HG SEMICONDUCTOR LIMITED
宏光半導體有限公司

(Incorporated in the Cayman Islands with limited liability)

(Stock Code: 6908)

ANNOUNCEMENT OF AUDITED ANNUAL RESULTS FOR THE YEAR ENDED 31 DECEMBER 2022

FINANCIAL HIGHLIGHTS

Year ended 31 December (RMB'000)	**2022**	2021	Percentage Change
Revenue	**87,518**	126,137	–30.6%
Cost of sales	**(71,087)**	(100,630)	–29.4%
Gross profit	**16,431**	25,507	–35.6%
Loss before income tax credit	**(101,646)**	(447,624)	–77.3%
Net loss	**(101,287)**	(446,826)	–77.3%
Loss per share (RMB)	**(0.1781)**	(0.9222)	–80.7%
Total assets	**718,308**	665,873	7.9%
Total equity	**609,945**	609,341	0.1%
Key Financial Ratios			
Gross profit margin (%)	**18.8**	20.2	
Net margin (%)	**(115.7)**	(354.2)	
Return on equity (%)	**(16.6)**	(73.3)	
Return on assets (%)	**(14.1)**	(67.1)	
Current ratio	**2.9**	8.1	
Gearing ratio (%)	**6.7**	1.1	

ANNUAL RESULTS

The board (the "**Board**") of Directors (the "**Directors**") of HG Semiconductor Limited (the "**Company**") hereby announces the consolidated annual results of the Company and its subsidiaries (collectively, the "**Group**") for the year ended 31 December 2022, together with the comparative figures for the year ended 31 December 2021, as follows:

CONSOLIDATED STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME

For the year ended 31 December 2022

	Notes	**2022** *RMB'000*	2021 *RMB'000*
Revenue	*5*	**87,518**	126,137
Cost of sales		**(71,087)**	(100,630)
Gross profit		**16,431**	25,507
Other income and gains	*5*	**1,224**	409
Selling and distribution expenses		**(2,966)**	(2,259)
Administrative and other expenses		**(112,732)**	(98,605)
Loss arising on acquisition of intangible assets		**—**	(374,410)
(Provision)/reversal of provision on expected credit losses on trade and bills receivables		**(1,595)**	2,881
Finance costs	*7*	**(2,008)**	(1,147)
Loss before income tax credit	*6*	**(101,646)**	(447,624)
Income tax credit	*8*	**359**	798
Loss for the year		**(101,287)**	(446,826)
Other comprehensive income			
Item that will not be reclassified to profit or loss:			
Exchange difference on translation to presentation currency		**3,265**	(4,125)
Item that may be reclassified to profit or loss:			
Change in fair value of financial assets at fair value through other comprehensive income		**12,532**	1,309
Total comprehensive income for the year		**(85,490)**	(449,642)

	Notes	**2022** *RMB'000*	2021 *RMB'000*
Loss for the year attributable to:			
Owners of the Company		**(101,287)**	(446,826)
Non-controlling interests		**—**	—
		(101,287)	(446,826)
Total comprehensive income attributable to:			
Owners of the Company		**(85,490)**	(449,642)
Non-controlling interests		**—**	—
		(85,490)	(449,642)
Loss per share attributable to owners of the Company			
— Basic and diluted (RMB cents)	*9*	**(17.81)**	(92.22)

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

As at 31 December 2022

	Notes	2022 RMB'000	2021 RMB'000
ASSETS AND LIABILITIES			
Non-current assets			
Property, plant and equipment		**108,897**	58,632
Intangible assets		**71,169**	63,951
Financial assets at fair value through OCI		**198,865**	186,333
Prepayments and deposits	*12*	**50,946**	40,843
Deferred tax assets		**2,047**	1,688
		431,924	351,447
Current assets			
Inventories		**58,949**	35,615
Trade and bills receivables	*11*	**77,265**	97,378
Prepayments, deposits and other receivables	*12*	**72,476**	42,373
Financial assets at fair value through profit or loss		**33,900**	25,383
Current tax recoverable		**—**	37
Cash and cash equivalents		**43,794**	113,640
		286,384	314,426
Current liabilities			
Trade payables	*13*	**23,262**	18,640
Other payables and accruals		**25,247**	6,373
Bank and other borrowings	*14*	**41,139**	7,000
Lease liabilities		**7,520**	6,651
		97,168	38,664
Net current assets		**189,216**	275,762

	Notes	**2022** ***RMB'000***	2021 *RMB'000*
Non-current liabilities			
Lease liabilities		**11,195**	17,868
		11,195	17,868
Net assets		**609,945**	609,341
EQUITY			
Equity attributable to owners of the Company			
Share capital	*15*	**5,098**	4,937
Reserves		**588,656**	604,404
		593,754	609,341
Non-controlling interests		**16,191**	—
Total equity		**609,945**	609,341

NOTES TO THE FINANCIAL STATEMENTS

For the year ended 31 December 2022

1. GENERAL AND CORPORATE INFORMATION

HG Semiconductor Limited (the "Company") was incorporated with limited liability in the Cayman Islands on 27 May 2015. The shares have been listed on the GEM of The Stock Exchange of Hong Kong Limited (the "Stock Exchange") since 30 December 2016 with stock code "8343" and have been transferred from the GEM to the Main Board of the Stock Exchange on 13 November 2019 with stock code "6908".

The address of the Company's registered office is Windward 3, Regatta Office Park, P.O. Box 1350, Grand Cayman KY1-1108, Cayman Islands. The principal place of business of the Company and its subsidiaries (collectively referred to as the "Group") is located in the People's Republic of China (the "PRC") at the North Side, 2nd Floor, No. 8 Pinggong Er Road, Nanping Technology Industrial Park, Zhuhai, the PRC.

The Company's principal activity is investment holding. The Group is principally engaged in the design, development, manufacturing, subcontracting service and sales of semiconductor products, including light emitting diode ("LED") beads, gallium nitride ("GaN") chips, GaN components and related application products, and fast charging products in the PRC.

In the opinion of the Directors, as at 31 December 2022, the Company's ultimate parents are First Global Limited, a company incorporated in the British Virgin Islands (the "BVI") and Wide Yield Investment Holding Limited, a company incorporated in the BVI.

2. ADOPTION OF HONG KONG FINANCIAL REPORTING STANDARDS ("HKFRSs")

(a) Adoption of new/revised HKFRSs — effective 1 January 2022

Amendments to HKFRS 1, HKFRS 9, HKFRS 16 and HKAS 41	Annual Improvements to HKFRS Standards 2018–2020
Amendments to HKFRS 3	Reference to the Conceptual Framework
Amendments to HKAS 16	Property, Plant and Equipment — Proceeds before Intended Use
Amendments to HKFRS 16	Covid-19-Related Rent Concessions beyond 30 June 2021
Amendments to HKFRS 37	Onerous Contract — Cost of Fulfilling a Contract

None of these new or amended HKFRSs has a material impact on the Group's results and financial position for the current or prior period. The Group has not early applied any new or amended HKFRSs that is not yet effective for the current accounting period.

