



Ernst & Young
27/F, One Taikoo Place
979 King's Road
Quarry Bay, Hong Kong

安永會計師事務所
香港鰂魚涌英皇道 979 號
太古坊一座 27 樓

Tel 電話: +852 2846 9888
Fax 傳真: +852 2868 4432
ey.com

The Directors

Beijing Shougang LanzaTech Technology Co., Ltd.
Guotai Junan Capital Limited

ACCOUNTANTS' REPORT ON HISTORICAL FINANCIAL INFORMATION TO THE DIRECTORS OF BEIJING SHOUGANG LANZATECH TECHNOLOGY CO., LTD. AND GUOTAI JUNAN CAPITAL LIMITED

Introduction

We report on the historical financial information of Beijing Shougang LanzaTech Technology Co., Ltd. (the "Company") and its subsidiaries (together, the "Group") set out on pages I-4 to I-78, which comprises the consolidated statements of profit or loss and other comprehensive income, statements of changes in equity and statements of cash flows of the Group for each of the years ended 31 December 2022, 2023 and 2024 (the "Relevant Periods"), and the consolidated statements of financial position of the Group and the statements of financial position of the Company as at 31 December 2022, 2023 and 2024 and material accounting policy information and other explanatory information (together, the "Historical Financial Information"). The Historical Financial Information set out on pages I-4 to I-78 forms an integral part of this report, which has been prepared for inclusion in the prospectus of the Company dated 30 June 2025 (the "Prospectus") in connection with the initial listing of the shares of the Company on the Main Board of The Stock Exchange of Hong Kong Limited (the "Stock Exchange").

Directors' responsibility for the Historical Financial Information

The directors of the Company are responsible for the preparation of the Historical Financial Information that gives a true and fair view in accordance with the basis of preparation set out in note 2.1 to the Historical Financial Information, and for such internal control as the directors determine is necessary to enable the preparation of the Historical Financial Information that is free from material misstatement, whether due to fraud or error.

Reporting accountants' responsibility

Our responsibility is to express an opinion on the Historical Financial Information and to report our opinion to you. We conducted our work in accordance with Hong Kong Standard on Investment Circular Reporting Engagements 200 *Accountants' Reports on Historical Financial Information in Investment Circulars* issued by the Hong Kong Institute of Certified Public Accountants ("HKICPA"). This standard requires that we comply with ethical standards and plan and perform our work to obtain reasonable assurance about whether the Historical Financial Information is free from material misstatement.



Our work involved performing procedures to obtain evidence about the amounts and disclosures in the Historical Financial Information. The procedures selected depend on the reporting accountants' judgement, including the assessment of risks of material misstatement of the Historical Financial Information, whether due to fraud or error. In making those risk assessments, the reporting accountants consider internal control relevant to the entity's preparation of the Historical Financial Information that gives a true and fair view in accordance with the basis of preparation set out in note 2.1 to the Historical Financial Information, in order to design procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Our work also included evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by the directors, as well as evaluating the overall presentation of the Historical Financial Information.

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

Opinion

In our opinion, the Historical Financial Information gives, for the purposes of the accountants' report, a true and fair view of the financial position of the Group and the Company as at 31 December 2022, 2023 and 2024 and of the financial performance and cash flows of the Group for each of the Relevant Periods in accordance with the basis of preparation set out in note 2.1 to the Historical Financial Information.



Report on matters under the Rules Governing the Listing of Securities on the Stock Exchange and the Companies (Winding Up and Miscellaneous Provisions) Ordinance

Adjustments

In preparing the Historical Financial Information, no adjustments to the Underlying Financial Statements as defined on page I-4 have been made.

Dividends

We refer to note 11 to the Historical Financial Information which states that no dividends have been paid by the Company in respect of the Relevant Periods.

A stylized, handwritten signature of 'Ernst & Young' in black ink.

Certified Public Accountants

Hong Kong

30 June 2025

I HISTORICAL FINANCIAL INFORMATION**Preparation of Historical Financial Information**

Set out below is the Historical Financial Information which forms an integral part of this accountants' report.

The financial statements of the Group for the Relevant Periods, on which the Historical Financial Information is based, were audited by Ernst & Young in accordance with Hong Kong Standards on Auditing issued by the HKICPA (the "Underlying Financial Statements").

The Historical Financial Information is presented in Renminbi ("RMB") and all values are rounded to the nearest thousand (RMB'000) except when otherwise indicated.

CONSOLIDATED STATEMENTS OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME

	Notes	Year ended 31 December		
		2022	2023	2024
		RMB'000	RMB'000	RMB'000
REVENUE	5	389,512	592,551	563,611
Cost of sales		(335,459)	(574,839)	(656,956)
Cost of sales of goods and services .		(328,895)	(504,687)	(594,296)
Maintenance and cultivation costs . .		(6,564)	(70,152)	(62,660)
Gross profit/(loss)		54,053	17,712	(93,345)
Finance income		6,925	5,801	2,259
Other income and gains	5	6,248	15,504	11,647
Selling and marketing expenses		(261)	(692)	(546)
Administrative expenses		(45,697)	(82,709)	(86,945)
Research and development expenses . .		(29,501)	(35,948)	(42,025)
Impairment losses on financial assets, net		(114)	(167)	(1,740)
Other expenses		(5,699)	(2,047)	(143)
Finance costs	7	(9,589)	(26,847)	(34,227)
LOSS BEFORE TAX	6	(23,635)	(109,393)	(245,065)
Income tax expense	10	(220)	(754)	(503)
LOSS FOR THE YEAR		(23,855)	(110,147)	(245,568)
Loss attributable to:				
Owners of the parent		(20,455)	(66,447)	(137,408)
Non-controlling interests		(3,400)	(43,700)	(108,160)
		<u>(23,855)</u>	<u>(110,147)</u>	<u>(245,568)</u>
LOSS PER SHARE				
ATTRIBUTABLE TO ORDINARY				
EQUITY HOLDERS OF				
THE PARENT				
Basic and diluted (RMB)	12	<u>(0.07)</u>	<u>(0.18)</u>	<u>(0.38)</u>
TOTAL COMPREHENSIVE				
INCOME FOR THE YEAR		(23,855)	(110,147)	(245,568)
Attributable to:				
Owners of the parent		(20,455)	(66,447)	(137,408)
Non-controlling interests		(3,400)	(43,700)	(108,160)
		<u>(23,855)</u>	<u>(110,147)</u>	<u>(245,568)</u>

CONSOLIDATED STATEMENTS OF FINANCIAL POSITION

		As at 31 December		
	Notes	2022	2023	2024
		RMB'000	RMB'000	RMB'000
NON-CURRENT ASSETS				
Property, plant and equipment	13	2,051,474	2,194,552	2,140,963
Right-of-use assets	14	64,758	111,496	102,004
Intangible assets	15	23,317	28,849	29,223
Prepayments, other receivables and other assets	20	18,864	15,338	3,792
Total non-current assets		2,518,413	2,350,235	2,275,982
CURRENT ASSETS				
Inventories	18	33,967	64,649	64,867
Trade and bills receivables	19	4,595	2,946	41,535
Prepayments, other receivables and other assets	20	39,405	29,089	31,161
Due from related companies	33	8,597	10,246	2,324
Income tax recoverable		228	2,508	2,375
Pledged deposits	21,33	43,754	37,469	31,051
Restricted cash	21	3,000	—	86
Cash and cash equivalents	21,33	503,928	183,371	111,191
Total current assets		637,474	330,278	284,590
CURRENT LIABILITIES				
Trade and bills payables	22	37,854	90,559	207,746
Other payables and accruals	23	327,260	317,909	242,949
Contract liabilities	24	12,622	8,172	3,237
Due to related companies	33	163,732	172,551	166,232
Interest-bearing bank and other borrowings	25,33	125,169	161,995	269,954
Lease liabilities	14,33	2,997	3,669	2,691
Income tax payable		62	—	—
Deferred income	26	4,848	8,130	2,892
Total current liabilities		674,544	762,985	895,701
NET CURRENT LIABILITIES		(37,070)	(432,707)	(611,111)
TOTAL ASSETS LESS CURRENT LIABILITIES				
		2,121,343	1,917,528	1,664,871

		As at 31 December		
	Notes	2022	2023	2024
		RMB'000	RMB'000	RMB'000
NON-CURRENT LIABILITIES				
Interest-bearing bank and other borrowings	25,33	828,789	705,270	677,513
Lease liabilities	14,33	6,622	3,920	1,794
Deferred income	26	31,850	29,195	52,020
Deferred tax liabilities	17	73	43	12
Total non-current liabilities		867,334	738,428	731,339
Net assets		1,254,009	1,179,100	933,532
EQUITY				
Equity attributable to owners of the parent				
Share capital	27	360,000	360,000	360,000
Reserves	29	641,955	579,243	441,972
		1,001,955	939,243	801,972
Non-controlling interests		252,054	239,857	131,560
Total equity		1,254,009	1,179,100	933,532

CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY

Year ended 31 December 2022

	Attributable to owners of the parent								
	Share capital	Share premium and other reserve*	Awarded share reserve*	Statutory surplus reserve*	Special reserve*	Accumulated losses*	Total	Non-controlling interests	Total equity
	RMB'000 Note 27	RMB'000 Note 29	RMB'000 Note 29	RMB'000 Note 29	RMB'000 Note 29	RMB'000	RMB'000	RMB'000	RMB'000
As at 1 January 2022	257,755	618,497	210	–	43	(154,127)	722,378	163,543	885,921
Loss for the year	–	–	–	–	–	(20,455)	(20,455)	(3,400)	(23,855)

	Attributable to owners of the parent								
	Share capital	Share premium and other reserve*	Awarded share reserve*	Statutory surplus reserve*	Special reserve*	Accumulated losses*	Total	Non-controlling interests	Total equity
	RMB'000 Note 27	RMB'000 Note 29	RMB'000 Note 29	RMB'000 Note 29	RMB'000 Note 29	RMB'000	RMB'000	RMB'000	RMB'000
Total comprehensive income for the year	—	—	—	—	—	—	(20,455)	(3,400)	(23,855)
Equity-settled share-based payment expense (note 28)	—	—	603	—	—	—	603	—	603
Shareholders' capital injection . . .	19,331	280,669	—	—	—	—	300,000	—	300,000
Capital injection from non-controlling shareholders . . .	—	—	—	—	—	—	—	91,340	91,340
Appropriation to statutory surplus reserve	—	—	—	3,883	—	—	(3,883)	—	—
Transfer from share premium (note 27)	82,914	(82,914)	—	—	—	—	—	—	—
Appropriation and utilisation of special reserve	—	—	—	—	1,142	(1,713)	(571)	571	—
As at 31 December 2022	360,000	816,252	813	3,883	1,185	(180,178)	1,001,955	252,054	1,254,009

Year ended 31 December 2023

	Attributable to owners of the parent								
	Share capital	Share premium and other reserve*	Awarded share reserve*	Statutory surplus reserve*	Special reserve*	Accumulated losses*	Total	Non-controlling interests	Total equity
	RMB'000 Note 27	RMB'000 Note 29	RMB'000 Note 29	RMB'000 Note 29	RMB'000 Note 29	RMB'000	RMB'000	RMB'000	RMB'000
As at 1 January 2023	360,000	816,252	813	3,883	1,185	(180,178)	1,001,955	252,054	1,254,009
Loss for the year	—	—	—	—	—	(66,447)	(66,447)	(43,700)	(110,147)
Total comprehensive income for the year	—	—	—	—	—	(66,447)	(66,447)	(43,700)	(110,147)
Equity-settled share-based payment expense (note 28)	—	—	3,981	—	—	—	3,981	—	3,981
Capital injection from non-controlling shareholders	—	—	—	—	—	—	—	31,257	31,257
Appropriation to statutory surplus reserve	—	—	—	2,313	—	(2,313)	—	—	—
Appropriation and utilisation of special reserve	—	—	—	—	(169)	(77)	(246)	246	—
As at 31 December 2023	360,000	816,252	4,794	6,196	1,016	(249,015)	939,243	239,857	1,179,100

Year ended 31 December 2024

Attributable to owners of the parent									
	Share capital	Share premium and other reserve*	Awarded share reserve*	Statutory surplus reserve*	Special reserve*	Accumulated losses*	Total	Non-controlling interests	Total equity
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
	Note 27	Note 29	Note 29	Note 29	Note 29				
As at 1 January 2024	360,000	816,252	4,794	6,196	1,016	(249,015)	939,243	239,857	1,179,100
Loss for the year	—	—	—	—	—	(137,408)	(137,408)	(108,160)	(245,568)
Total comprehensive income for the year	—	—	—	—	—	(137,408)	(137,408)	(108,160)	(245,568)
Appropriation and utilisation of special reserve	—	—	—	—	332	(195)	137	(137)	—
As at 31 December 2024	360,000	816,252	4,794	6,196	1,348	(386,618)	801,972	131,560	933,532

* These reserve accounts represent the total consolidated reserves of RMB641,955,000, RMB579,243,000 and RMB441,972,000 in the consolidated statements of financial position as at 31 December 2022, 2023 and 2024, respectively.

CONSOLIDATED STATEMENTS OF CASH FLOWS

		Year ended 31 December		
	Notes	2022	2023	2024
		RMB'000	RMB'000	RMB'000
CASH FLOWS (USED IN)/FROM OPERATING ACTIVITIES				
Loss before tax		(23,635)	(109,393)	(245,065)
Adjustments for:				
Depreciation of property, plant and equipment	6,13	48,869	97,116	119,499
Depreciation of right-of-use assets. . . .	6,14	4,929	9,061	9,639
Amortisation of intangible assets.	6,15	1,779	2,383	2,985
Impairment losses on financial assets, net		114	167	1,740
Impairment losses on property, plant and equipment	6,13	5,336	—	—
Write-down of inventories to net realisable value	6,18	—	8,035	16,086
Finance costs.	7	9,589	26,847	34,227
Interest income		(6,925)	(5,801)	(2,259)
Employee share-based compensation benefits	6,28	603	3,981	—
(Gain)/loss on a lease term termination.		(42)	—	4
(Gain)/loss on disposal of items of property, plant and equipment	5	—	(1,592)	4
		<u>40,617</u>	<u>30,804</u>	<u>(63,140)</u>
Increase in inventories.		(11,077)	(38,717)	(16,304)
(Increase)/decrease in trade and bills receivables		(793)	1,582	(40,134)
Decrease in prepayments, other receivables and other assets		33,992	10,338	2,373
(Increase)/decrease in amounts due from related companies		(1,547)	(1,756)	8,038
Decrease/(increase) in pledged deposits		989	(1,680)	(9,050)
(Increase)/decrease in restricted cash. .		(3,000)	3,000	(86)
Increase in trade and bills payables . .		15,898	52,705	117,187
Increase/(decrease) in other payables and accruals.		7,046	(59,085)	(2,869)
Increase/(decrease) in contract liabilities		1,885	(4,450)	(4,935)

	<i>Notes</i>	Year ended 31 December		
		2022	2023	2024
		<i>RMB'000</i>	<i>RMB'000</i>	<i>RMB'000</i>
Increase/(decrease) in amounts due to related companies		3,751	(6,515)	8,779
Increase in deferred income		<u>8,722</u>	<u>627</u>	<u>17,587</u>
Cash generated from/(used in) operations		<u>96,483</u>	<u>(13,147)</u>	<u>17,446</u>
Interest received		6,925	5,787	2,263
Income tax refunded/(paid)		<u>1,225</u>	<u>(3,126)</u>	<u>(401)</u>
Net cash flows from/(used in) operating activities		<u>104,633</u>	<u>(10,486)</u>	<u>19,308</u>
CASH FLOWS USED IN INVESTING ACTIVITIES				
Purchases of items of property, plant, equipment and leasehold land		(805,840)	(212,536)	(141,557)
Purchase of intangible assets		<u>(8,121)</u>	<u>(7,915)</u>	<u>(3,359)</u>
Net cash flows used in investing activities		<u>(813,961)</u>	<u>(220,451)</u>	<u>(144,916)</u>
CASH FLOWS FROM/(USED IN) FINANCING ACTIVITIES				
Capital injection from non-controlling shareholders		91,340	31,257	—
Capital injection from the Company's shareholders		300,000	—	—
Lease payments		(4,321)	(8,493)	(3,585)
Proceeds from interest-bearing bank and other borrowings		809,028	35,000	277,742
Repayment of interest-bearing bank and other borrowings		(95,500)	(121,519)	(197,519)
Interest paid		(23,606)	(33,830)	(33,918)
Payments of listing expenditure		—	—	(4,760)
(Increase)/decrease in pledged deposits		<u>(30,433)</u>	<u>7,965</u>	<u>15,468</u>
Net cash flows from/(used in) financing activities		<u>1,046,508</u>	<u>(89,620)</u>	<u>53,428</u>

		Year ended 31 December		
	Notes	2022	2023	2024
		RMB'000	RMB'000	RMB'000
NET INCREASE/(DECREASE) IN CASH AND CASH EQUIVALENTS				
Cash and cash equivalents at beginning of year		337,180	(320,557)	(72,180)
Cash and cash equivalents at end of year		166,748	503,928	183,371
		503,928	183,371	111,191
ANALYSIS OF BALANCES OF CASH AND CASH EQUIVALENTS				
Cash and bank balances	21	550,682	220,840	142,328
Less: Restricted cash	21	(3,000)	—	(86)
Pledged deposits	21	(43,754)	(37,469)	(31,051)
Cash and cash equivalents as stated in the statements of cash flows and statements of financial position		503,928	183,371	111,191

STATEMENTS OF FINANCIAL POSITION OF THE COMPANY

		As at 31 December		
	Notes	2022	2023	2024
		RMB'000	RMB'000	RMB'000
NON-CURRENT ASSETS				
Property, plant and equipment	13	25,320	26,495	31,273
Right-of-use assets	14	8,720	6,332	3,549
Intangible assets	15	21,269	22,667	20,424
Investment in subsidiaries	16	535,200	537,404	544,404
Prepayments, other receivables and other assets	20	2,699	953	1,222
Due from subsidiaries	33	230,000	200,000	230,000
Total non-current assets		823,208	793,851	830,872
CURRENT ASSETS				
Inventories	18	811	571	296
Trade and bills receivables	19	—	—	24,225
Due from subsidiaries	33	326,242	550,643	653,765
Due from related companies	33	2,640	3,732	—
Prepayments, other receivables and other assets	20	1,185	1,993	6,466
Income tax recoverable		—	789	1,688
Cash and cash equivalents	21	319,298	134,788	71,158
Total current assets		650,176	692,516	757,598
CURRENT LIABILITIES				
Trade payables	22	143	143	515
Other payables and accruals	23	7,630	8,285	12,258
Due to related companies	33	6,292	9,246	9,903
Due to subsidiaries	33	6,866	6	7,329
Interest-bearing bank and other borrowings	25	254	30,209	130,289
Lease liabilities	14	2,566	2,987	1,993
Deferred income	26	1,846	4,068	—
Total current liabilities		25,597	54,944	162,287
NET CURRENT ASSETS		624,579	637,572	795,311
TOTAL ASSETS LESS CURRENT LIABILITIES		1,447,787	1,431,423	1,426,183
NON-CURRENT LIABILITIES				
Interest-bearing bank and other borrowings	25	230,000	200,000	230,000
Lease liabilities	14	5,739	3,084	1,532
Deferred income	26	4,491	—	785
Deferred tax liabilities	17	62	39	3
Total non-current liabilities		240,292	203,123	232,320
Net assets		1,207,495	1,228,300	1,193,863
EQUITY				
Share capital	27	360,000	360,000	360,000
Reserves	29	847,495	868,300	833,863
Total equity		1,207,495	1,228,300	1,193,863

II NOTES TO THE HISTORICAL FINANCIAL INFORMATION

1. CORPORATE AND GROUP INFORMATION

Beijing Shougang LanzaTech Technology Co., Ltd. (the “Company”), was incorporated as a limited liability company in the People’s Republic of China (“PRC”) on 11 November 2011. The registered office of the Company is located at Room 1601-6, 16th Floor, Building 1, No. 1 Courtyard, Tian Shunzhuang North Road, Shijingshan District, Beijing, PRC. On 12 November 2021, the Company was converted into a joint stock company with limited liability.

