenue from construction contracts - Revenue from sales of goods - Rental income - Interest income - Interest expense - Lending funds - Repayment of borrowings - Purchases	9,851 1,676 - 54 - 4 124 6,754	10,741 1,112 2 159 1 56 52 4,229

These transactions are carried out on terms agreed with the counter parties in the ordinary course of business.

(b) Key management compensation

The remuneration of Directors and other members of key management during the year were as follows:

	Six months ended 30 June 2022 2021 RMB'000 RMB'000	
Basic salaries, housing allowances and other allowances Contributions to pension plans Others	(Unaudited) 2,339 339 1,363	(Unaudited) 2,344 314 1,282
	4,041	3,940

32. Related-party transactions (Continued)

(c) Balances with related parties

	As at	
	30 June 2022	31 December 2021
	RMB million	RMB million
	(Unaudited)	(Audited)
Balances with the CREC Group		
Trade and bills receivables	5	18
Other financial assets at amortised cost	1,330	980
Other payables	290	287
Deposits	525	748
Right-of-use assets	4	7
Advance from customers	1	_
Lease liabilities	4	7
Balances with joint ventures		
Trade and bills receivables	2,108	3,880
Other receivables	296	287
Advance to suppliers	30	22
Other financial assets at amortised cost	6,729	9,030
Contract assets	1,107	1,143
Trade payables	892	1,189
Other payables	92	149
Contract liabilities	3,407	6,337
Advance from customers	65	131
Deposits	42	1,300
Balances with associates		
Trade and bills receivables	4,909	4,623
Other receivables	4,909	138
Other financial assets at amortised cost	3,428	637
Contract assets	4,334	3,870
Advance to suppliers	325	71
Trade payables	1,692	1,153
Other payables	498	492
Contract liabilities	2,018	1,861
Advance from customers	12	2
Deposits	42	211

32. Related-party transactions (Continued)

(d) Guarantees

	As at	
	30 June 2022	31 December 2021
	RMB million	RMB million
	(Unaudited)	(Audited)
Outstanding loan guarantees provided by the		
Group to		
– Joint ventures	4,777	2,969
– Associates	1,815	4,730
 Government-related entities 	475	480
Outstanding debentures guarantees provided by		
CREC to the Group	3,500	3,500

33. Events after the reporting period

On July 2022, China Railway Xunjie Co., Limited, a subsidiary of the Company, has issued the corporate bond in a principal amount of USD0.5 billion with the maturity date of 6 July 2027. The interest rate is 4% per annum, payable semi-annually.

On 2 August 2022, the Company has issued the first tranche of the medium-term notes in 2022 in a principal amount of RMB3 billion, with a maturity date of 3 August 2025. The interest rate is 2.58% per annum, payable annually.

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