(b) New/revised HKFRSs that have been issued but are not yet effective

The following new/revised HKFRSs, potentially relevant to the Group's financial statements, have been issued, but are not yet effective and have not been early adopted by the Group. The Group's current intention is to apply these changes on the date they become effective.

Amendments to HKAS 1 and HKFRS Practice Statement 2	Disclosure of Accounting Policies[1]
Amendments to HKAS 8	Definition of Accounting Estimates[1]
Amendments to HKAS 12	Deferred Tax related to Assets and Liabilities arising from a Single Transaction[1]
Amendment to HKAS 1	Classification of Liabilities as Current or Non-current[2]
Amendment to HKAS 1	Presentation of financial statements — Non-current Liabilities with Covenants[2]
Amendments to HKFRS 16	Lease — Liability in a sale and Leaseback[2]
Amendments to HKFRS 10 and HKAS 28	Sale or Contribution of Assets between an Investor and its Associate or Joint Venture[3]

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

2 Effective for annual periods beginning on or after 1 January 2024.

3 The amendments shall be applied prospectively to the sale or contribution of assets occurring in annual periods beginning on or after a date to be determined.

Amendments to HKAS 1 and HKFRS Practice Statement 2 — Disclosure of Accounting Policies

The HKICPA amended HKAS 1 to require entities to disclose their material rather than their significant accounting policies. The amendments define what is 'material accounting policy information' and explain how to identify when accounting policy information is material. They further clarify that immaterial accounting policy information does not need to be disclosed. If it is disclosed, it should not obscure material accounting information.

To support this amendment, the HKICPA also amended HKFRS Practice Statement 2 Making Materiality Judgements to provide guidance on how to apply the concept of materiality to accounting policy disclosures.

The Directors of the Company do not anticipate that the application of the amendments and revision in the future will have an impact on the financial statements.

Amendments to HKAS 8 — Definition of Accounting Estimates

The amendment to HKAS 8 Accounting Policies, Changes in Accounting Estimates and Errors clarifies how companies should distinguish changes in accounting policies from changes in accounting estimates. The distinction is important, because changes in accounting estimates are applied prospectively to future transactions and other future events, but changes in accounting policies are generally applied retrospectively to past transactions and other past events as well as the current period.

The Directors of the Company do not anticipate that the application of the amendments and revision in the future will have an impact on the financial statements.

Amendments to HKAS 12 — Deferred Tax related to Assets and Liabilities arising from a Single Transaction

The amendments to HKAS 12 Income Taxes require companies to recognise deferred tax on transactions that, on initial recognition, give rise to equal amounts of taxable and deductible temporary differences. They will typically apply to transactions such as leases of lessees and decommissioning obligations and will require the recognition of additional deferred tax assets and liabilities.

The amendment should be applied to transactions that occur on or after the beginning of the earliest comparative period presented. In addition, entities should recognise deferred tax assets (to the extent that it is probable that they can be utilised) and deferred tax liabilities at the beginning of the earliest comparative period for all deductible and taxable temporary differences associated with:

- right-of-use assets and lease liabilities, and

- decommissioning, restoration and similar liabilities, and the corresponding amounts recognised as part of the cost of the related assets.

The cumulative effect of recognising these adjustments is recognised in retained earnings, or another component of equity, as appropriate.

HKAS 12 did not previously address how to account for the tax effects of on-balance sheet leases and similar transactions and various approaches were considered acceptable. Some entities may have already accounted for such transactions consistent with the new requirements. These entities will not be affected by the amendments.

The Directors of the Company anticipate that the application of the amendments may have an impact on the Group's accounting policies in respect of deferred tax on the Group's right-of-use assets and lease liabilities.

Amendments to HKAS 1 — Classification of Liabilities as Current or Non-current and related amendments to Hong Kong Interpretation 5 (2020)

The amendments provide clarification and additional guidance on the assessment of right to defer settlement for at least twelve months from reporting date for classification of liabilities as current or non-current, which:

- specify that the classification of liabilities as current or non-current should be based on rights that are in existence at the end of the reporting period. Specifically, the amendments clarify that:

  (i) the classification should not be affected by management intentions or expectations to settle the liability within 12 months; and

  (ii) if the right is conditional on the compliance with covenants, the right exists if the conditions are met at the end of the reporting period, even if the lender does not test compliance until a later date; and

- clarify that if a liability has terms that could, at the option of the counterparty, result in its settlement by the transfer of the entity's own equity instruments, these terms do not affect its classification as current or non-current only if the entity recognises the option separately as an equity instrument applying HKAS 32 Financial Instruments: Presentation.

  In addition, Hong Kong Interpretation 5 was revised as a consequence of the Amendments to HKAS 1 to align the corresponding wordings with no change in conclusion.

Amendments to HKAS 1 — Presentation of financial statements — Non-current Liabilities with Covenants

The amendments clarify that only covenants with which an entity must comply on or before the reporting date will affect a liability's classification as current or non-current. The amendments do not require an entity to present separately non-current liabilities for which the entity's right to defer settlements is subject to compliance with future covenants within twelve months. Instead, the amendments require entities to disclose information about such covenants and related liabilities in the notes.

Amendments to HKFRS 16 — Lease Liability in a Sale and Leaseback

The amendments add subsequent measurement requirements for sale and leaseback transactions that satisfy the requirements of HKFRS 15 to be accounted for as a sale. The amendments require a seller-lessee to "lease payments" or "revised lease payments" such that the seller-lessee would not recognise a gain or loss that relates to the right of use retained by the seller-lessee. The amendments also clarify that applying the requirements does not prevent the seller-lessee from recognising in profit or loss any gain or loss relating to subsequent partial or full termination of a lease.

As part of the amendments, illustrative Example 25 accompanying HKFRS 16 is added to illustrate the application of the requirements in a sale and leaseback transaction with variable lease payments that do not depend on an index or rate.

The amendments are effective for annual reporting periods beginning on or after 1 January 2024, with early application permitted.

Amendments to HKFRS 10 and HKAS 28, Sale or Contribution of Assets between an Investor and its Associate or Joint Venture

The amendments clarify with situations where there is a sale or contribution of assets between an investor and its associate or joint venture. When the transaction with an associate or joint venture that is accounted for using the equity method, any gains or losses resulting from the loss of control of a subsidiary that does not contain a business are recognised in the profit or loss only to the extent of the unrelated investors' interests in that associate or joint venture. Similarly, any gains or losses resulting from the remeasurement of retained interest in any former subsidiary (that has become an associate or a joint venture) to fair value are recognised in the profit or loss only to the extent of the unrelated investors' interests in the new associate or joint venture.

The Directors of the Company anticipate that the application of these amendments may have an impact on the financial statements in future periods should such transaction arise.

3. BASIS OF PREPARATION

(a) Statement of compliance

The consolidated financial statements have been prepared in accordance with all applicable HKFRSs, Hong Kong Accounting Standards ("HKASs") and Interpretations (hereinafter collectively referred to as the "HKFRS") and the disclosure requirements of the Hong Kong Companies Ordinance. In addition, the financial statements include applicable disclosures required by the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited.