The Company is an investment holding company. The Company’s ultimate holding company is Shougang Group Co., Ltd.. During the Relevant Periods, the Company and its subsidiaries (collectively, the “Group”) were involved in the following principal activities:

- research and development, production and sale of ethanol and protein
- provision of low-carbon integrated solutions

As at 31 December 2024, the Company had direct interests in its subsidiaries, all of which are private limited liability companies, the particulars of which are set out below:

Name	Note	Place and date of incorporation/ registration and operations	Nominal value of issued ordinary/ registered share capital (‘000)	Percentage of equity attributable to the Company Direct %	Principal activities
Hebei Shoulang New Energy Technology Co., Ltd. (“Hebei Shoulang”) 河北首朗新能源科技有限公司	(1)	PRC/Mainland China/ 30 January 2015	RMB200,000	100	Research and development (“R&D”), manufacturing and sales of ethanol and protein
Beijing Shoulang Biotechnology Co., Ltd. (“Shoulang Biotech”) 北京首朗生物科技有限公司 . . .	(2)	PRC/Mainland China/ 27 October 2016	RMB50,000	100	R&D and sales of protein
Ningxia Shoulang Jiyuan New Energy Technology Co., Ltd. (“Ningxia Jiyuan”) 寧夏首朗吉元新能源科技有限公司.	(2)	PRC/Mainland China/ 16 May 2019	RMB200,000	58	R&D, manufacturing and sales of ethanol and protein
Guizhou Jinze New Energy Technology Co., Ltd. (“Guizhou Jinze”) 貴州金澤新能源科技有限公司	(2)	PRC/Mainland China/ 28 September 2020	RMB200,000	51	R&D, manufacturing and sales of ethanol and protein
Ningxia Binze New Energy Technology Co., Ltd. (“Ningxia Binze”) 寧夏濱澤新能源科技有限公司	(2)	PRC/Mainland China/ 11 November 2020	RMB220,000	51	R&D, manufacturing and sales of ethanol and protein

The English names of all group companies registered in the PRC represent the best efforts made by the management of the Company to translate the Chinese names of these companies as they do not have official English names.

Notes:

- (1) The statutory financial statements of this entity for the years ended 31 December 2022, 2023 prepared in accordance with PRC Generally Accepted Accounting Principles and regulations (“PRC GAAP”) were audited by Beijing Aisiji Accounting Firm Co., Ltd. (北京愛思濟會計師事務所有限責任公司). The statutory financial statements of this entity for the year ended 31 December 2024 prepared in accordance with PRC GAAP were audited by Beijing Tianzhenghua Certified Public Accountants (北京天正華會計師事務所(普通合夥)).
- (2) The statutory financial statements of these entities for the years ended 31 December 2022, 2023 prepared in accordance with PRC Generally Accepted Accounting Principles and regulations were audited by Beijing Aisiji Accounting Firm Co., Ltd. (北京愛思濟會計師事務所有限責任公司). No statutory financial statements of these entities for the year ended 31 December 2024 have been prepared.

2.1 BASIS OF PREPARATION

The Historical Financial Information has been prepared in accordance with International Financial Reporting Standards ("IFRSs"), which comprise all standards and interpretations approved by the International Accounting Standards Board (the "IASB"). All IFRSs effective for the accounting period commencing from 1 January 2024, together with the relevant transitional provisions, have been early adopted by the Group in the preparation of the Historical Financial Information throughout the Relevant Periods.

The Historical Financial Information has been prepared under the historical cost convention.

Going concern consideration

The Historical Financial Information has been prepared under the going concern basis notwithstanding the fact that, as at 31 December 2024, the Group recorded net current liabilities amounting to RMB611,111,000. The directors of the Company have given consideration to the future liquidity and financial resources available to the Group, which mainly include the net cash flows generated from the Group's operating activities and financial facilities, in assessing whether the Group will have sufficient financial resources to continue as a going concern and will not have any going concern issue as a result of the shortage of working capital. Considering that the Group has sufficient unutilised financial facilities of RMB1,651,000,000 as of 30 April 2025 and together with the cashflow forecast which covers a period of not less than twelve months from 31 December 2024 prepared by the management of the Group, the directors of the Company are of the opinion that the Group has sufficient financial resources to continue as a going concern for the next twelve months.

Basis of consolidation

The consolidated financial statements include the financial statements of the Group for the Relevant Periods. A subsidiary is an entity (including a structured entity), directly or indirectly, controlled by the Company. Control is achieved when the Group is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee (i.e., existing rights that give the Group the current ability to direct the relevant activities of the investee).

Generally, there is a presumption that a majority of voting rights results in control. When the Company has less than a majority of the voting or similar rights of an investee, the Group considers all relevant facts and circumstances in assessing whether it has power over an investee, including:

- (a) the contractual arrangement with the other vote holders of the investee;
- (b) rights arising from other contractual arrangements; and
- (c) the Group's voting rights and potential voting rights.

The financial statements of the subsidiaries are prepared for the same reporting period as the Company, using consistent accounting policies. The results of subsidiaries are consolidated from the date on which the Group obtains control, and continue to be consolidated until the date that such control ceases.

Profit or loss and each component of other comprehensive income are attributed to the owners of the parent of the Group and to the non-controlling interests, even if this results in the non-controlling interests having a deficit balance. All intra-group assets and liabilities, equity, income, expenses and cash flows relating to transactions between members of the Group are eliminated in full on consolidation.

The Group reassesses whether or not it controls an investee if facts and circumstances indicate that there are changes to one or more of the three elements of control described above. A change in the ownership interest of a subsidiary, without a loss of control, is accounted for as an equity transaction.

If the Group loses control over a subsidiary, it derecognises the related assets (including goodwill), liabilities, any non-controlling interest and the exchange fluctuation reserve; and recognises the fair value of any investment retained and any resulting surplus or deficit in profit or loss. The Group's share of components previously recognised in other comprehensive income is reclassified to profit or loss or retained profits, as appropriate, on the same basis as would be required if the Group had directly disposed of the related assets or liabilities.

2.2 ISSUED BUT NOT YET EFFECTIVE INTERNATIONAL FINANCIAL REPORTING STANDARDS

The Group has not applied the following new and revised IFRSs, that have been issued but are not yet effective, in the Historical Financial Information. The Group intends to apply these new and revised IFRSs, if applicable, when they become effective.

Amendments to IAS 21	Lack of Exchangeability ¹
Amendments to IFRS 9 and IFRS 7	Amendments to the Classification and Measurement of Financial Instruments ²
IFRS 18	Presentation and Disclosure in Financial Statements ³
IFRS 19	Subsidiaries without Public Accountability: Disclosures ³
Amendments to IFRS 10 and IAS 28	Sale or Contribution of Assets between an Investor and its Associate or Joint Venture ⁴
Annual Improvements to IFRS Accounting Standards – Volume 11	Amendments to IFRS 1, IFRS 7, IFRS 9, IFRS 10 and IAS 7 ²

1 Effective for annual periods beginning on or after 1 January 2025

2 Effective for annual periods beginning on or after 1 January 2026

3 Effective for annual periods beginning on or after 1 January 2027

4 No mandatory effective date yet determined but available for adoption

Further information about those IFRSs that are expected to be applicable to the Group is described below.

IFRS 18 introduces new requirements for presentation within the statement of profit or loss, including specified totals and subtotals. Furthermore, entities are required to classify all income and expenses within the statement of profit or loss into one of five categories: operating, investing, financing, income taxes and discontinued operations, whereof the first three are new. It also requires disclosure of newly defined management-defined performance measures, subtotals of income and expenses, and includes new requirements for aggregation and disaggregation of financial information based on the identified 'roles' of the primary financial statements and the notes. In addition, narrow-scope amendments have been made to IAS 7 Statement of Cash Flows, which include changing the starting point for determining cash flows from operations under the indirect method, from 'profit or loss' to 'operating profit or loss' and removing the optionality around classification of cash flows from dividends and interest. There are also consequential amendments to several other standards. IFRS 18, and the amendments to the other standards, is effective for reporting periods beginning on or after 1 January 2027, but earlier application is permitted and must be disclosed. IFRS 18 will apply retrospectively.

The Group has already commenced an assessment of the impact of the new and revised IFRSs, which are relevant to the Group's operations. According to the preliminary assessment made by the directors, no significant impact on the financial performance and financial position of the Group is expected when the new and revised IFRSs become effective.

2.3 MATERIAL ACCOUNTING POLICIES**Fair value measurement**

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The fair value measurement is based on the presumption that the transaction to sell the asset or transfer the liability takes place either in the principal market for the asset or liability, or in the absence of a principal market, in the most advantageous market for the asset or liability. The principal or the most advantageous market must be accessible by the Group. The fair value of an asset or a liability is measured using the assumptions that market participants would use when pricing the asset or liability, assuming that market participants act in their economic best interest.

A fair value measurement of a non-financial asset takes into account a market participant's ability to generate economic benefits by using the asset in its highest and best use or by selling it to another market participant that would use the asset in its highest and best use.

The Group uses valuation techniques that are appropriate in the circumstances and for which sufficient data are available to measure fair value, maximising the use of relevant observable inputs and minimising the use of unobservable inputs.

All assets and liabilities for which fair value is measured or disclosed in the financial statements are categorised within the fair value hierarchy, described as follows, based on the lowest level input that is significant to the fair value measurement as a whole:

- | | | |
|---------|---|---|
| Level 1 | – | based on quoted prices (unadjusted) in active markets for identical assets or liabilities |
| Level 2 | – | based on valuation techniques for which the lowest level input that is significant to the fair value measurement is observable, either directly or indirectly |
| Level 3 | – | based on valuation techniques for which the lowest level input that is significant to the fair value measurement is unobservable |

For assets and liabilities that are recognised in the financial statements on a recurring basis, the Group determines whether transfers have occurred between levels in the hierarchy by reassessing categorisation (based on the lowest level input that is significant to the fair value measurement as a whole) at the end of each reporting period.

Impairment of non-financial assets

Where an indication of impairment exists, or when annual impairment testing for an asset is required (other than inventories, deferred tax assets and financial assets), the asset's recoverable amount is estimated. An asset's recoverable amount is the higher of the asset's or cash-generating unit's value in use and its fair value less costs of disposal, and is determined for an individual asset, unless the asset does not generate cash inflows that are largely independent of those from other assets or groups of assets, in which case the recoverable amount is determined for the cash-generating unit to which the asset belongs.

In testing a cash-generating unit for impairment, a portion of the carrying amount of a corporate asset (e.g., a headquarters building) is allocated to an individual cash-generating unit if it can be allocated on a reasonable and consistent basis or, otherwise, to the smallest group of cash-generating units.

An impairment loss is recognised only if the carrying amount of an asset exceeds its recoverable amount. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. An impairment loss is charged to profit or loss in the period in which it arises in those expense categories consistent with the function of the impaired asset.

An assessment is made at the end of each reporting period as to whether there is an indication that previously recognised impairment losses may no longer exist or may have decreased. If such an indication exists, the recoverable amount is estimated. A previously recognised impairment loss of an asset other than goodwill is reversed only if there has been a change in the estimates used to determine the recoverable amount of that asset, but not to an amount higher than the carrying amount that would have been determined (net of any depreciation/amortisation) had no impairment loss been recognised for the asset in prior years. A reversal of such an impairment loss is credited to profit or loss in the period in which it arises.

Related parties

A party is considered to be related to the Group if:

- (a) the party is a person or a close member of that person's family and that person
 - (i) has control or joint control over the Group;
 - (ii) has significant influence over the Group; or

- (iii) is a member of the key management personnel of the Group or of a parent of the Group;
- or
- (b) the party is an entity where any of the following conditions applies:
- (i) the entity and the Group are members of the same group;
 - (ii) one entity is an associate or joint venture of the other entity (or of a parent, subsidiary or fellow subsidiary of the other entity);
 - (iii) the entity and the Group are joint ventures of the same third party;
 - (iv) one entity is a joint venture of a third entity and the other entity is an associate of the third entity;
 - (v) the entity is a post-employment benefit plan for the benefit of employees of either the Group or an entity related to the Group; and the sponsoring employers of the post-employment benefit plan;
 - (vi) the entity is controlled or jointly controlled by a person identified in (a);
 - (vii) a person identified in (a)(i) has significant influence over the entity or is a member of the key management personnel of the entity (or of a parent of the entity); and
 - (viii) the entity, or any member of a group of which it is a part, provides key management personnel services to the Group or to the parent of the Group.

Property, plant and equipment and depreciation

Property, plant and equipment, other than construction in progress, are stated at cost less accumulated depreciation and any impairment losses. The cost of an item of property, plant and equipment comprises its purchase price and any directly attributable costs of bringing the asset to its working condition and location for its intended use.

Expenditure incurred after items of property, plant and equipment have been put into operation, such as repairs and maintenance, is normally charged to profit or loss in the period in which it is incurred. In situations where the recognition criteria are satisfied, the expenditure for a major inspection is capitalised in the carrying amount of the asset as a replacement. Where significant parts of property, plant and equipment are required to be replaced at intervals, the Group recognises such parts as individual assets with specific useful lives and depreciates them accordingly.

Depreciation is calculated on the straight-line basis to write off the cost of each item of property, plant and equipment to its residual value over its estimated useful life. The principal annual rates used for this purpose are as follows:

Buildings and constructions	2% to 6%
Vehicles	19%
Machinery.	3% to 32%
Electronic devices	10% to 32%
Other equipments	10% to 32%
Leasehold improvement	20% to 60%

Where parts of an item of property, plant and equipment have different useful lives, the cost of that item is allocated on a reasonable basis among the parts and each part is depreciated separately. Residual values, useful lives and the depreciation method are reviewed, and adjusted if appropriate, at least at each financial year end.

An item of property, plant and equipment including any significant part initially recognises is derecognised upon disposal or when no future economic benefits are expected from its use or disposal. Any gain or loss on disposal or retirement recognises in profit or loss in the year the asset is derecognised is the difference between the net sales proceeds and the carrying amount of the relevant asset.

Construction in progress is stated at cost less any impairment losses, and is not depreciated. It is reclassified to the appropriate category of property, plant and equipment when completed and ready for use.

Intangible assets (other than goodwill)

Intangible assets acquired separately are measured on initial recognition at cost. The useful lives of intangible assets are assessed to be either finite or indefinite. Intangible assets with finite lives are subsequently amortised over the useful economic life and assessed for impairment whenever there is an indication that the intangible asset may be impaired. The amortisation period and the amortisation method for an intangible asset with a finite useful life are reviewed at least at the end of each financial year.

Software

Purchased software is stated at cost less any impairment losses and is amortised on the straight-line basis over its estimated useful life of 5-6 years, which is mainly determined by reference to the licensed period of the purchased software.

Patents and licences

Purchased patents and licences are stated at cost less any impairment losses and are amortised on the straight-line basis over their estimated useful lives of 10 to 20 years, which are mainly determined by reference to the period during which such assets are expected to bring economic benefits to the Group.

Research and development costs

The Group classifies the expenses for in-house research and development as research costs and development costs. All research costs are charged to profit or loss as incurred. Development costs are capitalised and deferred only when all the following conditions are met: the Group can demonstrate the technical feasibility of completing the intangible asset so that it will be available for use or sale; its intention to complete and its ability to use or sell the asset; how the asset will generate economic benefits; the availability of technical and financial resources to complete the project and procure the use or sale of the intangible asset; and the ability to measure reliably the expenditure during the development. Development costs which do not meet these criteria are recorded in profit or loss when incurred.

Where the conditions stated above are satisfied, the work of the research stage is completed, and it is certain that the intangible assets arising from the development of the project cater to market demands and the technical solutions are developed, to generate economic benefits, the Group may advance the corresponding project to the development stage after assessment, capitalise the expenses of the development stage when the capitalisation conditions are satisfied, and transfer the capitalised expenses to intangible assets when the project passes the completion acceptance to become ready for the intended use.

Deferred development costs are stated at cost less any impairment losses and are amortised using the straight-line basis over the commercial lives of the underlying products, not exceeding five to seven years, commencing from the date when the products are put into commercial production.

Leases

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

Group as a lessee

The Group applies a single recognition and measurement approach for all leases, except for short-term leases and leases of low-value assets. The Group recognises lease liabilities to make lease payments and right-of-use assets representing the right to use the underlying assets.

(a) Right-of-use assets

Right-of-use assets are recognised at the commencement date of the lease (that is the date the underlying asset is available for use). Right-of-use assets are measured at cost, less accumulated depreciation and any impairment losses, and adjusted for any remeasurement of lease liabilities. The cost of right-of-use assets includes the amount of lease liabilities recognised, initial direct costs incurred, and lease payments made at or before the commencement date less any lease incentives received. Right-of-use assets are depreciated on a straight-line basis over the shorter of the lease terms and the estimated useful lives of the assets as follows:

Leasehold land	20 to 50 years
Plant and properties	2 to 20 years
Transportation equipment	3 to 5 years

If ownership of the leased asset transfers to the Group by the end of the lease term or the cost reflects the exercise of a purchase option, depreciation is calculated using the estimated useful life of the asset.

(b) Lease liabilities

Lease liabilities are recognised at the commencement date of the lease at the present value of lease payments to be made over the lease term. The lease payments include fixed payments (including in-substance fixed payments) less any lease incentives receivable, variable lease payments that depend on an index or a rate, and amounts expected to be paid under residual value guarantees. The lease payments also include the exercise price of a purchase option reasonably certain to be exercised by the Group and payments of penalties for termination of a lease, if the lease term reflects the Group exercising the option to terminate the lease. The variable lease payments that do not depend on an index or a rate are recognised as an expense in the period in which the event or condition that triggers the payment occurs.

In calculating the present value of lease payments, the Group uses its incremental borrowing rate at the lease commencement date because the interest rate implicit in the lease is not readily determinable. After the commencement date, the amount of lease liabilities is increased to reflect the accretion of interest and reduced for the lease payments made. In addition, the carrying amount of lease liabilities is remeasured if there is a modification, a change in the lease term, a change in lease payments (e.g., a change to future lease payments resulting from a change in an index or rate) or a change in assessment of an option to purchase the underlying asset.

(c) Short-term leases and leases of low-value assets

The Group applies the short-term lease recognition exemption to its short-term leases of machinery and equipment (that is those leases that have a lease term of 12 months or less from the commencement date and do not contain a purchase option). It also applies the recognition exemption for leases of low-value assets to leases of office equipment that are considered to be of low value.

Lease payments on short-term leases and leases of low-value assets are recognised as an expense on a straight-line basis over the lease term.

Investments and other financial assets***Initial recognition and measurement***

Financial assets are classified, at initial recognition, as subsequently measured at amortised cost, fair value through other comprehensive income, and fair value through profit or loss.

The classification of financial assets at initial recognition depends on the financial asset's contractual cash flow characteristics and the Group's business model for managing them. With the exception of trade receivables that do not contain a significant financing component or for which the Group has applied the practical expedient of not adjusting the effect of a significant financing component, the Group initially measures a financial asset at its fair value plus in the case of a financial asset not at fair value through profit or loss, transaction costs. Trade receivables that do not contain a significant financing component or for which the Group has applied the practical expedient are measured at the transaction price determined under IFRS 15 in accordance with the policies set out for "Revenue recognition" below.

In order for a financial asset to be classified and measured at amortised cost or fair value through other comprehensive income, it needs to give rise to cash flows that are solely payments of principal and interest ("SPPI") on the principal amount outstanding. Financial assets with cash flows that are not SPPI are classified and measured at fair value through profit or loss, irrespective of the business model.

The Group's business model for managing financial assets refers to how it manages its financial assets in order to generate cash flows. The business model determines whether cash flows will result from collecting contractual cash flows, selling the financial assets, or both. Financial assets classified and measured at amortised cost are held within a business model with the objective to hold financial assets in order to collect contractual cash flows, while financial assets classified and measured at fair value through other comprehensive income are held within a business model with the objective of both holding to collect contractual cash flows and selling. Financial assets which are not held within the aforementioned business models are classified and measured at fair value through profit or loss.