(b) Basis of measurement

The financial statements have been prepared under the historical cost basis except for the financial assets at fair value through profit or loss and financial assets at fair value through other comprehensive income, which are measured at fair value as explained in the accounting policies below.

(c) Functional and presentation currency

The financial statements are presented in Renminbi ("RMB"), which is also the functional currency of the Company and all values are rounded to the nearest thousand ("RMB'000") except when otherwise indicated.

4. SEGMENT INFORMATION

The chief operating decision makers are identified as Executive Directors of the Company. The Group has identified its operating segment based on the regular internal financial information reported to the Company's Executive Directors for their decisions about resources allocation and review of performance. The Group's operating segment is design, development, manufacturing, subcontracting service and sales of semiconductor products, including LED beads, GaN chips, GaN components and related application products, and fast charging products in the PRC. The Executive Directors determined there were two reportable and operating segments which are (i) LED products and (ii) GaN and other semiconductor products.

Segment revenue and results

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

	2022			2021		
	LED products *RMB'000*	**GaN and other semiconductor products** *RMB'000*	**Total** *RMB'000*	LED products *RMB'000*	GaN and other semiconductor products *RMB'000*	Total *RMB'000*
Segment revenue	**87,185**	**333**	**87,518**	126,137	—	126,137
Segment result	**(2,799)**	**(53,156)**	**(55,955)**	6,142	(386,444)	(380,302)
Other unallocated						
Income and gains			**87**			—
Administrative expenses			**(45,161)**			(67,108)
Finance costs			**(617)**			(214)
Loss before income tax			**(101,646)**			(447,624)

Segment assets and liabilities

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

	2022			2021		
	LED products	**GaN and other semiconductor products**	**Total**	LED products	GaN and other semiconductor products	Total
	RMB'000	***RMB'000***	***RMB'000***	*RMB'000*	*RMB'000*	*RMB'000*
Segment assets	**216,819**	**485,203**	**702,022**	220,066	392,471	612,537
Corporate and other unallocated assets *(Note)*			**16,286**			53,336
Total assets			**718,308**			665,873
Segment liabilities	**(40,142)**	**(48,678)**	**(88,820)**	(29,723)	(9,436)	(39,159)
Corporate and other unallocated liabilities *(Note)*			**(19,543)**			(17,373)
Total liabilities			**(108,363)**			(56,532)

Other segment information:

Depreciation charge						
— Owned property, plant and equipment	**(3,706)**	**(1,086)**	**(4,792)**	(4,827)	(1,022)	(5,849)
— Right-of-use-assets	**(326)**	**(1,334)**	**(1,660)**	(326)	(389)	(715)
Amortisation of intangible assets	**(372)**	**(342)**	**(714)**	(636)	—	(636)
(Provision)/reversals of provision of expected credit loss on trade and bills receivables	**(1,595)**	**—**	**(1,595)**	2,881	—	2,881
Fair value loss on financial asset	**—**	**(468)**	**(468)**	—	(63)	(63)

Note: Corporate and other unallocated assets mainly include property, plant and equipment in head office, deferred tax assets, prepayment in head office, deposit and other receivable, cash and cash equivalents in head office and corporate and other unallocated liabilities mainly include lease liabilities in head office, and other payables and accruals in head office.

No geographical information is presented as most of the Group's operations are located in the PRC.

Revenue from customers of the Group's LED products segment who contributed over 10% of the Group's revenue for the corresponding years are as follows:

	2022	2021
	RMB'000	*RMB'000*
Client A	**17,945**	16,350
Client B	**11,272**	N/A*
Client C	**9,931**	16,464

* Revenue did not contribute over 10% of the Group's revenue for the corresponding years.

5. REVENUE, OTHER INCOME AND GAINS

Revenue, which is also the Group's turnover, represents the net invoiced value of goods and services sold, less value added tax and other applicable local taxes during the year. The Group is principally engaged in the design, development, manufacturing, subcontracting service and sales of semiconductor products, including LED beads, GaN chips, GaN components and related application products, and fast charging products in the PRC.

The sales contract terms do not allow rebate, discount, warranties and return on revenue. During the years ended 31 December 2022 and 2021, there were no rebate, discount, warranties and return on revenue.

	2022	2021
	RMB'000	*RMB'000*
LED products		
Revenue recognised at a particular point in time		
Sales of LED beads	**87,185**	126,137
Sales of GaN and fast-charging products	**333**	—
	87,518	126,137
Other income and gains		
Bank interest income	**84**	61
Government grants *(Note)*	**777**	—
Other income	**363**	348
	1,224	409

Note: Government grants include various subsidies received by the Group from relevant government bodies in connection with certain subsidies to support the Group's businesses. There are no unfulfilled conditions or contingencies relating to these grants.

During the year ended 31 December 2022, among the government grants, HKD96,000 are government subsidies obtained from the Employment Support Scheme under the Anti-epidemic Fund launched by the Government of the Hong Kong Special Administrative Region supporting the payroll of the Group's employees. The Group has complied with the requirements set out in the subsidy notice or relevant law and regulations.

6. LOSS BEFORE INCOME TAX CREDIT

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

	2022	2021
	RMB'000	*RMB'000*
Cost of inventories sold	**58,826**	88,521
Depreciation charge, included in cost of sales:		
— Owned property, plant and equipment	**5,359**	4,885
— Right-of-use-assets included within:		
— Property	**7,278**	2,298
— Machinery	**—**	966
Amortisation of intangible assets, included in cost of sales	**714**	681
Auditor's remuneration	**1,244**	1,164
Change in fair value of financial assets at fair value through profit or loss	**468**	63
Research and development costs, included in administrative and other expenses	**28,472**	16,463
Employee costs (including Directors' remuneration)		
— Wages, salaries and other benefits	**27,201**	12,959
— Contribution to defined contribution pension plans	**3,074**	1,106
— Share-based payment	**10,954**	53,999
Exchange (gain)/loss, net	**(159)**	1,512

7. FINANCE COSTS

	2022	2021
	RMB'000	*RMB'000*
Interest on borrowings	**373**	549
Interest on lease liabilities	**1,635**	598
	2,008	1,147

8. INCOME TAX CREDIT

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

Pursuant to the rules and regulations of the Cayman Islands and the British Virgin Islands (the "BVI"), the Group is not subject to any income tax in the Cayman Islands and the BVI.

The subsidiary incorporated in Hong Kong is subject to income tax at the rate of 16.5% on the estimated assessable profits arising in Hong Kong for the years ended 31 December 2022 and 2021. For the year ended 31 December 2022, the first HK$2,000,000 of profits earned by one of the group companies will be taxed at a rate of 8.25% whilst the remaining profits will continue to be taxed at 16.5%. No provision for Hong Kong profits tax has been made as the Group's Hong Kong subsidiary had no estimated assessable profits for the year (2021: Nil).

In 2019, the Group's wholly-owned subsidiary, Zhuhai HongGuang Semiconductor Company Limited ("Zhuhai HongGuang"), previously known as Zhuhai HongGuang Lighting Fixture Company Limited, has renewed the "New and High Technology Enterprise Certificate" (the "Certificate") (高新技術企業證書). The Certificate has to be renewed over three years. In 2022, the Group has successfully renewed the Certificate for three years commencing from 1 January 2022. Pursuant to the relevant PRC enterprise income tax law, regulations and implementation guidance notes, Zhuhai HongGuang is entitled to a tax preference with a reduction of the enterprise income tax ("EIT") from 25% to 15% for the years ended 31 December 2022 and 2021.