Purchases or sales of financial assets that require delivery of assets within the period generally established by regulation or convention in the marketplace are recognised on the trade date, that is, the date that the Group commits to purchase or sell the asset.

Subsequent measurement

The subsequent measurement of financial assets depends on their classification as follows:

Financial assets at amortised cost (debt instruments)

Financial assets at amortised cost are subsequently measured using the effective interest method and are subject to impairment. Gains and losses are recognised in profit or loss when the asset is derecognised, modified or impaired.

Derecognition of financial assets

A financial asset (or, where applicable, a part of a financial asset or part of a group of similar financial assets) is primarily derecognised (i.e., removed from the Group's consolidated statement of financial position) when:

- the rights to receive cash flows from the asset have expired; or
- the Group has transferred its rights to receive cash flows from the asset or has assumed an obligation to pay the received cash flows in full without material delay to a third party under a "pass-through" arrangement; and either (a) the Group has transferred substantially all the risks and rewards of the asset, or (b) the Group has neither transferred nor retained substantially all the risks and rewards of the asset, but has transferred control of the asset.

When the Group has transferred its rights to receive cash flows from an asset or has entered into a pass-through arrangement, it evaluates if, and to what extent, it has retained the risk and rewards of ownership of the asset. When it has neither transferred nor retained substantially all the risks and rewards of the asset nor transferred control of the asset, the Group continues to recognise the transferred asset to the extent of the Group's continuing involvement. In that case, the Group also recognises an associated liability. The transferred asset and the associated liability are measured on a basis that reflects the rights and obligations that the Group has retained.

Continuing involvement that takes the form of a guarantee over the transferred asset is measured at the lower of the original carrying amount of the asset and the maximum amount of consideration that the Group could be required to repay.

Impairment of financial assets

The Group recognises an allowance for expected credit losses ("ECLs") for all debt instruments not held at fair value through profit or loss. ECLs are based on the difference between the contractual cash flows due in accordance with the contract and all the cash flows that the Group expects to receive, discounted at an approximation of the original effective interest rate. The expected cash flows will include cash flows from the sale of collateral held or other credit enhancements that are integral to the contractual terms.

General approach

ECLs are recognised in two stages. For credit exposures for which there has not been a significant increase in credit risk since initial recognition, ECLs are provided for credit losses that result from default events that are possible within the next 12 months (a 12-month ECL). For those credit exposures for which there has been a significant increase in credit risk since initial recognition, a loss allowance is required for credit losses expected over the remaining life of the exposure, irrespective of the timing of the default (a lifetime ECL).

At the end of each of the Relevant Periods, the Group assesses whether the credit risk on a financial instrument has increased significantly since initial recognition. When making the assessment, the Group compares the risk of a default occurring on the financial instrument as at the reporting date with the risk of a default occurring on the financial instrument as at the date of initial recognition and considers reasonable and supportable information that is available without undue cost or effort, including historical and forward-looking information.

The Group considers a financial asset in default when contractual payments are 360 days past due. However, in certain cases, the Group may also consider a financial asset to be in default when internal or external information indicates that the Group is unlikely to receive the outstanding contractual amounts in full before taking into account any credit enhancements held by the Group.

A financial asset is written off when there is no reasonable expectation of recovering the contractual cash flows.

Financial assets at amortised cost are subject to impairment under the general approach and they are classified within the following stages for measurement of ECLs except for trade receivables which apply the simplified approach as detailed below.

- | | | |
|---------|---|--|
| Stage 1 | – | Financial instruments for which credit risk has not increased significantly since initial recognition and for which the loss allowance is measured at an amount equal to 12-month ECLs |
| Stage 2 | – | Financial instruments for which credit risk has increased significantly since initial recognition but that are not credit-impaired financial assets and for which the loss allowance is measured at an amount equal to lifetime ECLs |
| Stage 3 | – | Financial assets that are credit-impaired at the reporting date (but that are not purchased or originated credit-impaired) and for which the loss allowance is measured at an amount equal to lifetime ECLs |

Simplified approach

For trade and bills receivables that do not contain a significant financing component or when the Group applies the practical expedient of not adjusting the effect of a significant financing component, the Group applies the simplified approach in calculating ECLs. Under the simplified approach, the Group does not track changes in credit risk, but instead recognises a loss allowance based on lifetime ECLs at each reporting date. The Group has established a provision matrix that is based on its historical credit loss experience, adjusted for forward-looking factors specific to the debtors and the economic environment.

Financial liabilities***Initial recognition and measurement***

Financial liabilities are classified, at initial recognition, as financial liabilities at fair value through profit or loss, loans and borrowings, or payables, as appropriate.

All financial liabilities are recognised initially at fair value and, in the case of loans and borrowings and payables, net of directly attributable transaction costs.

The Group's financial liabilities include trade and bills payables, other payables and accruals, other current liabilities, amounts due to related companies, lease liabilities and interest-bearing bank and other borrowings.

Subsequent measurement

The subsequent measurement of financial liabilities depends on their classification as follows:

Financial liabilities at amortised cost (trade and other payables, amounts due to related companies, and interest-bearing bank and other borrowings)

After initial recognition, trade and other payables, amounts due to related companies, and interest-bearing bank and other borrowings are subsequently measured at amortised cost, using the effective interest rate method unless the effect of discounting would be immaterial, in which case they are stated at cost. Gains and losses are recognised in profit or loss when the liabilities are derecognised as well as through the effective interest rate amortisation process.

Amortised cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the effective interest rate. The effective interest rate amortisation is included in finance costs in the statement of profit or loss.

Derecognition of financial liabilities

A financial liability is derecognised when the obligation under the liability is discharged or cancelled, or expires.

When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as a derecognition of the original liability and a recognition of a new liability, and the difference between the respective carrying amounts is recognised in profit or loss.

Offsetting of financial instruments

Financial assets and financial liabilities are offset and the net amount is reported in the statement of financial position if there is a currently enforceable legal right to offset the recognised amounts and there is an intention to settle on a net basis, or to realise the assets and settle the liabilities simultaneously.

Inventories

Inventories are stated at the lower of cost and net realisable value. Cost is determined on the weighted average basis and, in the case of work in progress and finished goods, comprises direct materials, direct labour and an appropriate proportion of overheads. Net realisable value is based on estimated selling prices less any estimated costs to be incurred to completion and disposal.

Cash and cash equivalents

Cash and cash equivalents in the statement of financial position comprise cash on hand and at banks, and short-term highly liquid deposits with a maturity of generally within three months that are readily convertible into known amounts of cash, subject to an insignificant risk of changes in value and held for the purpose of meeting short-term cash commitments.

For the purpose of the consolidated statement of cash flows, cash and cash equivalents comprise cash on hand and at banks, and short-term deposits as defined above, less bank overdrafts which are repayable on demand and form an integral part of the Group's cash management.

Income tax

Income tax comprises current and deferred tax. Income tax relating to items recognised outside profit or loss is recognised outside profit or loss, either in other comprehensive income or directly in equity.

Current tax assets and liabilities are measured at the amount expected to be recovered from or paid to the taxation authorities, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period, taking into consideration interpretations and practices prevailing in the countries in which the Group operates.

Deferred tax is provided, using the liability method, on all temporary differences at the end of the reporting period between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes.

Deferred tax liabilities are recognised for all taxable temporary differences, except:

- when the deferred tax liability arises from the initial recognition of goodwill or an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss and does not give rise to equal taxable and deductible temporary differences; and
- in respect of taxable temporary differences associated with investments in subsidiaries, associates and a joint venture, when the timing of the reversal of the temporary differences can be controlled and it is probable that the temporary differences will not reverse in the foreseeable future.

Deferred tax assets are recognised for all deductible temporary differences, and the carryforward of unused tax credits and any unused tax losses. Deferred tax assets are recognised to the extent that it is probable that taxable profit will be available against which the deductible temporary differences, and the carryforward of unused tax credits and unused tax losses can be utilised, except:

- when the deferred tax asset relating to the deductible temporary differences arises from the initial recognition of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss and does not give rise to equal taxable and deductible temporary differences; and
- in respect of deductible temporary differences associated with investments in subsidiaries, associates and a joint venture, deferred tax assets are only recognised to the extent that it is probable that the temporary differences will reverse in the foreseeable future and taxable profit will be available against which the temporary differences can be utilised.

The carrying amount of deferred tax assets is reviewed at the end of each reporting period and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be utilised. Unrecognised deferred tax assets are reassessed at the end of each reporting period and are recognised to the extent that it has become probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be recovered.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply to the period when the asset is realised or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period.

Deferred tax assets and deferred tax liabilities are offset if and only if the Group has a legally enforceable right to set off current tax assets and current tax liabilities and the deferred tax assets and deferred tax liabilities relate to income taxes levied by the same taxation authority on either the same taxable entity or different taxable entities which intend either to settle current tax liabilities and assets on a net basis, or to realise the assets and settle the liabilities simultaneously, in each future period in which significant amounts of deferred tax liabilities or assets are expected to be settled or recovered.

Government grants

Government grants are recognised at their fair value where there is reasonable assurance that the grant will be received and all attaching conditions will be complied with. When the grant relates to an expense item, it is recognised as income on a systematic basis over the periods that the costs, for which it is intended to compensate, are expensed.

Where the grant relates to an asset, the fair value is credited to a deferred income account and is released to profit or loss over the expected useful life of the relevant asset by equal annual instalments.

Where the Group receives government loans granted with no interest for the industrial support, the initial carrying amount of the government loans is determined using the effective interest rate method, as further explained in the accounting policy for "Financial liabilities" above. The benefit of the government loans granted with no or at a below-market rate of interest, which is the difference between the initial carrying value of the loans and the proceeds received, is treated as a government grant and released to profit or loss over the expected useful life of the relevant asset by equal annual instalments.

Revenue recognition***Revenue from contracts with customers***

Revenue from contracts with customers is recognised when control of goods or services is transferred to the customers at an amount that reflects the consideration to which the Group expects to be entitled in exchange for those goods or services.

When the consideration in a contract includes a variable amount, the amount of consideration is estimated to which the Group will be entitled in exchange for transferring the goods or services to the customer. The variable consideration is estimated at contract inception and constrained until it is highly probable that a significant revenue reversal in the amount of cumulative revenue recognised will not occur when the associated uncertainty with the variable consideration is subsequently resolved.

(a) Sale of products

Revenue from the sale of products is recognised at the point in time when control of the asset is transferred to the customer, generally on delivery of the products.

(b) Provision of low-carbon integrated solutions

Revenue from the provision of low-carbon integrated solutions primarily consists of revenue from patent royalties and provision of technical services.

The Group generates revenue from licensing patents to its customers for certain periods. Revenue from patent royalties is recognised at a point in time when the customer obtains the right to use the licensed patents, as the Group does not perform any activities that significantly affect the patents to which the customer has rights.

For contracts entered into with customers on provision of technical services, the relevant services are based on customer's specifications with no alternative use but the Group does not have an enforceable right to payment prior to the completion of relevant services to customers. Revenue from the provision of technical services is recognised at a point in time when the relevant services are rendered and acknowledged for receipt by the customers. Contract costs include contract fulfilment costs. Costs incurred for provision of technical services are recognised as contract fulfilment costs, which is recognised as the cost of sales when recognising revenue. If the carrying amount of the contract costs is higher than the remaining consideration expected to be obtained by rendering of the service net of the estimated cost to be incurred, the Group makes provision for impairment on the excess portion and recognises it as asset impairment losses.

Other income

Interest income is recognised on an accrual basis using the effective interest method by applying the rate that exactly discounts the estimated future cash receipts over the expected life of the financial instrument or a shorter period, when appropriate, to the net carrying amount of the financial asset.

Maintenance and cultivation costs

The Group has routine and non-routine maintenance every year. During the maintenance period and the subsequent fermentation strains breeding and cultivation period, there is no ethanol produced. The costs incurred during these periods, including depreciation of property, plant and equipment and utilities etc., are summarised and presented as maintenance and cultivation costs under cost of sales.

Contract liabilities

A contract liability is recognised when a payment is received or a payment is due (whichever is earlier) from a customer before the Group transfers the related goods or services. Contract liabilities are recognised as revenue when the Group performs under the contract (i.e., transfers control of the related goods or services to the customer).

Share-based payments

Incentive schemes, which include a share award scheme (the “Share Award Scheme”) and a share option scheme (the “Share Option Scheme”), are operated for the purpose of providing incentives and rewards to eligible participants who contribute to the success of the Group’s operations. Employees of the Group receive remuneration in the form of share-based payments, whereby employees render services in exchange for equity instruments (“equity-settled transactions”). The cost of equity-settled transactions with employees is measured by reference to the fair value at the date at which they are granted. For the Share Award Scheme, the fair value is based on a recent transaction price. And for the Share Option Scheme, the fair value is calculated using the Black-Scholes option pricing model as at the date of grant of the options, further details of which are given in note 28 to the Historical Financial Information.

The cost of equity-settled transactions is recognised in employee benefit expense, together with a corresponding increase in equity, over the period in which the performance and/or service conditions are fulfilled. The cumulative expense recognised for equity-settled transactions at the end of each reporting period until the vesting date reflects the extent to which the vesting period has expired and the Group’s best estimate of the number of equity instruments that will ultimately vest. The charge or credit to profit or loss for a period represents the movement in the cumulative expense recognised as at the beginning and end of that period.

Service and non-market performance conditions are not taken into account when determining the grant date fair value of awards, but the likelihood of the conditions being met is assessed as part of the Group’s best estimate of the number of equity instruments that will ultimately vest. Market performance conditions are reflected within the grant date fair value. Any other conditions attached to an award, but without an associated service requirement, are considered to be non-vesting conditions. Non-vesting conditions are reflected in the fair value of an award and lead to an immediate expensing of an award unless there are also service and/or performance conditions.

For awards that do not ultimately vest because non-market performance and/or service conditions have not been met, no expense is recognised. Where awards include a market or non-vesting condition, the transactions are treated as vesting irrespective of whether the market or non-vesting condition is satisfied, provided that all other performance and/or service conditions are satisfied.

Where the terms of an equity-settled award are modified, as a minimum an expense is recognised as if the terms had not been modified, if the original terms of the award are met. In addition, an expense is recognised for any modification that increases the total fair value of the share-based payments, or is otherwise beneficial to the employee as measured at the date of modification.

Where an equity-settled award is cancelled, it is treated as if it had vested on the date of cancellation, and any expense not yet recognised for the award is recognised immediately. This includes any award where non-vesting conditions within the control of either the Group or the employee are not met. However, if a new award is substituted for the cancelled award, and is designated as a replacement award on the date that it is granted, the cancelled and new awards are treated as if they were a modification of the original award, as described in the previous paragraph.

The dilutive effect of outstanding options is reflected as additional share dilution in the computation of earnings per share.

Other employee benefits***Pension schemes***

The employees of the Group’s subsidiaries which operate in Mainland China are required to participate in a central pension scheme operated by the local municipal government. These subsidiaries are required to contribute a certain percentage of their payroll costs to the central pension scheme. The contributions are charged to profit or loss as they become payable in accordance with the rules of the central pension scheme.

Termination benefits

Termination benefits are recognised at the earlier of when the Group can no longer withdraw the offer of those benefits and when the Group recognises restructuring costs involving the payment of termination benefits.

Borrowing costs

Borrowing costs directly attributable to the acquisition, construction or production of qualifying assets, i.e., assets that necessarily take a substantial period of time to get ready for their intended use or sale, are capitalised as part of the cost of those assets. The capitalisation of such borrowing costs ceases when the assets are substantially ready for their intended use or sale. All other borrowing costs are expensed in the period in which they are incurred. Borrowing costs consist of interest and other costs that an entity incurs in connection with the borrowing of funds.

Dividends

Final dividends are recognised as a liability when they are approved by the shareholders in a general meeting.

3. MATERIAL ACCOUNTING JUDGEMENTS AND ESTIMATES

The preparation of the Group's financial statements requires management to make judgements, estimates and assumptions that affect the reported amounts of revenues, expenses, assets and liabilities, and their accompanying disclosures, and the disclosure of contingent liabilities. Uncertainty about these assumptions and estimates could result in outcomes that could require a material adjustment to the carrying amounts of the assets or liabilities affected in the future.

Judgements

In the process of applying the Group's accounting policies, management has made the following judgement, apart from those involving estimations, which has the most significant effect on the amounts recognised in the financial statements:

Deferred tax assets

Deferred tax assets are recognised for unused tax losses to the extent that it is probable that taxable profit will be available against which the losses can be utilised. Significant management judgement is required to determine the amount of deferred tax assets that can be recognised, based upon the likely timing and the level of future taxable profits, together with future tax planning strategies.

The Group has tax losses of RMB173,545,000, RMB284,173,000 and RMB583,073,000, respectively, carried forward at the end of each of the Relevant Periods. These losses related to the company and subsidiaries that have a history of losses, have not expired, and may not be used to offset taxable income elsewhere in the Group. Deferred tax assets have not been recognised in respect of these losses as it is not considered probable that taxable profits will be available against which the tax losses can be utilised.

Further details on deferred taxes are disclosed in note 17 to the financial statements.

Significant judgement in determining the lease term of contracts with renewal options

The Group has several lease contracts that include extension and termination options. The Group applies judgement in evaluating whether or not to exercise the option to renew or terminate the lease. That is, it considers all relevant factors that create an economic incentive for it to exercise either the renewal or termination. After the commencement date, the Group reassesses the lease term if there is a significant event or change in circumstances that is within its control and affects its ability to exercise or not to exercise the option to renew or to terminate the lease.

The Group includes the renewal period as part of the lease term for leases of plant and properties and leasehold land due to the significance of these assets to its operations. These leases have a short non-cancellable period and there will be a significant negative effect on production if a replacement is not readily available.

Judgement in determine the likelihood of vesting conditions

Under the Share Option Scheme, the exercise of share option is conditional upon the satisfaction of specified vesting conditions, further details of which are given in note 28(b) to the Historical Financial Information. Judgement is required to take into account the vesting conditions to determine the number of the share options to be included in the measurement of equity-settled share-based payment expenses.

Estimation uncertainty

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

Share-based payments

The Group operates employee incentive schemes for the purpose of providing incentives to the Group's employees, which include the Share Award Scheme and the Share Option Scheme. For the Share Award Scheme, the grant date fair value is based on a recent transaction price. And for Share Option Scheme, the grant date fair value is calculated using the Black-Scholes option pricing model as at the date of grant of the options, further details of which are given in note 28 to the Historical Financial Information.

Provision for expected credit losses on trade and bills receivables, other receivables

Provision for impairment of trade receivables is made based on an assessment of expected credit losses on trade receivables and other receivables. Trade receivables relating to customers with known financial difficulties or significant doubt on collection are assessed individually for impairment allowance. The remaining trading receivables are grouped based on credit risk of various customer segments with similar loss patterns (i.e., by customer rating and ageing) and collectively assessed for impairment allowance.

The Group uses a provision matrix to calculate ECLs for trade and bills receivables. The provision rates are based on ageing of receivables for groups of various customer segments that have similar credit rating.

The Group determines the ECLs on these items by using a provision matrix, estimated based on the financial quality of the debtors and historical credit loss experience based on ageing of the trade receivables, adjusted as appropriate to reflect current conditions and estimates of future economic conditions. The Group will calibrate the matrix to adjust the credit loss with forward-looking information. For instance, if forecast economic conditions are expected to deteriorate over the next year which can lead to an increased number of defaults, the expected credit loss are adjusted. At the end of each of the Relevant Periods, the expected credit loss rates are updated and changes in the forward-looking estimates are analysed.

The assessment of the correlation among forecast economic conditions and ECLs is a significant estimate. The amount of ECLs is sensitive to changes in circumstances and forecast economic conditions. The Group's forecast of economic conditions may also not be representative of a customer's actual default in the future. The information about the ECLs on the Group's trade and bills receivables is disclosed in note 19 to the Historical Financial Information.