	2022	2021
	RMB'000	*RMB'000*
Current income tax — PRC EIT		
— Tax for the year	**—**	—
— Over provision in respect of prior year	**—**	(945)
Deferred tax	**(359)**	147
	(359)	(798)

9. LOSS PER SHARE

The calculation of basic and diluted loss per share attributable to the ordinary equity holders of the Company is based on the following data:

	2022	2021
	RMB'000	*RMB'000*
Loss		
Loss for the year attributable to owners of the Company	**(101,287)**	(446,826)
Number of shares		
Weighted average number of ordinary shares for the purpose of basic loss per share	**568,597,433**	484,525,098
Effect of dilutive potential ordinary shares in respect of the Company's share option schemes *(Note (ii))*	**—**	—
Weighted average number of ordinary shares for the purpose of diluted loss per share	**568,597,433**	484,525,098

Notes:

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

(ii) For the year ended 31 December 2022 and 2021, the potential ordinary shares from share options were not included in the calculation of loss per share as their inclusion would be anti-dilutive.

10. DIVIDEND

No dividend has been paid or declared by the Company for the years ended 31 December 2022 and 2021.

11. TRADE AND BILLS RECEIVABLES

The information about trade and bills receivables after ECLs are as follows:

	2022	2021
	RMB'000	*RMB'000*
Trade receivables	**68,327**	80,330
Bills receivable	**8,938**	17,048
	77,265	97,378

The Group's trading terms with its customers are mainly on credit. The credit period is generally 30 days to 90 days, extending up to 120 days for major customers. The Group seeks to maintain control over its outstanding receivables and overdue balances which are reviewed regularly by senior management. The business model of the Group related to the bills receivable is "hold to collect".

Included in trade and bills receivables are trade debtors (net of impairment losses) with the following ageing analysis, based on invoice dates, as of the end of reporting period.

	2022	2021
	RMB'000	*RMB'000*
0 to 30 days	**32,681**	28,900
31 to 60 days	**8,503**	18,092
61 to 90 days	**8,504**	9,691
91 to 120 days	**6,815**	5,964
121 to 365 days	**5,243**	19,923
Over 1 year	**20,663**	18,357
	82,409	100,927
Less: Impairment of trade and bills receivables	**(5,144)**	(3,549)
	77,265	97,378

12. PREPAYMENTS, DEPOSITS AND OTHER RECEIVABLES

	2022	2021
	RMB'000	*RMB'000*
Other receivables	**33,244**	246
Prepayments and deposits *(Note i)*	**90,178**	82,970
	123,422	83,216
Less: non-current portion		
Prepayments and deposits *(Note ii)*	**(50,946)**	(40,843)
Current portion	**72,476**	42,373

Prepayments, deposits and other receivables do not contain impaired assets.

Notes:

(i) The amount includes the prepayment to the independent third parties suppliers amounted to approximately RMB37,034,000 (2021: approximately RMB39,866,000) for purchase of raw material.

(ii) The amounted includes the prepayment of approximately RMB49,138,000 for purchase of machinery (2021: RMB31,198,000 for purchase of machinery and RMB7,334,000 for decoration). The machinery was delivered to the Company subsequent to the year ended.

13. TRADE PAYABLES

The credit period granted from suppliers normally ranges from 0 to 120 days. The aging analysis of trade payables, based on invoice date, is as follows:

	2022	2021
	RMB'000	*RMB'000*
0 to 30 days	**5,197**	8,116
31 to 60 days	**5,000**	3,431
61 to 90 days	**4,174**	1,795
91 to 120 days	**2,642**	4,000
121 to 365 days	**5,533**	831
Over 1 year	**716**	467
	23,262	18,640

14. BANK AND OTHER BORROWINGS

	2022	2021
	RMB'000	*RMB'000*
Bank loans — unsecured *(Note i)*	**10,000**	7,000
Other loans — secured *(Note ii)*	**31,139**	—
	41,139	7,000

Notes:

(i) As at 31 December 2022, the effective interest rates of the unsecured interest-bearing bank loans were 3.75% (2021: 3.80%) per annum.

All of the banking facilities are subject to the fulfilment of covenants commonly found in lending arrangements with financial institutions. If the Group was to breach the covenants, the borrowings would become repayable on demand. The Group regularly monitors its compliance with these covenants. At the end of each of reporting period, none of the covenants related to drawn down facilities had been breached.

(ii) As at 31 December 2022, the other loan was secured by the share capital of certain subsidiaries of the Group with the effective interest rates of 12% per annum. The other loan contained a repayment on demand clause giving the lender the unconditional right to call the loans at any time.

15. SHARE CAPITAL

	Number of ordinary shares	*RMB'000*
Issued and fully paid:		
At 1 January 2021	400,000,000	3,580
Issued for the acquisition of intangible assets *(Note (i))*	80,000,000	664
Placement of new shares *(Note (ii))*	83,591,000	693
At 31 December 2021 & 1 January 2022	563,591,000	4,937
Placement of new shares *(Note (iii))*	18,010,000	161
At 31 December 2022	581,601,000	5,098

Notes:

(i) The Company entered into a sales and purchase agreement to acquire the GSR GO together with its subsidiary (the "GSR GO Group"), involving the issuance of 80,000,000 shares for acquisition.

(ii) An aggregate of 69,245,000 and 14,346,000 shares have been successfully placed on 22 July 2021 and 1 December 2021 respectively to not less than six placees at the share price of HK$5.80 and HK$6.20 respectively per share.

(iii) An aggregate of 9,428,000 and 8,582,000 shares have been successfully placed on 2 September 2022 and 13 October 2022 respectively to not less than six placees at the share price of HK$3.20.

MANAGEMENT DISCUSSION AND ANALYSIS

The Board hereby presents the annual results of the Group for the year ended 31 December 2022 (the "**Year**" or "**2022**"), together with the comparative figures for the corresponding year ended 31 December 2021 (the "**Previous Year**" or "**2021**").

INTRODUCTION

HG Semiconductor Limited (the "**Company**" or "**HG Semiconductor**"; together with its subsidiaries referred to here as the "**Group**") is engaged principally in the design, development, manufacturing, subcontracting and sales of semiconductor products, including light-emitting diode ("**LED**") beads, next-generation semiconductor gallium nitride ("**GaN**") chips, GaN devices and their related applications, as well as fast charging products in China. With our expertise in LED manufacturing, strong scientific research team and research and development ("**R&D**") capability, the Group has in recent years devoted itself to the application of GaN-related products in the third-generation of semiconductors and has gradually achieved business transformation.

In 2022, HG Semiconductor focused on developing its third-generation semiconductor business, aiming to provide customers with more efficient and competitive solutions in terms of energy efficiency. By further accelerating the development and application of GaN technology, the Group is moving towards its goal of becoming an integrated device manufacturer ("**IDM**") of semiconductor to serve the whole industrial chain with a core focus on semiconductor design and manufacturing, integrating R&D, manufacturing, packaging and package testing and sales. The Group continues to implement its established business strategies to capture market opportunities and strives to become a leading third-generation semiconductor supplier in the Greater China region.