Impairment of non-financial assets (other than goodwill)

The Group assesses whether there are any indicators of impairment for all non-financial assets (including the right-of-use assets) at the end of each reporting period. These non-financial assets are tested for impairment when there are indicators that the carrying amounts may not be recoverable. An impairment exists when the carrying value of an asset or a cash-generating unit exceeds its recoverable amount, which is the higher of its fair value less costs of disposal and its value in use. The calculation of the fair value less costs of disposal is based on available data from binding sales transactions in an arm's length transaction of similar assets or observable market prices less incremental costs for disposing of the asset. When value-in-use calculations are undertaken, management must estimate the expected future cash flows from the asset or cash-generating unit and choose a suitable discount rate in order to calculate the present value of those cash flows.

In 2022, 2023 and 2024, we recorded net losses of RMB23,855,000, RMB110,147,000 and RMB245,568,000, respectively. Given our prolonged period of overall losses, there are indications of impairment.

In accordance with IAS 36, we performed impairment tests at each period-end on non-current assets that show indications of impairment and estimate the recoverable amount of the non-current asset. The recoverable amount is determined for the cash-generating unit to which the asset belongs.

The non-current assets other than financial assets mainly include property, plant and equipment, right-of-use assets and intangible assets at the end of each of Relevant Periods and represents RMB2,139,549,000, RMB2,334,897,000 and RMB2,272,190,000, respectively. Each entity that holds these assets can generate independent cash inflows and operated as a distinct economic entity. Therefore, non-current assets, other than financial assets for each factory is defined as a cash-generating unit ("CGU") for impairment testing.

The recoverable amount of a CGU is determined based on a value in use calculation using cash flow projections based on financial budgets approved by the management. The budgeted sales and margins are estimated based on historical information achieved and the expected market development.

The cash flow projections are discounted using an after-tax discount rates of 10.18%, 10.07% and 11.28% for years ended 31 December 2022, 2023 and 2024, which are corresponding to a pre-tax rate range 10.18%-11.02%, 10.07%-11.08% and 11.49%-12.90% for different factories for years ended 31 December 2022, 2023 and 2024. The discount rates used reflect specific risks relating to our subsidiaries. Impairment of RMB5,336,000 was made according to the impairment test results for the year ended 31 December 2022, and no further impairment was needed for the years ended 31 December 2023 and 2024.

Leases – Estimating the incremental borrowing rate

The Group cannot readily determine the interest rate implicit in a lease, and therefore, it uses an incremental borrowing rate ("IBR") to measure lease liabilities. The IBR is the rate of interest that the Group would have to pay to borrow over a similar term, and with a similar security, the funds necessary to obtain an asset of a similar value to the right-of-use asset in a similar economic environment. The IBR therefore reflects what the Group "would have to pay", which requires estimation when no observable rates are available (such as for subsidiaries that do not enter into financing transactions) or when it needs to be adjusted to reflect the terms and conditions of the lease (for example, when leases are not in the subsidiary's functional currency). The Group estimates the IBR using observable inputs (such as market interest rates) when available and is required to make certain entity-specific estimates (such as the subsidiary's stand-alone credit rating).

4. OPERATING SEGMENT INFORMATION

The Group manages its businesses as a whole by the most senior executive management for the purposes of resource allocation and performance assessment. The Group's chief operating decision maker is the chief executive officer of the Group who reviews the Group's consolidated results of operations for the purpose of making decisions about resource allocation and performance assessment. Accordingly, no reportable segment information is presented.

Geographical information

Almost all the non-current assets of the Group are physically located in the Mainland China. The geographical location of customers is based on the location at which the customers operate, and almost all of the revenue of the Group was derived from operations in the Mainland China during the Relevant Periods.

Information about major customers

External customers that contributed over 10% of total revenue of the Group for the years ended 31 December 2022, 2023 and 2024 are as follows:

	Year ended 31 December		
	2022	2023	2024
	RMB'000	RMB'000	RMB'000
Customer Group A	146,033	275,431	148,252
Customer B	49,198	85,931	108,304
Customer C	53,640	81,834	95,787
Customer D	53,710	*	*

* Less than 10% of the Group's revenue

5. REVENUE, OTHER INCOME AND GAINS

An analysis of revenue is as follows:

	Year ended 31 December		
	2022	2023	2024
	RMB'000	RMB'000	RMB'000
Revenue from contracts with customers.	389,512	592,551	563,611

Revenue from contracts with customers

(a) Disaggregated revenue information

	Year ended 31 December		
	2022	2023	2024
	RMB'000	RMB'000	RMB'000
Revenue from sales of products			
Ethanol	328,825	499,730	440,415
Microbial protein	53,549	86,533	90,823
Other products	7,138	6,288	6,242
	389,512	592,551	537,480
Revenue from low-carbon integrated solutions .	–	–	26,131
Total revenue from contracts with customers . . .	389,512	592,551	563,611
Geographical markets			
Mainland China	373,362	576,421	556,069
Overseas.	16,150	16,130	7,542
Total	389,512	592,551	563,611

	Year ended 31 December		
	2022	2023	2024
	RMB'000	RMB'000	RMB'000
Timing of revenue recognition			
Goods or services transferred at a point in time .	389,512	592,551	563,611

The following table shows the amounts of revenue recognised in the Relevant Periods that were included in the contract liabilities at the beginning of the reporting period and recognised from performance obligations satisfied in previous periods:

	Year ended 31 December		
	2022	2023	2024
	RMB'000	RMB'000	RMB'000
Revenue recognised that was included in contract liabilities at the beginning of the reporting period:	10,737	12,622	8,172

The amounts of transaction prices allocated to the remaining performance obligations (unsatisfied or partially unsatisfied) as at 31 December 2022, 2023 and 2024 are RMB12,780,000, RMB15,782,000 and RMB62,237,000, respectively, which are expected to be recognised as revenue within one year.

(b) Performance obligations

Information about the Group's performance obligations is summarised below:

Sale of products

The performance obligation is satisfied when control of the asset is transferred to the customer, generally upon delivery of the goods. Payment is generally made before goods delivery, except for certain customers where payment is due within 60 days from goods delivery.

Provision of low-carbon integrated solutions

The performance obligation is satisfied when patents and services are rendered and acknowledged for receipt by the customers with payments structured around specific milestones.

An analysis of other income and gains is as follows:

	Year ended 31 December		
	2022	2023	2024
	RMB'000	RMB'000	RMB'000
Other income			
Government grants and subsidies	5,499	12,739	11,231
Gain on disposal of scraps	167	948	64
Others	549	72	290
Other Gains			
Foreign exchange differences, net	33	153	62
Gain on disposal of property, plant and equipment	—	1,592	—
Total	<u>6,248</u>	<u>15,504</u>	<u>11,647</u>

6. LOSS BEFORE TAX

The Group's loss before tax is arrived at after charging/(crediting):

	Notes	Year ended 31 December		
		2022	2023	2024
		RMB'000	RMB'000	RMB'000
Cost of sales of goods or services		328,895	504,687	594,296
Maintenance and cultivation costs		6,564	70,152	62,660
Depreciation of property, plant and equipment*	13	48,869	97,116	119,499
Depreciation of right-of-use assets*	14	4,929	9,061	9,639
Amortisation of intangible assets*	15	1,779	2,383	2,985
Research and development expenses		29,501	35,948	42,025
Lease payments not included in the measurement of lease liabilities		87	238	464
Employee benefit expense (including directors' and chief executive's remuneration (note 8)**:				
Wages and salaries		39,410	57,107	66,875
Share-based payment	28	603	3,981	—
Pension scheme contributions and social welfare		14,265	23,249	26,410

	Notes	Year ended 31 December		
		2022	2023	2024
		RMB'000	RMB'000	RMB'000
Impairment losses on property, plant and equipment, net.	13	5,336	–	–
Write-down of inventories to net realisable value	18	–	8,035	16,086
Listing expenses		–	–	13,534

* The depreciation of property, plant and equipment, right-of-use assets and the amortisation of other intangible assets for the Relevant Periods are included in “Cost of sales”, “Research and development costs” and “Administrative expenses” in profit or loss.

** The labour cost for the Relevant Periods is included in “Cost of sales”, “Selling and marketing expenses”, “Research and development expenses” and “Administrative expenses” in profit or loss.

7. FINANCE COSTS

An analysis of finance costs is as follows:

	Year ended 31 December		
	2022	2023	2024
	RMB'000	RMB'000	RMB'000
Interest on interest-bearing bank and other borrowings	24,463	33,656	33,897
Interest on lease liabilities	369	473	330
Total interest expense on financial liabilities measured at amortised cost	24,832	34,129	34,227
Less: Interest capitalised	(15,243)	(7,282)	–
Total	9,589	26,847	34,227

8. DIRECTORS' AND SUPERVISORS' REMUNERATION

Directors' and supervisors' remuneration for the Relevant Periods, disclosed pursuant to the Listing Rules, section 383(1)(a), (b), (c) and (f) of the Hong Kong Companies Ordinance and Part 2 of the Companies (Disclosure of Information about Benefits of Directors) Regulation, is as follows:

	As at 31 December		
	2022	2023	2024
	RMB'000	RMB'000	RMB'000
Fees	205	200	210
Other emoluments:			
Salaries, bonuses, allowances and benefits in kind	1,403	1,461	1,534
Performance related bonuses*	490	406	669
Pension scheme contributions and social welfare	82	96	126
Subtotal	1,975	1,963	2,329
Total	2,180	2,163	2,539

* Certain directors of the Company are entitled to bonus payments which are determined by key performance indicators.

The remuneration of each director/supervisor of the Company paid/payable by the Group (including emoluments for services as employees of the group entities prior to becoming the directors/supervisors of the Company) for the Relevant Periods is set out as follows:

(a) Independent non-executive directors

The fees paid to independent non-executive directors during the Relevant Periods were as follows:

	As at 31 December		
	2022	2023	2024
	RMB'000	RMB'000	RMB'000
Mr. Li, Jiming (i)	11	50	46
Ms. Chen, Xin (ii).	–	50	52
Mr. Feng, Yingang (iii).	–	34	52
Mr. Hu, Shanying (iv)	–	7	52
Mr. Hu, Shanzhong (v)	42	–	–
Ms. Jin, Jinping (vi)	52	–	–
Ms. Xue, Min (vii)	50	17	–
Mr. Jin, Yong (viii)	50	42	–
Mr. Hoong Cheong Thard (ix)	–	–	8
Total	<u>205</u>	<u>200</u>	<u>210</u>

- (i) On 12 October 2022, Mr. Li, Jiming was appointed as an independent non-executive director of the Company and resigned on 5 December 2024.
- (ii) On 30 December 2022, Ms. Chen, Xin was appointed as an independent non-executive director of the Company.
- (iii) On 28 April 2023, Mr. Feng, Yingang was appointed as an independent non-executive director of the Company.
- (iv) On 14 November 2023, Mr. Hu, Shanying was appointed as an independent non-executive director of the Company.
- (v) On 5 November 2021, Mr. Hu, Shanzhong was appointed as an independent non-executive director of the Company and resigned on 12 October 2022.
- (vi) On 5 November 2021, Ms. Jin, Jinping was appointed as an independent non-executive director of the Company and resigned on 30 December 2022.
- (vii) On 5 November 2021, Ms. Xue, Min was appointed as an independent non-executive director of the Company and resigned on 28 April 2023.
- (viii) On 5 November 2021, Mr. Jin, Yong was appointed as an independent non-executive director of the Company and resigned on 14 November 2023.
- (ix) On 5 December 2024, Mr. Hoong, Cheong Thard was appointed as an independent non-executive director of the Company.

There were no other emoluments paid/payable to the independent non-executive directors during the Relevant Periods.

(b) Executive directors, non-executive directors and supervisors

	Salaries, allowances and benefits in kind	Performance related bonuses	Pension scheme contributions and social welfare	Total remuneration
	RMB'000	RMB'000	RMB'000	RMB'000
2022				
Executive director:				
Ms. Dong, Yan (ii)	1,150	480	—	1,630
Non-executive directors				
Mr. Wang, Guiyang (i)	—	—	—	—
Ms. Jennifer Holmgren (ii)	—	—	—	—
Mr. Lin, Siyu (iii)	—	—	—	—
Mr. Wu, Bin (vii)	—	—	—	—
Mr. Gao, Chongguang (iii)	—	—	—	—
Mr. Jiang, Wei (iv)	—	—	—	—
Mr. Zhang, Jianxun (iv)	—	—	—	—
Subtotal	—	—	—	—
Supervisors:				
Mr. Zhao, Yucheng (v)	—	—	—	—
Ms. Xing, Fei (vi)	93	5	30	128
Mr. Victor Su (vi)	160	5	52	217
Subtotal	253	10	82	345
Total	1,403	490	82	1,975

	Salaries, allowances and benefits in kind	Performance related bonuses	Pension scheme contributions and social welfare	Total remuneration
	RMB'000	RMB'000	RMB'000	RMB'000
2023				
Executive director:				
Ms. Dong, Yan (ii)	1,174	396	—	1,570
Non-executive directors				
Mr. Wang, Guiyang (i)	—	—	—	—
Ms. Jennifer Holmgren (ii)	—	—	—	—
Mr. Lin, Siyu (iii)	—	—	—	—
Ms. Yuan, Jinrui (viii)	—	—	—	—
Mr. Wu, Bin (vii)	—	—	—	—
Mr. Gao, Chongguang (iii)	—	—	—	—
Mr. Zhang, Jianxun (iv)	—	—	—	—
Subtotal	—	—	—	—
Supervisors:				
Mr. Zhao, Yucheng (v)	—	—	—	—
Ms. Xing, Fei (vi)	107	5	36	148
Mr. Victor Su (vi)	180	5	60	245
Subtotal	287	10	96	393
Total	1,461	406	96	1,963

	Salaries, allowances and benefits in kind	Performance related bonuses	Pension scheme contributions and social welfare	Total remuneration
	RMB'000	RMB'000	RMB'000	RMB'000
2024				
Executive director:				
Ms. Dong, Yan (ii)	1,205	648	—	1,853
Non-executive directors				
Mr. Wang, Guiyang (i)	—	—	—	—
Ms. Jennifer Holmgren (ii)	—	—	—	—
Mr. Lin, Siyu (iii)	—	—	—	—
Ms. Yuan, Jinrui (viii)	—	—	—	—
Mr. Wu, Bin (vii)	—	—	—	—
Mr. Gao, Chongguang (iii)	—	—	—	—
Mr. Ma, Lishen (x)	—	—	—	—
Mr. Zhang, Dan (xi)	—	—	—	—
Ms. Wang, Yan (xi)	—	—	—	—
Subtotal	—	—	—	—
Supervisors:				
Mr. Zhao, Yucheng (v)	—	—	—	—
Ms. Xing, Fei (vi)	115	7	40	162
Mr. Victor Su (vi)	61	—	21	82
Ms. Zhang, Ling (ix)	153	14	65	232
Subtotal	329	21	126	476
Total	1,534	669	126	2,329

- (i) On 5 November 2021, Mr. Wang, Guiyang was appointed as the chairman of the board of directors of the Company and resigned on 5 December 2024.
- (ii) On 11 November 2011, Ms. Jennifer Holmgren was appointed as the chairlady of the board of directors of the Group and Ms. Dong, Yan was appointed as a director of the Company and was re-designated as an executive director on 22 December 2024.
- (iii) On 2 February 2021, Mr. Lin, Siyu was appointed as a non-executive director of the Company and was re-designated as an executive director on 27 May 2025, and on 5 November 2021, Mr. Gao, Chongguang was appointed as a non-executive director of the Company and resigned on 5 December 2024, respectively.
- (iv) On 22 June 2021, Mr. Jiang, Wei was appointed as a non-executive director of the Company and resigned on 8 April 2022.
- On 16 December 2020, Mr. Zhang, Jianxun was appointed as a non-executive director of the Company and resigned on 14 November 2023.
- (v) On 9 March 2020, Mr. Zhao, Yucheng was appointed as the chairman of Board of supervisors of the Company.
- (vi) On 5 November 2021, Ms. Xing, Fei and Mr. Victor Su were appointed as supervisors of the Company, Mr. Victor Su resigned as a supervisor of the Company on 19 April 2024.
- (vii) On 8 April 2022, Mr. Wu, Bin was appointed as a non-executive director of the Company.
- (viii) On 14 November 2023, Ms. Yuan, Jinrui was appointed as a non-executive director of the Company and resigned on 5 December 2024.

- (ix) On 5 November 2021, Ms. Zhang, Ling resigned as a supervisor of the Company and on 9 May 2024, she was reappointed as a supervisor of the Company.
- (x) On 5 December 2024, Mr. Ma, Lishen was appointed as the chairman and a non-executive director of the Company.
- (xi) On 5 December 2024, Mr. Zhang, Dan and Ms. Wang, Yan were appointed as non-executive directors of the Company.

There was no arrangement under which a director, the chief executive or a supervisor waived or agreed to waive any remuneration during the Relevant Periods.

9. FIVE HIGHEST PAID EMPLOYEES

The five highest paid employees during the Relevant Periods included one director, details of whose remuneration are set out in note 8 above. Details of the remuneration of each of the remaining four highest paid employees who are neither a director nor chief executive of the Company are as follows:

	Year ended 31 December		
	2022	2023	2024
	RMB'000	RMB'000	RMB'000
Salaries, allowances and benefits in kind	2,185	1,919	2,080
Performance related bonuses	454	599	930
Equity-settled share based payment expense	121	171	–
Pension scheme contributions	558	611	642
Total	<u>3,318</u>	<u>3,300</u>	<u>3,652</u>

The number of non-director and non-chief executive highest paid employees whose remuneration fell within the following bands is as follows:

	Year ended 31 December		
	2022	2023	2024
Nil to HK\$1,000,000	3	4	2
HK\$1,000,000 to HK\$2,000,000	1	–	2
Total	<u>4</u>	<u>4</u>	<u>4</u>

10. INCOME TAX

The Group is subject to income tax on an entity basis on profits arising in or derived from the jurisdictions in which members of the Group are domiciled and operate.

Mainland China

The subsidiaries incorporated in Mainland China are subject to tax at the statutory rate of 25% on the taxable profits determined in accordance with the PRC Corporate Income Tax Law, except for those subject to preferential tax set out below:

Beijing Shougang LanzaTech Technology Co., Ltd. and Hebei Shoulang New Energy Technology Co., Ltd. were granted the qualification of High and New Technology Enterprises (“HNTE”) with a preferential corporate income tax rate of 15% during the Relevant Periods. Ningxia Binze New Energy Technology Co., Ltd. qualified for China’s Western Development corporate income tax policy for 2023 and 2024 with a preferential corporate income tax rate of 15%. Beijing Shoulang Biotechnology Co., Ltd. applied the Small-Scaled Minimal Profit Corporate Income Tax Preferential Policy announced by the PRC’s State Administration of Taxation with a preferential tax rate of 20% on 25% of the taxable profit for the years ended 31 December 2022, and it was granted with the qualification

of HNTE since 2023 with a preferential corporate income tax rate of 15%. Ningxia Shoulang Jiyuan New Energy Technology Co., Ltd and Ningxia Binze New Energy Technology Co., Ltd. were granted with the qualification of HNTE in 2024 separately with a preferential corporate income tax rate of 15%.

Taxes on assessable profits elsewhere have been calculated at the rates of tax prevailing in the jurisdictions in which the Group operates.

	Year ended 31 December		
	2022	2023	2024
	RMB'000	RMB'000	RMB'000
Current income tax	189	784	534
Deferred tax charge/(credit) (note 17)	31	(30)	(31)
Total tax expense for the year	<u>220</u>	<u>754</u>	<u>503</u>

A reconciliation of the tax expense applicable to loss before tax at the statutory rate for the jurisdiction in which the Company and the majority of its subsidiaries are domiciled to the tax expense at the effective tax rates, and a reconciliation of the applicable rates (i.e., the statutory tax rates) to the effective tax rates, are as follows:

	Year ended 31 December		
	2022	2023	2024
	RMB'000	RMB'000	RMB'000
Loss before tax	(23,635)	(109,393)	(245,065)
Tax at the statutory tax rate	(5,909)	(27,348)	(61,266)
Effect of preferential tax rates	1,651	2,045	15,130
Adjustments in respect of current tax of previous periods	–	68	534
Expenses not deductible for tax	469	447	82
Super-deduction on research and development expenses (a)	(5,457)	(6,921)	(8,156)
Deductible temporary differences unrecognized	13,802	8,903	6,509
Deductible temporary differences used	(401)	(789)	(6,788)
Tax losses not recognised	3,587	26,194	54,458
Tax losses utilised from previous years	(7,522)	(1,845)	–
Tax expense at the Group's effective tax rate	<u>220</u>	<u>754</u>	<u>503</u>

- (a) Super deduction allowance was for qualified research and development costs. According to the relevant laws and regulations promulgated by the State Taxation Administration of the PRC, enterprises engaging in research and development activities are entitled to claim 175% of their research and development costs incurred as tax-deductible expenses when determining their assessable profits for nine months ended 30 September 2022. According to the relevant laws and regulations from 1 October 2022, the aforementioned deduction rate increased to 200%.