INDUSTRY REVIEW

In 2022, the continued adverse impact of the COVID-19 pandemic ("**COVID-19**" or "**Pandemic**"), coupled with a significant slowdown in China's economic growth, undermined consumer confidence. As the demand and the promotion of semiconductor products have decreased, the overall development of the industry has slowed down. Repeated waves of the COVID-19 infections also impacted the overall demand of our products. The output value of China's LED lighting industry declined 13.2% year on year in 2022 due to the volatility of the situation.

In the semiconductor industry, international political and economic turmoils added to the negative impact of the Pandemic, making it more difficult to stabilise the semiconductor supply chain. Higher logistics costs and transportation delays became a feature of the market. Yet despite the macroeconomic uncertainties, the global semiconductor demand remained robust. According to the data released by Gartner Consulting, the semiconductor market was worth US$601.7 billion globally in 2022, showing continued growth from 2021. According to Semiconductor Equipment and Materials International an industry association, shipments and sales of silicon wafers for semiconductor substrates reached record high for the second consecutive year in 2022, with shipments up 4% to 14.7 billion square inches and sales up 10% to US$13.8 billion.

As a key member of the third-generation of semiconductors, GaN can operate at high frequencies and maintain high performance and efficiency with lower loss than previously used silicon transistors. As the development of third-generation semiconductor enters the window period, the demand for third-generation semiconductor materials in different fields is surging, semiconductor products are becoming more diversified and the speed of iteration and innovation continues to accelerate. New energy vehicles are one of the most core key application markets for third-generation semiconductor materials, which contributes strong demand continuously for third-generation semiconductor power devices. In 2022, China's new energy vehicle market expanded in full swing, with production and sales of 7.058 million units and 6.887 million units respectively, representing year-on-year growth of 96.9% and 93.4%. With the large-scale popularisation of new energy vehicles and strong national policy support, the scale of China's fast-charging market also showed rapid growth in 2022 — the unit of China's charging facilities increased by 2.593 million, and the cumulative number of charging facilities nationwide amounted to 5.21 million units, representing an increase of 99.1% year-on-year, indicating that the development of charging facilities among cities have kept up with pace as the large-scale development of electric vehicles.

In recent years, China has been giving great support and encouragement to innovative high-tech enterprises, in particular the new energy and third-generation semiconductors as the representatives of the technological innovation enterprises are gradually becoming a vital driving force for economic development. In the Outline of the Fourteenth Five-Year Plan and Long-Range Objectives Through the Year 2035 (《十四五規劃和2035年遠景目標綱要》), China advocates accelerating the industrialisation process of new materials and technologies for third-generation semiconductors, so as to create a new batch of fast-growing new material enterprises. In 2022, the Ministry of Science and Technology of China also released the "New Display and Strategic Electronic Materials" (「新型顯示與戰略性電子材料」), a key specialised annual project which supports the R&D of seven projects in respect of third-generation semiconductor materials and devices, to promote industrial development and to lay a cornerstone for the development of third-generation semiconductors.

In addition to be in line with the national policy, the Hong Kong SAR Government has promulgated the "Hong Kong Innovation and Technology Development Blueprint" (《香港創新科技發展藍圖》), which for the first time clearly states that the Hong Kong SAR Government will strengthen its support for the development of industries of new energy vehicles and semiconductor chips, and points out that new energy vehicles and semiconductor chips are both important industrial directions for the country. With the Government's favourable policies, extensive downstream application markets and domestic substitution opportunities, coupled with the goal of achieving "Carbon Peak and Carbon Neutrality", HG Semiconductor is accelerating its business development of third-generation GaN semiconductors, together with its aim in achieving breakthrough in the domestic substitution technologies in the future.

BUSINESS REVIEW

In 2022, HG Semiconductor continued to operate its initial LED bead business on a solid foundation, while at the same time fully deploying the third-generation semiconductor industry chain. Through the expansion of our GaN business and the building of core competencies, the Group is committed to accelerating the pace of GaN production and achieving a number of important milestones, with the hope to gradually move towards the fruitful period of our investment.

As the third-generation semiconductor business is still in the investment and R&D stage, the Group's revenue for the Year was mainly derived from the LED bead business. During the Year, the recurring Pandemic had a severe negative impact on China's economy. The temporary closure of factories due to lockdown measures among cities had halted the industrial chain of the Group's LED bead business for certain period of time and adversely impacted our production capacity accordingly. Disruption in the supply chain, surge in transportation costs, and delay in delivery time had also caused delay or suspension in some orders and production components, as a result weighing some pressures on the Group's performance, the revenue for the Year is approximately RMB87.5 million, representing a decrease of approximately 30.6% when compared to approximately RMB126.1 million for the Previous Year. Gross profit also decreased by 35.7% to RMB16.4 million for the Year. Nevertheless, the epitaxial wafer and fast charging products of the Group's third-generation GaN business began to record revenue contribution during the Year. As the Group did not record any non-cash flow items such as loss on acquisition of intangible assets, the loss for the Year attributable to the owners of the Company narrowed significantly to approximately RMB101.3 million despite the increase in expenditure on the promotion and R&D of the third-generation semiconductor business.

GaN epitaxial wafer R&D and production breakthrough turbo-charges development of third-generation semiconductor industry chain

In the past year, HG Semiconductor's team has devoted its efforts in developing the new GaN business in the third-generation semiconductor industry by enhancing its core equipment and various R&D and production facilities, including the upgrade of its semiconductor factory in the Xuzhou Economic and Technological Development Zone (徐州經濟技術開發區), Jiangsu Province, PRC ("**Xuzhou Factory**"), covering an area of over 7,000 square meters. Currently, the Group has installed two production lines in the Xuzhou Factory for the production of GaN-related products, and core machines imported from Europe and Japan have been delivered to the Xuzhou Factory and are ready for chips manufacturing to meet the market needs. The Group will continue to expand its production capacity and upgrade its technologies, and actively improve its factory efficiency and quality control.

Moreover, with the efforts of our scientists team and strong R&D capabilities, the Group has achieved a major breakthrough during the Year by successfully commencing the production of its own 6-inch GaN power device epitaxial wafer in October 2022. The manufacturing process of GaN chips is complex and involves different stages, our success in manufacturing the epitaxial wafers is well ahead of the expected schedule, representing an important achievement in our transformation into a third-generation GaN semiconductor supplier, and paving the way for mass production of GaN chips. As the

Group's aim of R&D, manufacturing and implementation of GaN third-generation semiconductors have realised, and quickly channelled into the production of epitaxial wafer, we are confident that our hard work will pay off in the foreseeable future.

HG Semiconductor continues to strengthen its R&D capacities, after obtaining the six patents for fast-charging battery systems, charging conversion systems and charging modules for charging stations and fast charging equipment for electric vehicle charging stations in the Previous Year. The Group has further obtained nine utility model and appearance patents during the Year, including GaN-based inverters and power supply modules, while the registration of other invention patents are currently under processing.