11. DIVIDENDS

No dividends have been paid or declared by the Company during the Relevant Periods.

12. LOSS PER SHARE ATTRIBUTABLE TO ORDINARY EQUITY HOLDERS OF THE PARENT

The calculation of the basic loss per share amounts is based on the loss for the Relevant Periods attributable to ordinary equity holders of the parent, and the weighted average number of ordinary shares of 312,854,392, 360,000,000, and 360,000,000 during the Relevant Periods in issue, as adjusted to reflect the rights issue during the Relevant Periods.

	Year ended 31 December		
	2022	2023	2024
	RMB'000	RMB'000	RMB'000
Loss			
Loss attributable to ordinary equity holders of the parent	(20,455)	(66,447)	(137,408)
Shares			
Weighted average number of ordinary shares outstanding during the year	312,854,392	360,000,000	360,000,000
Loss per share			
Basic and diluted (RMB)	(0.07)	(0.18)	(0.38)

The Group had no potentially dilutive ordinary shares in issue during the Relevant Periods.

13. PROPERTY, PLANT AND EQUIPMENT

The Group

	Buildings and constructions	Machinery	Vehicles	Electronic devices	Other equipment	Leasehold improvements	Construction in progress	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
31 December 2022								
At 1 January 2022:								
Cost	188,165	299,794	2,381	1,725	3,889	2,476	658,939	1,157,369
Accumulated depreciation and impairment	(21,339)	(74,685)	(795)	(1,024)	(2,116)	(1,194)	–	(101,153)
Net carrying amount . . .	166,826	225,109	1,586	701	1,773	1,282	658,939	1,056,216
At 1 January 2022, net of accumulated depreciation and impairment	166,826	225,109	1,586	701	1,773	1,282	658,939	1,056,216
Additions	–	6,889	420	2,309	2,190	1,225	1,036,430	1,049,463
Transfers	245,237	876,975	–	–	1,308	–	(1,123,520)	–
Depreciation provided during the year	(10,923)	(35,290)	(451)	(870)	(913)	(422)	–	(48,869)
Impairment	(3,400)	(1,936)	–	–	–	–	–	(5,336)
At 31 December 2022, net of accumulated depreciation and impairment	397,740	1,071,747	1,555	2,140	4,358	2,085	571,849	2,051,474
At 31 December 2022:								
Cost	433,402	1,183,658	2,801	4,034	7,387	3,701	571,849	2,206,832
Accumulated depreciation and impairment	(35,662)	(111,911)	(1,246)	(1,894)	(3,029)	(1,616)	–	(155,358)
Net carrying amount . . .	397,740	1,071,747	1,555	2,140	4,358	2,085	571,849	2,051,474

	Buildings and constructions	Machinery	Vehicles	Electronic devices	Other equipment	Leasehold improvements	Construction in progress	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
31 December 2023								
At 1 January 2023:								
Cost	433,402	1,183,658	2,801	4,034	7,387	3,701	571,849	2,206,832
Accumulated depreciation and impairment	(35,662)	(111,911)	(1,246)	(1,894)	(3,029)	(1,616)	–	(155,358)
Net carrying amount	<u>397,740</u>	<u>1,071,747</u>	<u>1,555</u>	<u>2,140</u>	<u>4,358</u>	<u>2,085</u>	<u>571,849</u>	<u>2,051,474</u>
At 1 January 2023, net of accumulated depreciation and impairment	397,740	1,071,747	1,555	2,140	4,358	2,085	571,849	2,051,474
Additions	535	597	–	2,539	1,742	4,234	278,739	288,386
Transfers	221,341	575,762	–	48,045	287	–	(845,435)	–
Disposals	(48,192)	–	–	–	–	–	–	(48,192)
Depreciation provided during the year	(15,660)	(74,883)	(499)	(3,401)	(1,314)	(1,359)	–	(97,116)
At 31 December 2023, net of accumulated depreciation and impairment	<u>555,764</u>	<u>1,573,223</u>	<u>1,056</u>	<u>49,323</u>	<u>5,073</u>	<u>4,960</u>	<u>5,153</u>	<u>2,194,552</u>
At 31 December 2023:								
Cost	602,092	1,760,017	2,801	54,618	9,416	7,935	5,153	2,442,032
Accumulated depreciation and impairment	(46,328)	(186,794)	(1,745)	(5,295)	(4,343)	(2,975)	–	(247,480)
Net carrying amount	<u>555,764</u>	<u>1,573,223</u>	<u>1,056</u>	<u>49,323</u>	<u>5,073</u>	<u>4,960</u>	<u>5,153</u>	<u>2,194,552</u>

	Buildings and constructions	Machinery	Vehicles	Electronic devices	Other equipment	Leasehold improvements	Construction in progress	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
31 December 2024								
At 1 January 2024:								
Cost	602,092	1,760,017	2,801	54,618	9,416	7,935	5,153	2,442,032
Accumulated depreciation and impairment	(46,328)	(186,794)	(1,745)	(5,295)	(4,343)	(2,975)	–	(247,480)
Net carrying amount	<u>555,764</u>	<u>1,573,223</u>	<u>1,056</u>	<u>49,323</u>	<u>5,073</u>	<u>4,960</u>	<u>5,153</u>	<u>2,194,552</u>
At 1 January 2024, net of accumulated depreciation and impairment	555,764	1,573,223	1,056	49,323	5,073	4,960	5,153	2,194,552
Additions	91	12,328	–	510	2,777	3,331	46,877	65,914
Transfers	5,702	19,073	–	–	–	–	(24,775)	–
Disposals	–	–	–	(1)	(3)	–	–	(4)
Depreciation provided during the year	(18,952)	(90,071)	(422)	(5,974)	(1,482)	(2,598)	–	(119,499)
At 31 December 2024, net of accumulated depreciation and impairment	<u>542,605</u>	<u>1,514,553</u>	<u>634</u>	<u>43,858</u>	<u>6,365</u>	<u>5,693</u>	<u>27,255</u>	<u>2,140,963</u>

	Buildings and constructions	Machinery	Vehicles	Electronic devices	Other equipment	Leasehold improvements	Construction in progress	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
At 31 December 2024:								
Cost	607,885	1,791,418	2,801	55,113	12,143	11,266	27,255	2,507,881
Accumulated depreciation and impairment	(65,280)	(276,865)	(2,167)	(11,255)	(5,778)	(5,573)	–	(366,918)
Net carrying amount . . .	<u>542,605</u>	<u>1,514,553</u>	<u>634</u>	<u>43,858</u>	<u>6,365</u>	<u>5,693</u>	<u>27,255</u>	<u>2,140,963</u>

Certificates of ownership in respect of certain buildings of the Group in the PRC with aggregate net book values of RMB115,400,000, RMB93,374,000 and RMB45,081,000 at 31 December 2022, 2023 and 2024, respectively, had not been issued by the relevant PRC authorities.

Certain properties of the Group with an aggregate carrying amounts of approximately RMB1,355,293,000, RMB1,537,806,000 and RMB1,459,366,000 at 31 December 2022, 2023 and 2024 have been pledged to secure bank and other borrowings granted to the Group (note 25).

The Company

	Buildings and constructions	Machinery	Electronic devices	Other equipment	Leasehold improvements	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
31 December 2022						
At 1 January 2022:						
Cost	21,773	47,781	672	800	1,933	72,959
Accumulated depreciation	(5,429)	(32,812)	(455)	(660)	(652)	(40,008)
Net carrying amount . .	<u>16,344</u>	<u>14,969</u>	<u>217</u>	<u>140</u>	<u>1,281</u>	<u>32,951</u>
At 1 January 2022, net of accumulated depreciation	16,344	14,969	217	140	1,281	32,951
Additions	–	941	492	–	223	1,656
Depreciation provided during the year	(1,033)	(2,349)	(160)	(20)	(389)	(3,951)
Impairment	(3,400)	(1,936)	–	–	–	(5,336)
At 31 December 2022, net of accumulated depreciation	<u>11,911</u>	<u>11,625</u>	<u>549</u>	<u>120</u>	<u>1,115</u>	<u>25,320</u>
At 31 December 2022:						
Cost	21,773	48,722	1,164	800	2,156	74,615
Accumulated depreciation	(9,862)	(37,097)	(615)	(680)	(1,041)	(49,295)
Net carrying amount . .	<u>11,911</u>	<u>11,625</u>	<u>549</u>	<u>120</u>	<u>1,115</u>	<u>25,320</u>

	Buildings and constructions	Machinery	Electronic devices	Other equipment	Leasehold improvements	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
31 December 2023						
At 1 January 2023:						
Cost	21,773	48,722	1,164	800	2,156	74,615
Accumulated depreciation	(9,862)	(37,097)	(615)	(680)	(1,041)	(49,295)
Net carrying amount . .	<u>11,911</u>	<u>11,625</u>	<u>549</u>	<u>120</u>	<u>1,115</u>	<u>25,320</u>
At 1 January 2023, net of accumulated depreciation	11,911	11,625	549	120	1,115	25,320
Additions	–	1,286	494	1,193	2,395	5,368
Depreciation provided during the year	<u>(792)</u>	<u>(2,058)</u>	<u>(309)</u>	<u>(222)</u>	<u>(812)</u>	<u>(4,193)</u>
At 31 December 2023, net of accumulated depreciation	<u>11,119</u>	<u>10,853</u>	<u>734</u>	<u>1,091</u>	<u>2,698</u>	<u>26,495</u>
At 31 December 2023:						
Cost	21,773	50,008	1,658	1,993	4,551	79,983
Accumulated depreciation	(10,654)	(39,155)	(924)	(902)	(1,853)	(53,488)
Net carrying amount . .	<u>11,119</u>	<u>10,853</u>	<u>734</u>	<u>1,091</u>	<u>2,698</u>	<u>26,495</u>

	Buildings and constructions	Machinery	Electronic devices	Other equipment	Leasehold improvements	Construction in progress	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
31 December 2024							
At 1 January 2024:							
Cost	21,773	50,008	1,658	1,993	4,551	–	79,983
Accumulated depreciation	(10,654)	(39,155)	(924)	(902)	(1,853)	–	(53,488)
Net carrying amount . .	<u>11,119</u>	<u>10,853</u>	<u>734</u>	<u>1,091</u>	<u>2,698</u>	<u>–</u>	<u>26,495</u>
At 1 January 2024, net of accumulated depreciation	11,119	10,853	734	1,091	2,698	–	26,495
Additions	–	2,819	–	378	724	6,022	9,943
Depreciation provided during the year	<u>(792)</u>	<u>(2,341)</u>	<u>(338)</u>	<u>(314)</u>	<u>(1,380)</u>	<u>–</u>	<u>(5,165)</u>
At 31 December 2024, net of accumulated depreciation	<u>10,327</u>	<u>11,331</u>	<u>396</u>	<u>1,155</u>	<u>2,042</u>	<u>6,022</u>	<u>31,273</u>
At 31 December 2024:							
Cost	21,773	52,827	1,658	2,371	5,275	6,022	89,926
Accumulated depreciation	(11,446)	(41,496)	(1,262)	(1,216)	(3,233)	–	(58,653)
Net carrying amount . .	<u>10,327</u>	<u>11,331</u>	<u>396</u>	<u>1,155</u>	<u>2,042</u>	<u>6,022</u>	<u>31,273</u>

14. LEASES

The Group as a lessee

The Group has lease contracts for various items of plant and properties and leasehold land used in its operations. Leases of plant and properties and transportation equipment generally have lease terms between 2 and 20 years. Other equipment generally has lease terms of 12 months or less or is individually of low value. Generally, the Group is restricted from assigning and subleasing the leased assets outside the Group.

(a) Right-of-use assets

The carrying amounts of the Group's right-of-use assets and the movements during the Relevant Periods are as follows:

The Group

	Plant and properties	Leasehold land	Transportation equipment	Total
	RMB'000	RMB'000	RMB'000	RMB'000
1 January 2022.	5,357	59,154	550	65,061
Additions	5,384	62	317	5,763
Depreciation charge.	(1,763)	(2,938)	(228)	(4,929)
Decrease arising from lease term termination.	(1,084)	—	(53)	(1,137)
As at 31 December 2022 and 1 January 2023	7,894	56,278	586	64,758
Additions	35,085	20,714	—	55,799
Depreciation charge.	(5,311)	(3,454)	(296)	(9,061)
As at 31 December 2023 and 1 January 2024	37,668	73,538	290	111,496
Additions	—	—	342	342
Depreciation charge.	(6,053)	(3,454)	(132)	(9,639)
Decrease arising from lease term termination.	—	—	(195)	(195)
As at 31 December 2024.	31,615	70,084	305	102,004

As at 31 December 2022, 2023 and 2024, the Group's leasehold land with aggregate carrying amounts of approximately RMB54,672,000, RMB53,047,000 and RMB51,423,000, respectively, were pledged to secure interest-bearing bank and other borrowings granted to the Group (note 25).

The Company

	Plant and properties	Leasehold land	Transportation equipment	Total
	RMB'000	RMB'000	RMB'000	RMB'000
1 January 2022.	5,328	1,720	279	7,327
Additions	4,249	—	—	4,249
Depreciation charge.	(1,493)	(115)	(111)	(1,719)
Decrease arising from lease term termination.	(1,084)	—	(53)	(1,137)
As at 31 December 2022 and 1 January 2023	7,000	1,605	115	8,720
Additions	475	—	—	475
Depreciation charge.	(2,633)	(115)	(115)	(2,863)
As at 31 December 2023 and 1 January 2024	4,842	1,490	—	6,332
Depreciation charge.	(2,668)	(115)	—	(2,783)
As at 31 December 2024.	2,174	1,375	—	3,549

(b) Lease liabilities

The carrying amount of lease liabilities (not included under interest-bearing bank and other borrowings) and the movements during the Relevant Periods are as follows:

The Group

	As at 31 December		
	2022	2023	2024
	RMB'000	RMB'000	RMB'000
Carrying amount at 1 January	8,987	9,619	7,589
New leases	5,763	55,799	342
Accretion of interest recognised during the year	369	473	330
Decrease arising from lease term termination . . .	(1,179)	–	(191)
Payments	(4,321)	(8,493)	(3,585)
Offset by sale of a property	–	(49,809)	–
Carrying amount at 31 December	<u>9,619</u>	<u>7,589</u>	<u>4,485</u>
Analysed into:			
Current portion	2,997	3,669	2,691
Non-current portion	<u>6,622</u>	<u>3,920</u>	<u>1,794</u>

The Company

	As at 31 December		
	2022	2023	2024
	RMB'000	RMB'000	RMB'000
Carrying amount at 1 January	7,048	8,305	6,071
New leases	4,249	475	–
Accretion of interest recognised during the year	269	390	261
Decrease arising from lease term termination . . .	(1,179)	–	–
Payments	(2,082)	(3,099)	(2,807)
Carrying amount at 31 December	<u>8,305</u>	<u>6,071</u>	<u>3,525</u>
Analysed into:			
Current portion	2,566	2,987	1,993
Non-current portion	<u>5,739</u>	<u>3,084</u>	<u>1,532</u>

The maturity analysis of lease liabilities is disclosed in note 36.

(c) The amounts recognised in profit or loss in relation to leases are as follows:**The Group**

	Year ended 31 December		
	2022	2023	2024
	RMB'000	RMB'000	RMB'000
Interest on lease liabilities	369	473	330
Depreciation charge of right-of-use assets	4,929	9,061	9,639
Expenses relating to short-term leases and leases of low-value assets	87	238	464
Total amount recognised in profit or loss	<u>5,385</u>	<u>9,772</u>	<u>10,433</u>

The Company

	Year ended 31 December		
	2022	2023	2024
	RMB'000	RMB'000	RMB'000
Interest on lease liabilities	269	390	261
Depreciation charge of right-of-use assets	1,719	2,863	2,783
Expenses relating to short-term leases and leases of low-value assets	40	33	73
Total amount recognised in profit or loss	2,028	3,286	3,117

15. INTANGIBLE ASSETS**The Group**

	Patents and licences	Software	Development expenditure	Total
	RMB'000	RMB'000	RMB'000	RMB'000
31 December 2022				
Cost at 1 January 2022, net of accumulated amortisation	16,770	205	–	16,975
Additions	8,101	20	–	8,121
Amortisation provided during the year	(1,668)	(111)	–	(1,779)
At 31 December 2022	23,203	114	–	23,317
At 31 December 2022 and at 1 January 2023:				
Cost	33,901	624	–	34,525
Accumulated amortisation	(10,698)	(510)	–	(11,208)
Net carrying amount	23,203	114	–	23,317
31 December 2023				
Cost at 1 January 2023, net of accumulated amortisation	23,203	114	–	23,317
Additions	4,231	308	3,376	7,915
Amortisation provided during the year	(2,304)	(79)	–	(2,383)
At 31 December 2023	25,130	343	3,376	28,849
At 31 December 2023 and at 1 January 2024:				
Cost	38,132	932	3,376	42,440
Accumulated amortisation	(13,002)	(589)	–	(13,591)
Net carrying amount	25,130	343	3,376	28,849
31 December 2024				
Cost at 1 January 2024, net of accumulated amortisation	25,130	343	3,376	28,849
Additions	–	577	2,782	3,359
Transfer to intangible asset	1,905	–	(1,905)	–
Amortisation provided during the year	(2,652)	(333)	–	(2,985)
At 31 December 2024	24,383	587	4,253	29,223
Cost	40,037	1,509	4,253	45,799
Accumulated amortisation and impairment	(15,654)	(922)	–	(16,576)
Net carrying amount	24,383	587	4,253	29,223

The Company

	Patents and licences	Software	Total
	<i>RMB'000</i>	<i>RMB'000</i>	<i>RMB'000</i>
31 December 2022			
Cost at 1 January 2022, net of accumulated amortisation	16,770	136	16,906
Additions	6,000	–	6,000
Amortisation provided during the year	(1,545)	(92)	(1,637)
At 31 December 2022	<u>21,225</u>	<u>44</u>	<u>21,269</u>
At 31 December 2022 and at 1 January 2023:			
Cost	31,800	515	32,315
Accumulated amortisation	(10,575)	(471)	(11,046)
Net carrying amount	<u>21,225</u>	<u>44</u>	<u>21,269</u>
31 December 2023			
Cost at 1 January 2023, net of accumulated amortisation	21,225	44	21,269
Additions	3,490	16	3,506
Amortisation provided during the year	(2,065)	(43)	(2,108)
At 31 December 2023	<u>22,650</u>	<u>17</u>	<u>22,667</u>
At 31 December 2023 and at 1 January 2024:			
Cost	35,290	531	35,821
Accumulated amortisation	(12,640)	(514)	(13,154)
Net carrying amount	<u>22,650</u>	<u>17</u>	<u>22,667</u>
31 December 2024			
Cost at 1 January 2024, net of accumulated amortisation	22,650	17	22,667
Amortisation provided during the year	(2,239)	(4)	(2,243)
At 31 December 2024	<u>20,411</u>	<u>13</u>	<u>20,424</u>
Cost	35,290	531	35,821
Accumulated amortisation and impairment	(14,879)	(518)	(15,397)
Net carrying amount	<u>20,411</u>	<u>13</u>	<u>20,424</u>

16. INVESTMENTS IN SUBSIDIARIES**The Company**

	Year ended 31 December		
	2022	2023	2024
	<i>RMB'000</i>	<i>RMB'000</i>	<i>RMB'000</i>
Investments, at cost	535,200	535,200	542,200
Share-based payments to employees of subsidiaries	–	2,204	2,204
Carrying amount at the end of year	<u>535,200</u>	<u>537,404</u>	<u>544,404</u>

The Company's outstanding balances with the subsidiaries are disclosed in note 33.

17. DEFERRED TAX

The Group

The movements in deferred tax assets and liabilities during the Relevant Periods are as follows:

Deferred tax assets

	<u>Lease liabilities</u>
	<i>RMB'000</i>
At 1 January 2022.	1,285
Deferred tax credited to profit or loss during the year.	<u>274</u>
Gross deferred tax assets at 31 December 2022.	1,559
Deferred tax charged to profit or loss during the year.	<u>(421)</u>
Gross deferred tax assets at 31 December 2023.	1,138
Deferred tax charged to profit or loss during the year.	<u>(465)</u>
Gross deferred tax assets at 31 December 2024.	<u><u>673</u></u>

The movements in deferred tax assets and liabilities during the Relevant Periods are as follows:

Deferred tax liabilities

	<u>Right-of-use assets</u>
	<i>RMB'000</i>
At 1 January 2022.	1,327
Deferred tax charged to profit or loss during the year.	<u>305</u>
Gross deferred tax liabilities at 31 December 2022.	1,632
Deferred tax credited to profit or loss during the year.	<u>(451)</u>
Gross deferred tax liabilities at 31 December 2023.	1,181
Deferred tax credited to profit or loss during the year.	<u>(496)</u>
Gross deferred tax liabilities at 31 December 2024.	<u><u>685</u></u>

For presentation purposes, certain deferred tax assets and liabilities have been offset in the statements of financial position. The following is an analysis of the deferred tax balances of the Group for financial reporting purposes:

	<u>As at 31 December</u>		
	<u>2022</u>	<u>2023</u>	<u>2024</u>
	<i>RMB'000</i>	<i>RMB'000</i>	<i>RMB'000</i>
Net deferred tax assets recognised in the consolidated statement of financial position. . .	–	–	–
Net deferred tax liabilities recognised in the consolidated statement of financial position. . .	<u>(73)</u>	<u>(43)</u>	<u>(12)</u>

Deferred tax assets have not been recognised in respect of the following items:

	As at 31 December		
	2022	2023	2024
	RMB'000	RMB'000	RMB'000
Tax losses	173,545	284,173	583,073
Deductible temporary differences	133,310	184,948	177,128
Total	306,855	469,121	760,201

The Group has tax losses arising in Mainland China of RMB173,545,000, RMB284,173,000 and RMB583,073,000 as at 31 December 2022, 2023 and 2024, respectively, that will expire in one to ten years for offsetting against future taxable profits. Deferred tax assets have not been recognised in respect of these losses as it is not considered probable that taxable profits will be available against which the tax losses can be utilised.

The Company

The movements in deferred tax assets and liabilities during the Relevant Periods are as follows:

Deferred tax assets

	Lease liabilities
	RMB'000
At 1 January 2022.	1,057
Deferred tax credited to profit or loss during the year.	189
Gross deferred tax assets at 31 December 2022.	1,246
Deferred tax charged to profit or loss during the year.	(335)
Gross deferred tax assets at 31 December 2023.	911
Deferred tax charged to profit or loss during the year.	(381)
Gross deferred tax assets at 31 December 2024.	530

The movements in deferred tax assets and liabilities during the Relevant Periods are as follows:

Deferred tax liabilities

	Right-of-use assets
	RMB'000
At 1 January 2022.	1,099
Deferred tax charged to profit or loss during the year.	209
Gross deferred tax liabilities at 31 December 2022.	1,308
Deferred tax credited to profit or loss during the year.	(358)
Gross deferred tax liabilities at 31 December 2023.	950
Deferred tax credited to profit or loss during the year.	(417)
Gross deferred tax liabilities at 31 December 2024.	533

For presentation purposes, certain deferred tax assets and liabilities have been offset in the statements of financial position. The following is an analysis of the deferred tax balances of the Group for financial reporting purposes:

	As at 31 December		
	2022	2023	2024
	RMB'000	RMB'000	RMB'000
Net deferred tax assets recognised in the consolidated statement of financial position. . .	–	–	–
Net deferred tax liabilities recognised in the consolidated statement of financial position. . .	62	39	3
	<u> </u>	<u> </u>	<u> </u>

The Company has tax losses arising in Mainland China of RMB59,123,000 and RMB39,567,000 and RMB94,044,000 as at 31 December 2022, 2023 and 2024, respectively, that will expire in one to ten years for offsetting against future taxable profits. Deferred tax assets have not been recognised in respect of these losses as it is not considered probable that taxable profits will be available against which the tax losses can be utilised.

18. INVENTORIES

The Group

	As at 31 December		
	2022	2023	2024
	RMB'000	RMB'000	RMB'000
Raw materials	13,791	22,031	25,295
Finished goods	19,854	50,453	54,348
Goods in transit	322	200	1,310
	<u>33,967</u>	<u>72,684</u>	<u>80,953</u>
Less: provision for impairment losses on inventories	–	(8,035)	(16,086)
Net carrying amount	<u>33,967</u>	<u>64,649</u>	<u>64,867</u>

As at 31 December 2022, 2023 and 2024, inventories were stated at the lower of cost and net realisable value.

The movements in provision

	As at 31 December		
	2022	2023	2024
	RMB'000	RMB'000	RMB'000
Carrying amount at the beginning of the year . . .	14	–	8,035
Impairment losses recognised (note 6)	–	8,035	16,086
Amounts written off	(14)	–	(8,035)
Carrying amount at the end of year	<u> </u>	<u>8,035</u>	<u>16,086</u>

The Company

	As at 31 December		
	2022	2023	2024
	RMB'000	RMB'000	RMB'000
Raw materials	811	405	296
Finished goods	—	166	—
	811	571	296
Less: provision for impairment losses on inventories	—	—	—
Net carrying amount	811	571	296

The movements in provision

	As at 31 December		
	2022	2023	2024
	RMB'000	RMB'000	RMB'000
Carrying amount at the beginning of the year . . .	4	—	—
Impairment losses recognised	—	—	—
Amounts written off	(4)	—	—
Carrying amount at the end of the year	—	—	—

19. TRADE AND BILLS RECEIVABLES**The Group**

	As at 31 December		
	2022	2023	2024
	RMB'000	RMB'000	RMB'000
Current:			
Trade receivables	4,600	3,018	42,236
Impairment allowance	(5)	(72)	(1,617)
Trade receivables, net	4,595	2,946	40,619
Bank acceptance notes	—	—	916
Net carrying amount	4,595	2,946	41,535

The Group's trading terms with its customers are mainly payment in advance. The Group provides credit terms to certain customers with satisfied creditworthiness and long-term relationship. Each customer has a maximum credit limit. The Group seeks to maintain strict control over its outstanding receivables and has a credit control department to minimise credit risk.

The Group does not hold any collateral or other credit enhancements over its trade and bills receivable balances. Trade and bills receivables are non-interest-bearing.

An ageing analysis of the Group's trade and bills receivables, based on invoice date and net of loss allowance, as at the end of each of the Relevant Periods is as follows:

	As at 31 December		
	2022	2023	2024
	RMB'000	RMB'000	RMB'000
Current			
Within 1 year.	<u>4,595</u>	<u>2,946</u>	<u>41,535</u>

The movements in the impairment losses on trade and bills receivables are as follows:

	As at 31 December		
	2022	2023	2024
	RMB'000	RMB'000	RMB'000
At beginning of year	23	5	72
Impairment losses recognised	–	67	1,545
Impairment losses reversed	<u>(18)</u>	<u>–</u>	<u>–</u>
At end of year	<u>5</u>	<u>72</u>	<u>1,617</u>

The Group applies the simplified approach in calculating ECLs for trade and bills receivables. Trade and bills receivables relating to customers not sharing similar credit risk with others are assessed individually for impairment allowance, for instance, customers with known financial difficulties or significant doubt on collection. The remaining trade receivables and acceptance bills receivables are grouped and collectively assessed for impairment allowance. An impairment analysis is performed at each reporting date using a provision matrix to measure expected credit losses. The provision rates are based on ageing of receivables for groups of various customer segments that have similar credit rating. The calculation reflects the probability-weighted outcome, the time value of money and reasonable and supportable information that is available at the reporting date about past events, current conditions and forecasts of future economic conditions.

The Group's bills receivable aged within one year were neither past due nor impaired. The accepting banks are reputable financial institution, the management of the Company assessed that the credit loss to be minimal.

Set out below is the information about the credit risk exposure on the Group's trade receivables using a provision matrix:

		Within 1 year
As at 31 December 2022		
<i>On a collective basis:</i>		
Expected credit loss rate		0.11%
Gross carrying amount (RMB'000)		4,600
Expected credit losses (RMB'000)		5
		Within 1 year
As at 31 December 2023		
<i>On collective basis:</i>		
Expected credit loss rate		2.39%
Gross carrying amount (RMB'000)		3,018
Expected credit losses (RMB'000)		72
		Within 1 year
As at 31 December 2024		
<i>On collective basis:</i>		
Expected credit loss rate		3.83%
Gross carrying amount (RMB'000)		42,236
Expected credit losses (RMB'000)		1,617

The Company

	As at 31 December		
	2022	2023	2024
	RMB'000	RMB'000	RMB'000
Trade receivables	—	—	25,500
Less: Impairment losses	—	—	(1,275)
Net carrying amount	—	—	24,225
	=	=	=

An ageing analysis of the Company's trade receivables, based on the invoice date and net of loss allowance, as at the end of each of the Relevant Periods is as follows:

	As at 31 December		
	2022	2023	2024
	RMB'000	RMB'000	RMB'000
Within 1 year.	—	—	24,225
	=	=	=

The movements in the loss allowance for impairment of trade receivables are as follows:

	Year ended 31 December		
	2022	2023	2024
	RMB'000	RMB'000	RMB'000
At beginning of year	—	—	—
Impairment losses recognised	—	—	1,275
At end of year	—	—	1,275
	=	=	=

Set out below is the information about the credit risk exposure on the Company's trade receivables using a provision matrix:

	Within 1 year
As at 31 December 2024	
On a collective basis:	
Expected credit loss rate	5.00%
Gross carrying amount (RMB'000)	25,500
Expected credit losses (RMB'000)	1,275

20. PREPAYMENTS, OTHER RECEIVABLES AND OTHER ASSETS**The Group**

	As at 31 December		
	2022	2023	2024
	RMB'000	RMB'000	RMB'000
Current:			
Other tax recoverable	31,072	24,868	22,029
Deferred listing expenditures	—	—	4,760
Deposits	841	1,051	2,453
Prepayments to suppliers.	6,539	1,822	2,000
Prepaid expenses	1,013	1,307	309
Advances to employees	28	32	16
Others	25	114	10
	=	=	=

	As at 31 December		
	2022	2023	2024
	RMB'000	RMB'000	RMB'000
Impairment allowance	39,518 (113)	29,194 (105)	31,577 (416)
	39,405	29,089	31,161
Non-current:			
Prepayments for long-term assets	18,864	15,338	3,792
Total	58,269	44,427	34,953

An impairment analysis is performed at the end of each of the Relevant Periods. As at 31 December 2022, 2023 and 2024, the ECLs were RMB113,000, RMB105,000 and RMB416,000. The Group has applied the general approach to provide for expected credit losses for non-trade other receivables under IFRS 9. The Group considered the historical loss rate and adjusted it for forward-looking macroeconomic data in calculating the expected credit loss rate.

The Company

	As at 31 December		
	2022	2023	2024
	RMB'000	RMB'000	RMB'000
Current:			
Prepaid listing expenditures	–	–	4,760
Other tax recoverable	48	556	1,106
Deposits	627	641	672
Prepayments to suppliers	420	669	127
Prepaid expenses	163	160	88
Advances to employees	10	–	–
	1,268	2,026	6,753
Impairment allowance	(83)	(33)	(287)
	1,185	1,993	6,466
Non-current:			
Prepayments for long-term assets	2,699	953	1,222
Total	3,884	2,946	7,688

21. CASH AND CASH EQUIVALENTS, PLEDGED DEPOSITS AND RESTRICTED CASH

The Group

	As at 31 December		
	2022	2023	2024
	RMB'000	RMB'000	RMB'000
Cash and cash equivalents	503,928	183,371	111,191
Pledged deposits	43,754	37,469	31,051
Restricted cash	3,000	–	86
Cash and bank balances	550,682	220,840	142,328

As at 31 December 2022, 2023 and 2024, the Group's restricted cash amounted to an aggregate carrying amount of approximately RMB3,000,000, nil and RMB86,000, which were frozen by the court.

The Group's bank and bank balances are dominated in RMB.

As at 31 December 2022, 2023 and 2024, bank deposits of RMB43,754,000, RMB37,469,000 and RMB31,051,000 were pledged to banks as collateral for the issuance of bank acceptance notes and bank loans.

The Company

	As at 31 December		
	2022	2023	2024
	RMB'000	RMB'000	RMB'000
Cash and cash equivalents			
Denominated in RMB	319,298	134,788	71,158

Cash at banks earns interest at floating rates based on daily bank deposit rates.

As at 31 December 2022, 2023 and 2024, the Group and the Company have assessed the credit risk of cash and cash equivalents, pledged deposits and restricted cash to be minimal as they were placed in reputable financial institutions.

22. TRADE AND BILLS PAYABLES

An ageing analysis of the trade and bills payables as at the end of each of the Relevant Periods, based on the invoice date, is as follows:

The Group

	As at 31 December		
	2022	2023	2024
	RMB'000	RMB'000	RMB'000
Within 1 year.	37,640	88,646	192,892
1 to 2 years.	208	1,892	14,565
2 to 3 years.	—	20	276
Over 3 years	6	1	13
Total	37,854	90,559	207,746

The trade and bills payables are non-interest-bearing, unsecured and repayable within one year.

The Company

	As at 31 December		
	2022	2023	2024
	RMB'000	RMB'000	RMB'000
Within 1 year.	75	85	515
1 to 2 years.	68	57	—
2 to 3 years.	—	1	—
Over 3 years	—	—	—
Total	143	143	515

23. OTHER PAYABLES AND ACCRUALS

The Group

	As at 31 December		
	2022	2023	2024
	RMB'000	RMB'000	RMB'000
Payable for purchase of constructions and equipments and service	269,524	286,629	214,538
Deposits	42,328	14,442	6,862
Payroll and welfare payable	9,997	11,454	13,048
Other tax payables	3,635	1,605	4,394
Others	1,776	3,779	4,107
Total	<u>327,260</u>	<u>317,909</u>	<u>242,949</u>

The Company

	As at 31 December		
	2022	2023	2024
	RMB'000	RMB'000	RMB'000
Payroll and welfare payable	4,012	4,922	5,467
Payable for purchase of constructions, equipments and service	599	2,392	5,808
Deposit	85	85	85
Other tax payables	2,827	156	173
Others	107	730	725
Total	<u>7,630</u>	<u>8,285</u>	<u>12,258</u>

Other payables are non-interest-bearing and unsecured. Except for payable for purchase of constructions, equipments and service is repayable within 12 months, all the other payables are repayable on demand.

24. CONTRACT LIABILITIES

The Group

	As at 31 December		
	2022	2023	2024
	RMB'000	RMB'000	RMB'000
Current:			
Ethanol	12,622	8,172	2,772
Microbial protein	—	—	465
Total	<u>12,622</u>	<u>8,172</u>	<u>3,237</u>

Contract liabilities represented advances received to deliver products.

25. INTEREST-BEARING BANK AND OTHER BORROWINGS

The Group

	2022		
	Effective interest rate (%)	Maturity	RMB'000
Current			
Bank loans – secured	3.9	2023	45,049
Current portion of long term bank loans – secured	4.1-4.9	2023	79,865
Current portion of long term other borrowings – unsecured	3.08-3.7	2023	255
Total – current			125,169
Non-current			
Bank loans – secured	4.1-4.9	2025-2032	598,789
Other borrowings – unsecured	3.08-3.7	2024-2025	230,000
Total – non-current			828,789
Total			953,958

	2023		
	Effective interest rate (%)	Maturity	RMB'000
Current			
Bank loans – secured	3.6-3.7	2024	35,039
Current portion of long term bank loans – secured	3.7-4.1	2024	96,747
Current portion of long term other borrowings – unsecured	3.08-3.7	2024	30,209
Total – current			161,995
Non-current			
Bank loans – secured	3.7-4.1	2025-2032	505,270
Other borrowings – unsecured	3.7	2025	200,000
Total – non-current			705,270
Total			867,265

	2024		
	Effective interest rate (%)	Maturity	RMB'000
Current			
Bank loans – unsecured	3.3-3.4	2025	110,082
Other borrowings – unsecured	3.1	2025	50,030
Current portion of long term bank loans – secured	3.4-3.75	2025	109,634
Current portion of long term other borrowings – unsecured	2.96	2025	208
Total – current			269,954
Non-current			
Bank loans – secured	3.4-3.75	2029-2032	447,513
Other borrowings – unsecured	2.48-2.96	2027-2028	230,000
Total – non-current			677,513
Total			947,467

The Group

	As at 31 December		
	2022	2023	2024
	RMB'000	RMB'000	RMB'000
Analysed into:			
Bank loans repayable:			
Within one year	124,914	131,786	219,716
In the second year	–	49,999	–
In the third to fifth years, inclusive	106,228	–	–
Beyond five years	492,561	455,271	447,513
Subtotal	723,703	637,056	667,229
Other borrowings repayable:			
Within one year	255	30,209	50,238
In the second year	30,000	200,000	–
In the third to fifth years, inclusive	200,000	–	230,000
Subtotal	230,255	230,209	280,238
Total	953,958	867,265	947,467

As at 31 December 2022 and 2023 and 2024, the Group's property, plant and equipment with aggregate carrying amounts of approximately RMB1,355,293,000, RMB1,537,806,000 and RMB1,459,366,000, respectively, along with leasehold land of, RMB54,672,000, RMB53,047,000 and RMB51,423,000, were pledged to secure interest-bearing bank and other borrowings granted to the Group (notes 13 and 14).

As at 31 December 2022, 2023 and 2024, bank deposits of RMB30,433,000, RMB22,468,000 and RMB7,000,000 were pledged to banks as collateral for bank loans (note 21).

The Company

	As at 31 December		
	2022	2023	2024
	RMB'000	RMB'000	RMB'000
Analysed into:			
Bank loans repayable:			
Within one year	–	–	80,051
Other borrowings repayable:			
Within one year	254	30,209	50,238
In the second year	30,000	200,000	–
In the third to fifth years, inclusive	200,000	–	230,000
Subtotal	230,254	230,209	280,238
Total	230,254	230,209	360,289

26. DEFERRED INCOME

The Group

	As at 31 December		
	2022	2023	2024
	RMB'000	RMB'000	RMB'000
Non-current:			
Government grants			
Asset-related grants (a)	27,359	29,195	51,235
Reimbursement of future expenses (b)	4,491	—	785
Subtotal	31,850	29,195	52,020
Current:			
Government grants			
Asset-related grants (a)	2,502	2,890	2,892
Reimbursement of future expenses (b)	2,346	5,240	—
Subtotal	4,848	8,130	2,892
Total	36,698	37,325	54,912

The Company

	As at 31 December		
	2022	2023	2024
	RMB'000	RMB'000	RMB'000
Non-current:			
Government grants			
Reimbursement of future expenses (b)	4,491	—	785
Current:			
Reimbursement of future expenses (b)	1,846	4,068	—
Total	6,337	4,068	785

(a) Asset-related grants

The asset-related grants were the subsidies received from the government in relation to the Group's property, plant and equipment and research and development, the deferred income is released to profit or loss over the expected useful life of the relevant asset on straight-line basis.

(b) Reimbursement of future expenses

Government grants as reimbursement of future expenses were subsidies received in relation to the Group's future research and development activities. The deferred income is recognised as income on a systematic basis over the period that the costs, which it is intended to compensate, are expensed.