While focusing on its core business, the Group also conducts other GaN-related research and development with its strategic partners, in order to make great contribution to the industry. Xuzhou GSR Semiconductor Co., Ltd. ("**Xuzhou GSR**"), a subsidiary of the Group, conducted the first publicised industry field trial of GaN with GaN Systems in the power infrastructure of an internet data centre ("**IDC**") in March 2022. The test results showed that the total energy consumption of IDCs could be reduced by 10%. Compared to the traditional silicon-based power supplies, GaN is expected to yield power savings of up to 20%, in which it is expected to reduce the carbon footprint of the data centre. This energy-saving result potentially increases the profit margins of IDCs and reduces operating costs and lowers energy consumption, which underlining that GaN can be widely used in the power infrastructure of data centers, contributing to green and sustainable development.

Multi-party strategic cooperation achievements continue to drive GaN business

During the Year, HG Semiconductor has entered into strategic framework agreements with a number of industry-leading companies, leveraging their operating scale, extensive experience, resources and expertise to establish mutually beneficial strategic partnerships and enhance the Group's capabilities in innovation and manufacturing. In May 2022, the Group reached a strategic cooperation agreement with China Titans Energy Technology Group Co., Limited (Stock Code: 2188.HK) in respect of technology R&D and exchange, to cooperate in the R&D of the new generation of fast-charging piles using the Group's third-generation semiconductor technology in the next three years. This agreement will also facilitate cooperation in the promotion and product sales of fast charging pile technology in China and Hong Kong. Such cooperation will serve to create the synergy for both parties in their respective fields.

Furthermore, the Group has entered into a strategic cooperation agreement with Ingdan, Inc. (Stock Code: 400.HK) in March 2022, which will assist the Group in the sale of its manufactured chips in the PRC, and to establish a long-term strategic cooperation between the two parties in the application and development of chips. The Group has also entered into a non-legally binding memorandum of understanding with GUH Holdings Berhad ("**GUH**"; stock code: 3247.KL) to expand the sales of fast-charging batteries and GaN devices to Malaysia and Southeast Asia, aiming to expand our revenue streams. At the same time, the Group will provide GUH with plans for the construction of a battery factory and the procurement of related equipment, as well as the provision of a complete set of module equipment for a 100 MWh energy storage station. The above-mentioned strategic cooperation will assist the Group in developing its fast-charge application business and to expand its own sales channels and enhance sales performance.

The Group will also leverage its advantageous connection with Hong Kong's statutory bodies, wherein both sides will jointly research and promote "smart city" development in Hong Kong, as well as study the upgrade of local electric vehicle and charging facilities, to achieve 400-kilowatt direct current charging, in compliance with international standards, and also adopt smart management systems such as cloud-based data and security monitoring, to assist in the widespread implementation of new energy-related concept facilities, thereby contributing to the sustainable development of the community.

Introduction of major strategic shareholders to accelerate the pace of entering the new energy field

The global shortage of semiconductor supply has put the industry under the international spotlight, whereas GaN, as an emerging new technology, its broad prospects are favoured by investors. During the Year, the Group has successfully introduced a number of strategic shareholders to raise more capital for the development of key technologies and to further enlarge its shareholder base. Among them, the Group has entered into an investment agreement with Profit Act Limited ("**Strategic Investor**") in August 2022, a company that is indirectly wholly-owned by Mr. Zhu Gongshan ("**Mr. Zhu**"), the founder, Chairman and Executive Director of GCL Technology Holdings Limited (Stock Code: 3800.HK). The Strategic Investor agreed to subscribe for 60 million subscription shares and 60 million subscription warrants.

In addition, the Group has also entered into a strategic cooperation framework agreement with Golden Concord Group Limited ("**Golden Concord Group**"), a company ultimately held under a discretionary trust with Mr. Zhu and his family members as beneficiaries, for a long-term strategic cooperation in the application of GaN power chips in the new energy sector. Leveraging Golden Concord Group's leading position and comprehensive deployment in the new energy industry, this partnership will assist HG Semiconductor in entering the supply chain market in the new energy industry and help the Group in expanding its upstream and downstream business, thereby constituting a successful business partnership. The Group intends to establish a joint venture company with Golden Concord Group and commence in-depth cooperation; to purchase high quality silicon wafers from the Golden Concord Group and in return the Group will supply the Golden Concord Group with GaN chips manufactured by its newly developed Xuzhou Factory with advanced technology which are used as infrastructure components by the Golden Concord Group in its energy engineering business, solar inverters and energy storage technology.

With Mr. Zhu's and Golden Concord Group's abundant resources and leading technologies in the field of new energy, HG Semiconductor will be able to strengthen its development in talents, operations, technology and R&D, and gradually expand its business blueprint. The Group will continue to pursue innovation and strive to create synergy with the Golden Concord Group in the respective industries and invest more resources in the development of GaN-related products.

Focusing on scientific research, striving to build a world-class research and management team

"Innovation" is the core value of HG Semiconductor, and innovative talents are crucial to the development of the Group's third-generation semiconductor business. Therefore, the Group has been actively recruiting talents and semiconductor experts to assist the management and R&D to produce high-quality semiconductor products. During the Year, the Group continued to build up a magnificent team in professional R&D and management, to construct a stable team of third-generation semiconductor talents in order to provide strong support for the production and R&D of GaN products. The research team members cover the GaN semiconductor business, GaN device design and fabrication, as well as technology and management for both semiconductor industry and wafer foundry, thereby optimising the Group's scientific research capabilities significantly.

In February 2023, the Group announced the appointment of new management to the Board, including the appointment of Dr. Cao Yu ("**Dr. Cao**"), a core expert in the compound semiconductor business, as the Chief Executive Officer and Executive Director of the Group, and the appointment of Dr. Chen Zhen ("**Dr. Chen**"), a core expert in the GaN semiconductor business, as the Executive Director of the Group. Dr. Cao and Dr. Chen have joined the Group since 2021 and took up managerial positions in the Xuzhou Factory. With their extensive expertise and experience in the semiconductor industry, coupled with their profound understanding in the Group's overall operations and strategies, the Board believes that they are able to lead the Group in the design and production of top-tier third-generation semiconductor products and empower the rapid development of GaN business. Leveraging their strong research capabilities to expand the depth, breadth and scope of the Group's chip product development and upgrade, the Group is exploring greater scope for innovation and development of third-generation semiconductors.

PROSPECTS

Although the economies of many countries have gradually rebounded from the Pandemic and demand for our products is strong in the U.S. and Europe, interest rate increases by central banks to counter inflation and the conflict between Russia and Ukraine may impair economic activity. The International Monetary Fund (IMF) expects the global economy to grow by 2.9% in 2023, down from 3.4% in 2022, before rising to 3.1% in 2024. The reopening of China at the beginning of 2023 is expected to pave the way for a smooth economic recovery following the negative economic effects of the Pandemic last year.