27. SHARE CAPITAL

The Group and the Company

Shares

	As at 31 December		
	2022	2023	2024
	RMB'000	RMB'000	RMB'000
Issued and fully paid:			
Share capital	360,000	360,000	360,000

Pursuant to the shareholders' resolution dated 24 September 2021, the shareholders of the Company agreed to convert the Company into a joint stock company with limited liability with registered capital of RMB257,754,800 (257,754,800 shares with a nominal value of RMB1.00 each). Upon completion of the registration with the Shijingshan District Market Supervision Administration of Beijing Municipality on 12 November 2021, the Company was renamed as Beijing Shougang LanzaTech Technology Co., Ltd.

On 12 May 2022, the Company completed the capital increase registration, with the share capital increased to RMB277,086,400.

On 27 June 2022, the Company completed registration for the share premium conversion to share capital. 82,913,600 shares in total were converted from share premium. After this share conversion, the Company's total share capital is RMB360,000,000.

A summary of movements in the Company's share capital is as follows:

	Year ended 31 December		
	2022	2023	2024
	RMB'000	RMB'000	RMB'000
At beginning of year	257,755	360,000	360,000
Shareholders' capital injection	19,331	—	—
Transfer from share premium	82,914	—	—
At end of year	360,000	360,000	360,000

28. SHARE-BASED PAYMENTS

(a) Share Award Scheme

To provide incentives and rewards to eligible participants who contribute to the Group's operation, the Company established an employee shareholding platform for the Company to operate Employee Incentive Scheme i.e. the Share Award Scheme. Eligible participants of the Share Award Scheme, including directors, senior management, mid-level managers and other employees of the Group, can participate the Share Award Scheme voluntarily, and the list of participants should be approved by the Company through a board resolution. The board secretary of the Company acts as the general partner of the platforms. The resigned eligible participants should transfer their shares to other eligible participants within 12 months after their resignation, at subscription prices agreed by trading parties, which should be approved by the Company. When no eligible participants purchase the shares from resigned eligible participants within 12 months, the platform would transfer the shares to Tangming Group (Wellington) Investment Limited Liability Company, a shareholder of the Company, who holds 34,137,886 shares of the Company.

On 26 March 2020, 2,734,700 shares of the Company were granted to eligible participants through the employee shareholding platform of the Share Award Scheme at a subscription price of RMB8.5933 per share. The grant date fair values of the shares of the Scheme, which were determined based on investors' recent capital injection price, equals to the subscription price.

The shares held by the employee shareholding platform of the Share Award Scheme will be vested 36 months later from the completion date of industrial and commercial registration for employee shareholding platform investment in the Company. Therefore, service conditions are included in assumptions about the number of equity instruments that are expected to vest. The vesting period will be reviewed and determined by management and the related expense is recognised over the vesting period.

(b) Share Option Scheme

The Share Option Scheme was approved by the Company through board resolutions on 20 June 2023 for the purpose of providing incentives and rewards to eligible participants who contribute to the Group's operations, granting a total of 10,620,000 stock options to 73 eligible participants, including senior management, mid-level managers and other employees of the Group. The exercise price of a share option to subscribe for shares is RMB12.02. As the Company is contemplating an A Share initial public offering at that time, the Share Option Scheme stipulates that the share options are exercisable upon the regulatory approval on issuance of A shares from the China Securities Regulatory Commission by 31 December 2024.

The directors have estimated the values of the share options granted, calculated using the Black-Scholes option pricing model as at the date of grant of the options.

On 31 December 2023, the directors take the view that the vesting conditions will not be met due to change in the circumstances, no share options are likely to vest.

Movements in the number of equity interest shares granted and the respective weighted average grant date fair value are as follows:

	Year ended 31 December 2022		Year ended 31 December 2023		Year ended 31 December 2024	
	Weighted average grant date fair value	Number of shares	Weighted average grant date fair value	Number of shares	Weighted average grant date fair value	Number of shares
	RMB per share		RMB per share		RMB per share	
At beginning of year . .	8.5933	2,734,700	7.2778	3,553,015	12.0200	3,553,015
Granted during the year	—	—	12.0200	10,620,000	—	—
Transfer from share premium	—	818,315	—	—	—	—
Forfeited during the year	—	—	12.0200	(10,620,000)	—	—
At end of year	<u>7.2778</u>	<u>3,553,015</u>	<u>12.0200</u>	<u>3,553,015</u>	<u>12.0200</u>	<u>3,553,015</u>

Share-based payment expenses relating to employees recognised for the Relevant Periods are as follows:

	Year ended 31 December		
	2022	2023	2024
	RMB'000	RMB'000	RMB'000
Administrative expenses	603	3,463	—
Research and development expenses	—	289	—
Selling and marketing expenses	—	—	—
Cost of sales	—	229	—
Total	<u>603</u>	<u>3,981</u>	<u>—</u>

29. RESERVES**The Group**

The amounts of the Group's reserves and the movements therein for the Relevant Periods are presented in the consolidated statements of changes in equity of the Historical Financial Information.

(i) Share premium and other reserve

The share premium of the Group represents the difference between the par value of the shares issued.

Based on the net asset as of 31 May 2021, the Company converted into a joint stock company, with the share capital remaining unchanged, net of accumulated losses and share premium by RMB82,273,000.

(ii) Statutory surplus reserve

In accordance with the Company Law of the PRC, certain subsidiaries of the Group which are domestic enterprises are required to allocate 10% of their profit after tax, as determined in accordance with the relevant PRC accounting standards, to their respective statutory surplus reserves until the reserves reach 50% of their respective registered capital. Subject to certain restrictions set out in the Company Law of the PRC, part of the statutory surplus reserve may be converted to share capital, provided that the remaining balance after the capitalisation is not less than 25% of the registered capital.

(iii) Awarded share reserve

The awarded share reserve represents the excess of the fair value of the awarded shares over the subscription price (including related transaction costs) of the awarded shares awarded and vested to the selected employees at the date of award.

(iv) Special reserve

According to relevant PRC regulations, transfer of production and maintenance funds at fixed rates based on relevant bases to a specific reserve account is required. The production and maintenance funds could be utilised when expenses or capital expenditures on production maintenance and safety measures are incurred. The amount of production and maintenance funds utilised would be transferred from the specific reserve account to retained earnings.

The Company

	Share capital	Share premium and other reserve	Awarded share reserve	Surplus reserve	Retained profits/ (accumulated losses)	Total
As at 1 January 2022	257,755	613,610	210	–	(7,463)	864,112
Total comprehensive income for the year	–	–	–	–	42,780	42,780
Equity-settled share-based payment expense (note 28)	–	–	603	–	–	603
Shareholders' capital injection	19,331	280,669	–	–	–	300,000
Appropriations to statutory surplus reserve	–	–	–	3,883	(3,883)	–
Transfer from share premium	82,914	(82,914)	–	–	–	–
As at 31 December 2022 and 1 January 2023	360,000	811,365	813	3,883	31,434	1,207,495
Total comprehensive income for the year	–	–	–	–	16,824	16,824

	Share capital	Share premium and other reserve	Awarded share reserve	Surplus reserve	Retained profits/(accumulated losses)	Total
As at 1 January 2022	257,755	613,610	210	–	(7,463)	864,112
Equity-settled share-based payment expense (note 28)	–	–	3,981	–	–	3,981
Appropriations to statutory surplus reserve	–	–	–	2,313	(2,313)	–
As at 31 December 2023 and 1 January 2024 . . .	360,000	811,365	4,794	6,196	45,945	1,228,300
Total comprehensive income for the year . . .	–	–	–	–	(34,437)	(34,437)
As at 31 December 2024. .	<u>360,000</u>	<u>811,365</u>	<u>4,794</u>	<u>6,196</u>	<u>11,508</u>	<u>1,193,863</u>

30. PARTLY-OWNED SUBSIDIARIES WITH MATERIAL NON-CONTROLLING INTERESTS

As at 31 December 2022

	Percentage of equity interest held by non-controlling interests	Loss for the year allocated to non-controlling interests	Accumulated balances of non-controlling interests
	%	RMB'000	RMB'000
Ningxia Shoulang Jiyuan New Energy Technology Co., Ltd. (“Ningxia Jiyuan”)	42	(3,792)	77,298
Guizhou Jinze New Energy Technology Co., Ltd. (“Guizhou Jinze”)	49	6	66,558
Ningxia Binze New Energy Technology Co., Ltd. (“Ningxia Binze”)	49	386	108,198

As at 31 December 2023

	Percentage of equity interest held by non-controlling interests	(Loss)/gain for the year allocated to non-controlling interests	Accumulated balances of non-controlling interests
	%	RMB'000	RMB'000
Ningxia Jiyuan	42	(27,245)	50,114
Guizhou Jinze	49	(11,732)	86,412
Ningxia Binze	49	(4,723)	103,331

As at 31 December 2024

	Percentage of equity interest held by non-controlling interests	Loss for the year allocated to non-controlling interests	Accumulated balances of non-controlling interests
	%	RMB'000	RMB'000
Ningxia Jiyuan	42	(24,605)	25,440
Guizhou Jinze	49	(45,943)	40,117
Ningxia Binze	49	(37,614)	66,003

The following tables illustrate the summarised financial information of the above subsidiaries. The amounts disclosed are before any inter-company eliminations:

Ningxia Ji Yuan

	31 December	31 December	31 December
	2022	2023	2024
	RMB'000	RMB'000	RMB'000
Revenue	129,917	98,447	117,718
Total cost and expenses	(138,944)	(163,317)	(176,300)
Total comprehensive income for the year.	(9,027)	(64,870)	(58,582)
Current assets	56,254	50,794	29,235
Non-current assets.	532,460	521,302	476,330
Current liabilities	(271,700)	(369,694)	(412,123)
Non-current liabilities	(132,989)	(82,779)	(32,570)
Net assets	184,025	119,623	60,872
Net cash flows (used in)/from operating activities	31,514	(10,687)	(27,080)
Net cash flows used in investing activities.	(64,032)	(21,968)	(15,245)
Net cash flows from financing activities	4,203	28,866	18,278
Net decrease in cash and cash equivalents	(28,315)	(3,789)	(24,047)

Guizhou Jinze

	31 December	31 December	31 December
	2022	2023	2024
	RMB'000	RMB'000	RMB'000
Revenue	—	92,275	98,525
Total cost and expenses	128	(116,160)	(192,285)
Income tax expense	(116)	(57)	—
Total comprehensive income for the year.	12	(23,942)	(93,760)
Current assets	20,533	20,001	26,524
Non-current assets.	604,180	842,132	818,651
Current liabilities	(102,757)	(330,398)	(323,339)
Non-current liabilities	(353,592)	(354,917)	(439,449)
Net assets	168,364	176,818	82,387
Net cash flows from operating activities	52,827	72,900	34,413
Net cash flows used in investing activities.	(390,432)	(151,817)	(64,061)
Net cash flows from financing activities	342,409	64,108	29,261
Net increase/(decrease) in cash and cash equivalents.	4,804	(14,809)	(387)

Ningxia Binze

	31 December	31 December	31 December
	2022	2023	2024
	RMB'000	RMB'000	RMB'000
Revenue	41,316	192,076	134,189
Total cost and expenses	(40,529)	(201,715)	(210,951)
Total comprehensive income for the year	787	(9,639)	(76,762)
Current assets	145,979	51,624	40,044
Non-current assets	688,525	687,442	657,399
Current liabilities	(264,523)	(217,799)	(296,321)
Non-current liabilities	(349,169)	(309,849)	(265,882)
Net assets	220,812	211,418	135,240
Net cash flows from operating activities	74,581	43,963	35,431
Net cash flows used in investing activities	(416,195)	(103,680)	(45,582)
Net cash flows from/(used in) financing activities	429,051	(32,426)	3,818
Net increase/(decrease) in cash and cash equivalents	87,437	(92,143)	(6,333)

31. NOTES TO THE CONSOLIDATED STATEMENTS OF CASH FLOWS**(a) Major non-cash transactions**

During the years ended 31 December 2022, 2023 and 2024, the Group had non-cash additions to right-of-use assets and lease liabilities of RMB5,763,000, RMB55,799,000 and RMB342,000, respectively, in respect of lease arrangements for plant, equipment and land.

During the year ended 31 December 2023, the Group sold a property with a carrying value of RMB49,809,000 to a related party, and leased it back, recognising a right-of-use asset of RMB54,428,000. The Group agreed with the related party to offset the rent payable of RMB49,809,000 against receivables from sale of the property.

(b) Changes in liabilities arising from financing activities

	Interest-bearing bank and other borrowings	Lease liabilities	Total
	RMB'000	RMB'000	RMB'000
At 1 January 2022	239,573	8,987	248,560
Changes from financing cash flows	689,922	(4,321)	685,601
New leases	–	5,763	5,763
Interest expense	24,463	369	24,832
Lease term termination	–	(1,179)	(1,179)
At 31 December 2022	953,958	9,619	963,577
Changes from financing cash flows	(120,349)	(8,493)	(128,842)
Offset by sale of a property	–	(49,809)	(49,809)
New leases	–	55,799	55,799
Interest expense	33,656	473	34,129
At 31 December 2023	867,265	7,589	874,854
Changes from financing cash flows	46,305	(3,585)	42,720
New leases	–	342	342
Lease term termination	–	(191)	(191)
Interest expense	33,897	330	34,227
At 31 December 2024	947,467	4,485	951,952

(c) Total cash outflow for leases

The total cash outflow for leases included in the statements of cash flows is as follows:

	Year ended 31 December		
	2022	2023	2024
	RMB'000	RMB'000	RMB'000
Within operating activities.	87	238	464
Within financing activities.	4,321	8,493	3,585
Total	<u>4,408</u>	<u>8,731</u>	<u>4,049</u>

32. COMMITMENTS

The Group had the following capital commitments at the end of each reporting period:

	As at 31 December		
	2022	2023	2024
	RMB'000	RMB'000	RMB'000
Contracted, but not provided for:			
Properties, plant and equipment	<u>193,560</u>	<u>25,305</u>	<u>12,705</u>

33. RELATED PARTY TRANSACTIONS

(a) Name and relationship:

Name of related parties	Relationship with the Group
北京首鋼機電有限公司 Beijing Shougang Machinery Electric Co., Ltd.	A company controlled by the ultimate controlling shareholders
北京首鋼氣體有限公司 Beijing Shougang Gas Company Limited	A company controlled by the ultimate controlling shareholders
北京首建設備維修有限公司 Beijing Shoujian Equipment Maintenance Co., Ltd.	A company controlled by the ultimate controlling shareholders
北京首鋼建設集團有限公司 Beijing Shougang Construction Group Co., Ltd.	A company controlled by the ultimate controlling shareholders
北京首鋼富通電梯有限責任公司 Beijing Shougang Futong Elevator Co., Ltd.	A company controlled by the ultimate controlling shareholders
北京首鋼自動化信息技術有限公司 Beijing Shougang Automation Information Technology Co., Ltd.	A company controlled by the ultimate controlling shareholders
首鋼環境產業有限公司 Shougang Environmental Industry Co., Ltd.	A company controlled by the ultimate controlling shareholders
首鋼集團財務有限公司 Shougang Group Finance Company Limited	A company controlled by the ultimate controlling shareholders
首鋼京唐鋼鐵聯合有限責任公司 Shougang Jingtang United Iron Steel Co., Ltd.	A company controlled by the ultimate controlling shareholders
唐山曹妃甸首實實業有限公司 Tangshan Caofeidian Shoushi Industrial Co., Ltd.	A company controlled by the ultimate controlling shareholders
中國首鋼國際貿易工程有限公司 China Shougang International Trade Engineering Corporation	A company controlled by the ultimate controlling shareholders

Name of related parties	Relationship with the Group
秦皇島首鋼機械有限公司 Qinhuangdao Capital Steelwork Machinery Plant	A company controlled by the ultimate controlling shareholders
首鋼工學院 Shougang Institute of Technology	A company controlled by the ultimate controlling shareholders
陳琪 Qi Chen	Close member of key management
江蘇久吾高科技股份有限公司 Jiangsu Jiuwu Hi-tech Co., Ltd.	A company controlled by a substantial shareholder
朗澤科技香港有限公司 LanzaTech Hong Kong Limited.	A substantial shareholder
LanzaTech, Inc.	A company under the same controller as a substantial shareholder
上海朗澤清潔技術有限公司 Lanzatech China Limited.	A company controlled by a substantial shareholder
LanzaTech NZ, Inc.	A company controlled by a substantial shareholder
LanzaTech, EU B.V.	A company controlled by a substantial shareholder

(b) Transactions with related parties:

The Group had the following transactions with related parties during the Relevant Periods:

The Group

	Year ended 31 December		
	2022	2023	2024
	RMB'000	RMB'000	RMB'000
Sales of goods or services			
Lanzatech China Limited	9	—	30,012
LanzaTech, EU B.V.	—	—	5,840
Shougang Jingtang United Iron Steel Co., Ltd. . .	6,650	5,609	5,787
LanzaTech, Inc.	16,150	16,130	1,702
Total	<u>22,809</u>	<u>21,739</u>	<u>43,341</u>
Interest income			
Shougang Group Finance Company Limited	<u>6,738</u>	<u>5,408</u>	<u>1,978</u>
Purchase of goods or services			
Shougang Jingtang United Iron Steel Co., Ltd. . .	124,331	117,138	110,887
Beijing Shougang Gas Company Limited.	—	—	358
Qi Chen	479	492	662
Tangshan Caofeidian Shoushi Industrial Co., Ltd.	407	340	371
Beijing Shougang Construction Group Co., Ltd. .	226	45	—
Lanzatech China Limited	507	41	15
Qinhuangdao Capital Steelwork Machinery Plant	15	12	—
Beijing Shougang Futong Elevator Co., Ltd. . . .	9	10	9
Beijing Shougang Machinery Electric Co., Ltd. . .	257	—	—
Beijing Shougang Automation Information Technology Co., Ltd.	4,837	3,393	4,000
LanzaTech NZ, Inc.	—	—	8
Shougang Institute of Technology	—	—	3
LanzaTech Hong Kong Limited	—	—	2,550
Shougang Group Finance Company Limited	<u>28</u>	<u>55</u>	<u>118</u>
Total	<u>131,096</u>	<u>121,526</u>	<u>118,981</u>

	Year ended 31 December		
	2022	2023	2024
	RMB'000	RMB'000	RMB'000
Purchase of property, plant and equipment and intangible assets			
Jiangsu Jiuwu Hi-tech Co., Ltd.	90,086	24,818	98
Beijing Shougang Automation Information Technology Co., Ltd.	5,703	2,923	1,405
LanzaTech Hong Kong Limited.	8,100	4,192	—
Beijing Shougang Gas Company Limited.	—	128	—
LanzaTech, Inc.	319	—	—
Total	<u>104,208</u>	<u>32,061</u>	<u>1,503</u>
Disposal of property, plant and equipment			
Shougang Jingtang United Iron Steel Co., Ltd. . .	—	49,809	—
Borrowings from:			
Shougang Group Finance Company Limited . . .	<u>200,000</u>	<u>—</u>	<u>80,000</u>
Repayment borrowings:			
Shougang Group Finance Company Limited . . .	<u>—</u>	<u>—</u>	<u>30,000</u>
Interest expense			
Shougang Group Finance Company Limited . . .	<u>4,452</u>	<u>7,991</u>	<u>6,968</u>
Interest expense on lease liabilities			
Shougang Jingtang United Iron Steel Co., Ltd. . .	<u>134</u>	<u>79</u>	<u>75</u>

These transactions were carried out in accordance with the terms and conditions mutually agreed by the parties involved.

According to the financial service agreement signed between the Group and Shougang Group Finance Company Limited, Shougang Group Finance Company Limited provides the Group with comprehensive credit services with a maximum daily credit limit of RMB50,000,000. The Group issued bills which are guaranteed by Shougang Group Finance Company Limited of RMB94,400,000, RMB94,350,000, RMB93,830,000 for the years ended 31 December 2022, 2023 and 2024. Balances for those bills are RMB44,400,000, RMB50,000,000 and RMB50,000,000 as at 31 December 2022 and 2023 and 2024.

(c) Outstanding balances with related parties:

The Group

	As at 31 December		
	2022	2023	2024
	RMB'000	RMB'000	RMB'000
Due from related companies			
Trade-related			
Trade and bills receivables			
LanzaTech, Inc.	83	3,175	872
Shougang Jingtang United Iron Steel Co., Ltd. .	<u>5,330</u>	<u>3,532</u>	<u>1,574</u>
Subtotal.	5,413	6,707	2,446
Less: Impairment allowance	<u>(131)</u>	<u>(238)</u>	<u>(122)</u>
Net carrying amount	<u>5,282</u>	<u>6,469</u>	<u>2,324</u>
Prepayments, other receivables and other assets			
Jiangsu Jiuwu Hi-tech Co., Ltd.	<u>6</u>	<u>—</u>	<u>—</u>
Non-trade-related			
Prepayments, other receivables and other assets			
Shougang Group Finance Company Limited . .	<u>3,309</u>	<u>3,777</u>	<u>—</u>
Total	<u>8,597</u>	<u>10,246</u>	<u>2,324</u>

The Group places deposits in Shougang Group Finance Company Limited, and bears interest rate of 1.9% without fixed term. The management assesses that the credit risk to be minimal.

As at 31 December 2022, 2023 and 2024, balances due from related parties are non-interest-bearing and unsecured, and except for trade and bills receivables from related companies are within one year, the remaining balances due from related parties are payable on demand.

Ageing of trade and bills receivables in due from related companies, based on invoice date and net of loss allowance, is with one year as at the end of each of the Relevant Periods. The Group performs impairment assessment under the ECL model on amounts due from related companies, which are subject to impairment assessment under IFRS 9. The amount of ECLs is updated at each reporting date to reflect changes in credit risk since initial recognition.

The movements in the impairment losses on trade and bills receivables in due from related companies are as follows:

	As at 31 December		
	2022	2023	2024
	RMB'000	RMB'000	RMB'000
At beginning of year	49	131	238
Impairment losses recognised	82	107	–
Impairment losses reversed	–	–	(116)
At end of year	<u>131</u>	<u>238</u>	<u>122</u>

Set out below is the information about the credit risk exposure on the Group's trade and bills receivables in due from related companies using a provision matrix:

	As at 31 December		
	2022	2023	2024
<i>On a collective basis:</i>			
Expected credit loss rate	2.30%	3.5%	5%
Gross carrying amount (RMB'000)	5,413	6,707	2,446
Expected credit losses (RMB'000)	131	238	122

Deposits balances made by the Group in Shougang Group Finance Company Limited:

	As at 31 December		
	2022	2023	2024
	RMB'000	RMB'000	RMB'000
Non-trade-related			
Pledged deposits	13,320	15,000	15,000
Cash and cash equivalents	<u>431,886</u>	<u>170,045</u>	<u>80,049</u>

The Group

	As at 31 December		
	2022	2023	2024
	RMB'000	RMB'000	RMB'000
Due to related companies			
Trade-related			
Trade and bills payables			
Shougang Jingtang United Iron Steel Co., Ltd. .	82,434	75,431	80,734
Tangshan Caofeidian Shoushi Industrial Co., Ltd.	138	110	177
Beijing Shougang Gas Company Limited	—	—	330
Beijing Shougang Automation Information Technology Co., Ltd	—	—	2,147
Jiangsu Jiuwu Hi-tech Co., Ltd.	—	—	792
Beijing Shougang Machinery Electric Co., Ltd.	4	4	—
Subtotal.	<u>82,576</u>	<u>75,545</u>	<u>84,180</u>
Other payables and accruals			
Jiangsu Jiuwu Hi-tech Co., Ltd.	66,828	81,434	68,399
LanzaTech Hong Kong Limited	8,100	8,761	8,639
Beijing Shougang Automation Information Technology Co., Ltd	5,790	6,514	4,578
Lanzatech China Limited	287	287	304
Beijing Shougang Construction Group Co., Ltd.	144	—	—
Beijing Shougang Machinery Electric Co., Ltd.	3	3	—
Beijing Shougang Gas Company Limited	—	4	—
Beijing Shoujian Equipment Maintenance Co., Ltd.	3	3	—
China Shougang International Trade Engineering Corporation	1	—	—
Subtotal.	<u>81,156</u>	<u>97,006</u>	<u>81,920</u>
Contract liabilities			
Lanzatech China Limited	—	—	132
Total	<u>163,732</u>	<u>172,551</u>	<u>166,232</u>
Interest-bearing bank and other borrowings			
Non-trade-related			
Current			
Shougang Group Finance Company Limited . .	<u>254</u>	<u>30,209</u>	<u>50,238</u>
Non-current			
Shougang Group Finance Company Limited . .	<u>230,000</u>	<u>200,000</u>	<u>230,000</u>
Total	<u>230,254</u>	<u>230,209</u>	<u>280,238</u>
Lease liabilities			
Trade-related			
Shougang Jingtang United Iron Steel Co., Ltd. . .	<u>1,663</u>	<u>1,577</u>	<u>1,486</u>

The non-trade-related balance with Shougang Group Finance Company Limited will continue after the listing.

As at 31 December 2022, 2023 and 2024, except for interest-bearing bank and other borrowings and lease liabilities, all the remaining balances due to related companies are non-interest-bearing, unsecured and repayable within 60 days.

Ageing of the trade and bills payables in due to related companies based on the invoice date is within one year as at the end of each of the Relevant Periods.

The Company

	As at 31 December		
	2022	2023	2024
	RMB'000	RMB'000	RMB'000
Due from related parties:			
Trade-related:			
Prepayments, other receivables and other assets			
Shougang Group Finance Company Limited . .	2,640	3,732	–
Due from subsidiaries:			
Current:			
Trade-related:			
Trade receivables	69,296	109,388	102,417
Less: Impairment allowance	(3,465)	(5,469)	(5,121)
Net carrying amount	65,831	103,919	97,296
Non-trade-related:			
Loans to subsidiaries	237,000	417,000	519,000
Prepayments, other receivables and other assets	23,411	29,724	37,469
Subtotal	260,411	446,724	556,469
Total	326,242	550,643	653,765
Due from subsidiaries:			
Non-current:			
Non-trade-related:			
Loans to subsidiaries	230,000	200,000	230,000
Due to related companies:			
Trade-related:			
Other payables			
Lanzatech China Limited	287	287	304
Beijing Shougang Automation Information Technology Co., Ltd	–	–	960
Jiangsu Jiuwu Hi-tech Co., Ltd.	–	194	–
LanzaTech Hong Kong Limited	6,000	8,761	8,639
Beijing Shougang Machinery Electric Co., Ltd.	4	4	–
China Shougang International Trade Engineering Corporation	1	–	–
Total	6,292	9,246	9,903
Due to subsidiaries:			
Trade-related:			
Trade payables	6,866	6	7,329

As at 31 December 2022, 2023 and 2024, except for loans to subsidiaries that bore interest of 3.1%-3.45%, all the remaining balances due from related parties and subsidiaries were non-interest-bearing, unsecured and payable on demand. The management assesses that the credit risk to be minimal.

As at 31 December 2022, 2023 and 2024, except for interest-bearing bank and other borrowings from Shougang Group Finance Company Limited that bore interest at a rate range of 2.48-2.96% per annum, all the remaining balances due to related companies and subsidiaries were non-interest-bearing, unsecured and repayable on demand.

(d) Compensation of key management personnel of the Group

	Year ended 31 December		
	2022	2023	2024
	RMB'000	RMB'000	RMB'000
Fees	205	200	210
Salaries, bonuses, allowances and benefits in kind	1,403	1,461	1,534
Performance related bonuses	490	406	669
Pension scheme contributions	82	96	126
Total compensation paid to key management personnel	<u>2,180</u>	<u>2,163</u>	<u>2,539</u>

Further details of the directors', chief executive's and supervisors' emoluments are included in note 8 to the Historical Financial Information.

34. FINANCIAL INSTRUMENTS BY CATEGORY

The carrying amounts of each of the categories of financial instruments as at the end of each of the Relevant Periods are as follows:

The Group

Financial assets

	As at 31 December		
	2022	2023	2024
	RMB'000	RMB'000	RMB'000
Financial assets at amortised cost			
Trade and bills receivables	4,595	2,946	41,535
Financial assets included in prepayments, other receivables and other assets	866	1,165	2,463
Due from related companies	8,728	10,484	2,446
Pledged deposits	43,754	37,469	31,051
Restricted cash	3,000	–	86
Cash and cash equivalents	<u>503,928</u>	<u>183,371</u>	<u>111,191</u>
Total	<u>564,871</u>	<u>235,435</u>	<u>188,772</u>

Financial liabilities

	As at 31 December		
	2022	2023	2024
	RMB'000	RMB'000	RMB'000
Financial liabilities at amortised cost			
Lease liabilities	9,619	7,589	4,485
Trade and bills payables	37,854	90,559	207,746
Financial liabilities included in other payables and accruals	313,628	304,850	225,507
Due to related companies	163,732	172,551	166,232
Interest-bearing bank and other borrowings	<u>953,958</u>	<u>867,265</u>	<u>947,467</u>
Total	<u>1,478,791</u>	<u>1,442,814</u>	<u>1,551,437</u>

The Company

Financial assets

	As at 31 December		
	2022	2023	2024
	RMB'000	RMB'000	RMB'000
Financial assets at amortised cost			
Trade and bills receivables	–	–	24,225
Financial assets included in prepayments, other receivables and other assets	627	641	672
Due from subsidiaries	559,706	756,112	888,886
Due from related parties	2,640	3,732	–
Cash and cash equivalents	319,298	134,788	71,158
Total	<u>882,271</u>	<u>895,273</u>	<u>984,941</u>

Financial liabilities

	As at 31 December		
	2022	2023	2024
	RMB'000	RMB'000	RMB'000
Financial liabilities at amortised cost			
Trade payables	143	143	515
Financial liabilities included in other payables and accruals	791	3,207	6,618
Due to related companies	6,292	9,246	9,903
Due to subsidiaries	6,866	6	7,329
Interest-bearing bank and other borrowings	230,254	230,209	360,289
Total	<u>244,346</u>	<u>242,811</u>	<u>384,654</u>

35. FAIR VALUE AND FAIR VALUE HIERARCHY OF FINANCIAL INSTRUMENTS

Management has assessed that the fair values of cash and cash equivalents, restricted cash, pledged deposits, trade and bills receivables, financial assets included in prepayments, other receivables and other assets, trade and bills payables, financial liabilities included in other payables and accruals and current portion of interest-bearing bank and other borrowings approximate to their carrying amounts largely due to the short term maturities of these instruments.

The Group's finance department headed by the finance manager is responsible for determining the policies and procedures for the fair value measurement of financial instruments. The finance manager reports directly to the chief financial officer. At each reporting date, the finance department analyses the movements in the values of financial instruments and determines the major inputs applied in the valuation. The valuation is reviewed and approved by the chief financial officer.

The fair values of the financial assets and liabilities are included at the amount at which the instrument could be exchanged in a current transaction between willing parties, other than in a forced or liquidation sale.

The fair values of the non-current portion of interest-bearing bank and other borrowings with floating rate approximate to their carrying amounts. The fair values of the non-current portion of interest-bearing bank and other borrowings on fixed rate have been calculated by discounting the expected future cash flows using rates currently available for instruments with similar terms, credit risk and remaining maturities and are within level 2 of the fair value hierarchy. The changes in fair value as a result of the Group's own non-performance risk for interest-bearing bank and other borrowings as at the end of the reporting period were assessed to be insignificant.

The carrying amounts and fair values of the Group's financial instruments, other than those with carrying amounts that reasonably approximate to their fair values, are as follows:

	Carrying amounts			Fair values		
	31 December			31 December		
	2022	2023	2024	2022	2023	2024
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
Non-current portion of interest-bearing bank and other borrowings with fixed rate	230,000	200,000	230,000	226,612	199,970	240,504

36. FINANCIAL RISK MANAGEMENT OBJECTIVES AND POLICIES

The Group's principal financial instruments comprise bank loans, other interest-bearing borrowings, and cash and short term deposits. The main purpose of these financial instruments is to raise finance for the Group's operations. The Group has various other financial assets and liabilities such as trade and bills receivables and trade and bills payables, which arise directly from its operations.

The main risks arising from the Group's financial instruments are interest rate risk, credit risk and liquidity risk. The board of directors reviews and agrees policies for managing each of these risks and they are summarised below.

Interest rate risk

The Group's exposure to the risk of changes in market interest rates relates primarily to the Group's long term debt obligations with a floating interest rate. The Group's policy is to manage its interest cost using a mix of fixed and variable rate debts.

If the interest rate of bank and other borrowings had increased/decreased by 5% and all other variables were held constant, the loss before tax of the Group, through the impact on floating rate borrowings, would have increased/decreased by approximately RMB462,000, RMB1,319,000 and RMB1,316,000 for the years ended 31 December 2022, 2023 and 2024, respectively.

Credit risk

The Group trades only with recognised and creditworthy third parties. It is the Group's policy that all customers who wish to trade on credit terms are subject to credit verification procedures. In addition, receivable balances are monitored on an ongoing basis. For transactions that are not denominated in the functional currency of the relevant operating unit, the Group does not offer credit terms without specific verification procedures.

As at the end of each of the Relevant Periods, the Group had certain concentrations of credit risk as 81.1%, 53.5%, and 44.0% of the Group's trade and bills receivables were due from the Group's largest debtor, respectively.

Maximum exposure and year-end staging

The tables below show the credit quality and the maximum exposure to credit risk based on the Group's credit policy, which is mainly based on past due information unless other information is available without undue cost or effort, and year-end staging classification.

The amounts presented are gross carrying amounts for financial assets.

APPENDIX I

ACCOUNTANTS' REPORT

As at 31 December 2022

	12-month ECLs	Lifetime ECLs			
	Stage 1	Stage 2	Stage 3	Simplified approach	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
Trade and bills receivables*	—	—	—	4,600	4,600
Financial assets included in prepayments, other receivables and other assets					
– Normal**	862	—	—	—	862
– Doubtful**	—	—	4	—	4
Due from related companies					
– Normal**	3,315	—	—	5,413	8,728
Pledged deposits					
– Not yet past due	43,754	—	—	—	43,754
Restricted cash					
– Not yet past due	3,000	—	—	—	3,000
Cash and cash equivalents					
– Not yet past due	503,928	—	—	—	503,928
Total	554,859	—	4	10,013	564,876

As at 31 December 2023

	12-month ECLs	Lifetime ECLs			
	Stage 1	Stage 2	Stage 3	Simplified approach	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
Trade and bills receivables*	—	—	—	3,018	3,018
Financial assets included in prepayments, other receivables and other assets					
– Normal**	1,165	—	—	—	1,165
Due from related companies					
– Normal**	3,777	—	—	6,707	10,484
Pledged deposits					
– Not yet past due	37,469	—	—	—	37,469
Cash and cash equivalents					
– Not yet past due	183,371	—	—	—	183,371
Total	225,782	—	—	9,725	235,507

As at 31 December 2024

	12-month ECLs	Lifetime ECLs			Total
	Stage 1	Stage 2	Stage 3	Simplified approach	
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
Trade and bills receivables*	–	–	–	43,152	43,152
Financial assets included in prepayments, other receivables and other assets					
– Normal**	2,463	–	–	–	2,463
Due from related companies					
– Normal**	2,446	–	–	–	2,446
Pledged deposits					
– Not yet past due	31,051	–	–	–	31,051
Restricted cash					
– Not yet past due	86	–	–	–	86
Cash and cash equivalents					
– Not yet past due	111,191	–	–	–	111,191
Total	<u>147,237</u>	<u>–</u>	<u>–</u>	<u>43,152</u>	<u>190,389</u>

* For trade and bills receivables to which the Group applies the simplified approach for impairment, information based on the provision matrix is disclosed in note 19.

** The credit quality of the financial assets included in prepayments, other receivables and other assets is considered to be “normal” when they are not past due and there is no information indicating that the financial assets had a significant increase in credit risk since initial recognition. Otherwise, the credit quality of the financial assets is considered to be “doubtful”.

Liquidity risk

The Group monitors and maintains a level of cash and cash equivalents deemed adequate by the management of the Group to finance the operations and mitigate the effects of fluctuations of cash flows.

The Group's objective is to maintain a balance between continuity of funding and flexibility through the use of interest-bearing bank and other borrowings and lease liabilities.

The maturity profile of the Group's financial liabilities as at the end of each reporting period, based on the contractual undiscounted payments, is as follows:

	Less than 1 year	Between 1 and 2 years	Between 2 and 3 years	Between 3 and 5 years	Over 5 years	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
31 December 2022						
Lease liabilities	3,342	3,352	2,188	552	1,485	10,919
Trade payables	37,854	–	–	–	–	37,854
Financial liabilities included in other payables and accruals	313,628	–	–	–	–	313,628
Due to related companies	163,732	–	–	–	–	163,732
Interest-bearing bank and other borrowings	163,787	63,751	335,242	42,000	560,308	1,165,088
Total	<u>682,343</u>	<u>67,103</u>	<u>337,430</u>	<u>42,552</u>	<u>561,793</u>	<u>1,691,221</u>

	Less than 1 year	Between 1 and 2 years	Between 2 and 3 years	Between 3 and 5 years	Over 5 years	Total
	<i>RMB'000</i>	<i>RMB'000</i>	<i>RMB'000</i>	<i>RMB'000</i>	<i>RMB'000</i>	<i>RMB'000</i>
31 December 2023						
Lease liabilities . . .	3,903	2,607	347	330	1,320	8,507
Trade payables . . .	90,559	–	–	–	–	90,559
Financial liabilities included in other payables and accruals	304,850	–	–	–	–	304,850
Due to related companies	172,551	–	–	–	–	172,551
Interest-bearing bank and other borrowings	196,390	274,639	18,418	36,836	498,380	1,024,663
Total	<u>768,253</u>	<u>277,246</u>	<u>18,765</u>	<u>37,166</u>	<u>499,700</u>	<u>1,601,130</u>

	Less than 1 year	Between 1 and 2 years	Between 2 and 3 years	Between 3 and 5 years	Over 5 years	Total
	<i>RMB'000</i>	<i>RMB'000</i>	<i>RMB'000</i>	<i>RMB'000</i>	<i>RMB'000</i>	<i>RMB'000</i>
31 December 2024						
Lease liabilities . . .	2,871	552	165	331	1,157	5,076
Trade and bills payables	207,746	–	–	–	–	207,746
Financial liabilities included in other payables and accruals	225,507	–	–	–	–	225,507
Due to related companies	166,232	–	–	–	–	166,232
Interest-bearing bank and other borrowings	298,478	23,058	52,989	235,967	473,083	1,083,575
Total	<u>900,834</u>	<u>23,610</u>	<u>53,154</u>	<u>236,298</u>	<u>474,240</u>	<u>1,688,136</u>

Capital management

The primary objectives of the Group's capital management are to safeguard the Group's ability to continue as a going concern and to maintain healthy capital ratios in order to support its business and maximise shareholders' value.

The Group manages its capital structure and makes adjustments to it in light of changes in economic conditions. To maintain or adjust the capital structure, the Group may adjust the dividend payment to shareholders, return capital to shareholders or issue new shares.

The Group monitors capital using a gearing ratio, which is net debt divided by total capital plus net debt. The Group includes, within net debt, interest-bearing bank and other borrowings, trade and bills payables, other payables and accruals and lease liabilities, less cash and cash equivalents. Capital includes equity attributable to the owners of the parent. The gearing ratios as at the end of the reporting periods were as follows:

	As at 31 December		
	2022	2023	2024
	RMB'000	RMB'000	RMB'000
Trade and bills payables	37,854	90,559	207,746
Other payables and accruals	327,260	317,909	242,949
Due to related companies	163,732	172,551	166,232
Interest-bearing bank and other borrowings	953,958	867,265	947,467
Lease liabilities	9,619	7,589	4,485
Less: Cash and cash equivalents	(503,928)	(183,371)	(111,191)
Net debt	988,495	1,272,502	1,457,688
Equity attributable to owners of the parent.	1,001,955	939,243	801,972
Capital and net debt	1,990,450	2,211,745	2,259,660
Gearing ratio	50%	58%	65%

37. SUBSEQUENT EVENTS

The Company obtained new banking facilities of RMB1,680,000,000 subsequent to 31 December 2024.