At present, China's economy is in a critical period of industrial transformation, and semiconductors are widely used in integrated circuits, consumer electronics, communication systems, photovoltaic power generation and other fields. With the rise of technologies such as 5G and artificial intelligence, the R&D and application of third-generation semiconductors represented by GaN are also included in the national strategic planning. According to the forecast made by Yole Développment, a market analysis firm, the market for GaN power device is expected to grow from US$46 million in 2020 to US$1.1 billion in 2026, with an average compound annual growth rate of 70%, in view of the increasing demand for electricity from green power, electric vehicles, charging piles and energy storage.

The GaN power market has become the fastest-growing segment of the third-generation semiconductor industry in terms of output value, thanks to the rapid rise in demand for fast-charging consumer products and the strong demand for GaN power products in the consumer market. Among these products, new-energy vehicles represent the main driver of growth, with domestic brands in China accounting more than 80% of the country's electric vehicle market and increasingly expanding their exports. This trend offers huge business opportunities across the whole supply chain, and has spurred domestic electric vehicle manufacturers to accelerate the development of third-generation semiconductor devices in the automotive field. With national policy support and solid market demand, the further development of GaN power products is expected to be rapid.

The Group will continue to make increased efforts to the third-generation semiconductor GaN industry chain in order to accelerate the pace of R&D, and expand the applications of GaN-related products. Following the successful development of GaN epitaxial wafers at the end of 2022, along with the upgrade of the Xuzhou Factory and the production lines and machines are well in place, the Group's R&D team and experts will continue to focus on production research, aiming to accelerate the realisation of production capacity.

In addition, the Group expects that GaN technology will play a key role in great energy systems in the future and serve to connect photovoltaics and great energy systems. The cooperation between the Group and the Golden Concord Group is expected to assist HG Semiconductor in the deployment of GaN chips for new-energy applications. HG Semiconductor will establish a new-energy joint venture with the Golden Concord Group in China and provide technical support to the joint venture for the purpose of co-developing silicon-based power chips and products that use third-generation semiconductors. In this way, the Group can further accelerate the pace of R&D of technologies and applications of GaN in the new-energy field.

As market penetration of electric vehicles in Mainland China and Hong Kong increases, the Group will continue to develop and commercialise new-generation charging piles in both China and Hong Kong, and actively explore the establishment of a stronghold for fast-charging battery solutions in Hong Kong. The Group has been in discussions with shopping malls in Hong Kong to gradually expand the network of electric vehicle charging piles from residential building parking garages to shopping malls, we are preparing and developing application software and devices for electric vehicle charging piles to increase penetration in the Hong Kong market.

The Group will also actively seek strategic partners and upgrade its industrial chain while upholding the principle of achieving synergy in use of resources and dual-win cooperation. The Group will continue to strengthen its R&D capabilities and bring in outstanding experts and talents in the field of semiconductor to enhance its production and R&D, strive to become an IDM enterprise integrating R&D, manufacturing, packaging and package testing, and sales in the whole GaN industry chain. In addition, the Group will steadily develop its initial LED bead business. As the impact of the Pandemic gradually subsides, the LED bead business is expected to stabilise progressively. The Group will continue to identify more licensed patents in the market in order to expand its product scope.

Securing independent control of the chip sector has been elevated by the Chinese Government to the level of national key strategy so that the country can accelerate the pace of replacing imported components with domestic substitute products and independent innovation, providing strong, long-term support for the semiconductor segment. Buoyed by three factors — the Government's favourable policies, the extensive downstream application market, and the opportunities for component replacement using domestic substitute products — the Group will benefit from tailwinds in further exploring and developing third-generation semiconductor products and applications with GaN at their core, and continue its enhancement of production capacity and the progress of product R&D to boost quality and efficiency, maximising value for our shareholders.

FINANCIAL REVIEW

Revenue

For the Year, total revenue was approximately RMB87.5 million, representing a decrease of approximately 30.6% as compared with that for the Previous Year (2021: approximately RMB126.1 million). The decrease was mainly attributable to the decrease in revenue from the sales of LED products.

The following table sets forth the breakdown of the Group's revenue by segment:

	2022		2021	
	RMB'000	*%*	*RMB'000*	*%*
LED products	**87,185**	**99.6**	126,137	100.0
GaN and other semiconductor products	**333**	**0.4**	—	—
Total	**87,518**	**100.0**	126,137	100.0

For the Year, revenue from LED products amounted to approximately RMB87.2 million (2021: approximately RMB126.1 million), accounting for approximately 99.6% of the total revenue (2021: 100.0%). The decrease in revenue was mainly due to the decrease in the average selling price of LED beads during the Year, as the demand for high-end LED products in the PRC has substantially decreased as a result of the recurrences of the COVID-19 outbreaks and the emergence of mutated variants of the virus, which adversely impacted the Chinese economy.

Revenue from GaN and other semiconductor products during the Year was approximately RMB0.3 million (2021: nil), accounting for approximately 0.4% of the total revenue (2021: nil).

Cost of Sales

Cost of sales of the Group primarily consisted of cost of material used, direct labour and production overheads. It decreased by approximately 29.3% from approximately RMB100.6 million for the Previous Year to approximately RMB71.1 million for the Year, reflecting a decrease in the average purchase price of raw materials used, which mainly led to the decrease in the cost of materials used.

Gross Profit and Gross Profit Margin

The gross profit decreased from approximately RMB25.5 million for the Previous Year to approximately RMB16.4 million for the Year. The gross profit margin decreased from approximately 20.2% for the Previous Year to approximately 18.8 % for the Year. The following table sets forth a breakdown of the gross profit and gross profit margin by segment for the periods indicated:

	2022		2021	
	Gross profit	**Gross profit margin**	Gross profit	Gross profit margin
	RMB'000	**%**	*RMB'000*	%
LED products	**16,434**	**18.8**	25,507	20.2
GaN and other semiconductor products	**(3)**	**(0.9)**	—	—
Total gross profit/gross profit margin	**16,431**	**18.8**	25,507	20.2

The gross profit margin of LED products decreased from approximately 20.2% for the Previous Year to approximately 18.8% for the Year. Such decrease was mainly attributable to the decrease in the average selling price of the LED beads.

Other Income and Gains

Other income and gains of the Group increased by approximately 200.0% from approximately RMB0.4 million for the Previous Year to approximately RMB1.2 million for the Year, which was mainly due to the increase in government grants from the PRC government during the Year.

Selling and Distribution Expenses

The selling and distribution expenses increased by approximately 30.4% from approximately RMB2.3 million for the Previous Year to approximately RMB3.0 million for the Year. The selling and distribution expenses mainly comprised staff costs, traveling expenses and entertainment expenses. The increase in selling and distribution expenses was mainly attributable to the increase in traveling expenses and entertainment expenses as a result of increased marketing activities.

Administrative and Other Expenses

The Group's administrative and other expenses increased by approximately 14.3% from approximately RMB98.6 million for the Previous Year to approximately RMB112.7 million for the Year. The administrative and other expenses mainly included administrative staff costs, research and development costs and professional services expenses and equity-settled share-based payment expenses. The increase in administrative and other expenses was mainly due to the increase in (i) research and development costs and (ii) administrative staff costs. The research and development costs were approximately RMB28.5 million for the Year (Previous Year: approximately RMB16.5 million). The increase in research and development costs during the Year was mainly due to the extended efforts on research and development of semiconductor-related products. The administrative staff costs were approximately RMB30.3 million for the Year (Previous Year: approximately RMB14.1 million). The increase in administrative staff costs during the Year was mainly due to the increase in the number of professional staff at the Group's Xuzhou Factory and the Shenzhen R&D centre.

The equity-settled share-based payment expenses were approximately RMB11.0 million for the Year (Previous Year: RMB54.0 million).

Finance Costs

The Group's finance costs were approximately RMB2.0 million for the Year (Previous Year: approximately RMB1.1 million). The increase in finance costs was mainly attributable to the increase in interest on lease liabilities for the Year, as compared to that for the Previous Year.

Income Tax Credit

Income tax credit of the Group for the Year was approximately RMB0.4 million (Previous Year: approximately RMB0.8 million).

Loss for the Year

The loss for the Year was approximately RMB101.3 million, as compared to a loss of approximately RMB446.8 million for the Previous Year. The reduction in loss for the Year was mainly attributable to the absence of the loss arising on acquisition of intangible assets during the Year. The loss arising on acquisition of intangible assets was approximately RMB374.4 million for the Previous Year.

Net Margin

The Group recorded a net margin of approximately –115.7% for the Year, compared to that of a net margin of approximately –354.2% for the Previous Year. The improved net margin for the Year was mainly attributable to the absence of the loss arising on acquisition of intangible assets during the Year.

Dividend

The Directors do not recommend the payment of a final dividend for the Year (Previous Year: nil), in order to cope with the future business development of the Group.

Liquidity, Financial Resources and Capital Structure

For the Year, the amount of net cash used by the Group in its operating activities was approximately RMB94.8 million as compared to that of approximately RMB59.9 million for the Previous Year, primarily due to the increase in operating loss before working capital changes.

As at 31 December 2022, the Group had net current assets of approximately RMB189.2 million (31 December 2021: approximately RMB275.8 million). The Group's current ratio as at 31 December 2022 was approximately 2.9 times (31 December 2021: approximately 8.1 times).

As at 31 December 2022, the Group had total cash and bank balances of approximately RMB43.8 million (31 December 2021: approximately RMB113.6 million). The decrease in total cash and bank balances was mainly due to a decrease in net cash flows generated from financing activities and an increase in net cash flows used in operating activities during the Year.

As at 31 December 2022, the total available facilities of the Group were approximately RMB10.0 million (31 December 2021: RMB7.0 million). The total drawn down of the facilities as at 31 December 2022 was approximately RMB10.0 million (31 December 2021: RMB7.0 million).

The shares of the Company were successfully listed on the GEM of the Stock Exchange on 30 December 2016 and the listing of the Company's shares has been transferred from the GEM to the Main Board of the Stock Exchange since 13 November 2019. The share capital of the Company comprises only ordinary shares. As at 31 December 2022, the equity attributable to owners of the Company amounted to approximately RMB609.9 million (2021: approximately RMB609.3 million).

Return on Equity

Return on equity (i.e. net loss/profit for the year divided by total equity of the year and multiplied by 100%) increased from approximately –73.3% for the Previous Year to approximately –16.6% for the Year. Such increase was mainly attributable to the absence of the loss arising on acquisition of intangible assets during the Year.

Return on Assets

Return on assets (i.e. net loss/profit for the year divided by total assets of the year and multiplied by 100%) increased from approximately –67.1% for the Previous Year to approximately –14.1% for the Year. Such increase was mainly attributable to the absence of the loss arising on acquisition of intangible assets during the Year.

Current Ratio

Current ratio (i.e. total current assets at the end of the year divided by total current liabilities at the end of the year) decreased from approximately 8.1 times as at 31 December 2021 to approximately 2.9 times as at 31 December 2022, primarily due to the decrease in cash and cash equivalents for the Year.

Gearing Ratio

The Group's gearing ratio (i.e. total debt at the end of the year divided by total equity at the end of the year and multiplied by 100%) as at 31 December 2022 was approximately 6.7% (31 December 2021: approximately 1.1%).

Significant Investments

VisIC Technologies Limited ("VisIC")

On 24 June 2021, the Company's wholly-owned subsidiary, FastSemi Holding Limited ("**FastSemi**"), acquired 349,992 series E preferred shares of VisIC, an unlisted company in Israel principally engaged in the development of GaN-related products, which include high-power transistors and modules, at the consideration of approximately USD5 million. On 23 August 2021, FastSemi further acquired 1,399,969 series E preferred shares of VisIC, at the consideration of approximately USD20 million. During the Previous Year, the total number of shares acquired was 1,749,961 with an investment cost of approximately USD25 million. The total number of shares acquired represented approximately 18.8% of the enlarged issued share capital of VisIC as at 31 December 2022. Such investment was classified as an equity instrument at fair value through other comprehensive income amounting to approximately RMB172.2 million as at 31 December 2022, representing approximately 23.8% of the Group's consolidated total assets as at 31 December 2022. Fair value gain of approximately RMB13.3 million was recognised through other comprehensive income during the Year. There was no dividends received from this investment for the Year. As VisIC is one of the largest players in the third-generation field of GaN devices, the Group plans to hold VisIC as a long-term investment.

Beijing Hongzhi Electric Technology Co., Ltd. ("Beijing Hongzhi")*

On 6 August 2021, the then Company's wholly-owned subsidiary, Xuzhou GSR Semiconductor Co., Ltd.* ("**Xuzhou GSR**"), invested 10% of the ordinary shares of Beijing Hongzhi with a consideration of RMB15 million. Such investment was classified as an equity instrument at fair value through other comprehensive income amounting to approximately RMB16.3 million as at 31 December 2022. Fair value gain of approximately RMB29,000 was recognised through other comprehensive income during the Year. There was no dividends received from this investment for the Year. Beijing Hongzhi has more than 20 years of experience in chip design and technology, and holds numerous registered patents and technology-related intellectual property rights which helps the company to maintain high potential for future growth.

GaN Systems Inc. ("GaN Systems")

On 30 November 2021, FastSemi acquired 206,367 series F-2 preferred shares of GaN Systems, a Canadian company principally engaged in the development of a broad range of GaN-related products, which include high current GaN power semiconductors, at a consideration of approximately USD1.75 million, representing approximately 0.37% of the total issued share capital of GaN Systems as at 31 December 2022. Such investment was classified as an equity instrument at fair value through other comprehensive income amounting to approximately RMB10.3 million as at 31 December 2022. Fair value loss of approximately RMB0.8 million was recognised through other comprehensive income during the Year. There was no dividends received from this investment for the Year. GaN Systems has in-depth knowledge of GaN technology and a management team with decades of GaN product experience. GaN System is also a GaN power transistor company currently shipping to automotive, consumer, industrial, and data centre customers globally.

HighTec SP2 Fund (the "Fund")

In December 2021, FastSemi subscribed 4,000 shares of the Fund at a consideration of USD4 million. The Fund's investment strategies are principally to invest directly or through other investment vehicles in the equity securities of the world's leading semiconductor design and production companies, which include technology companies focusing on providing fast-charging solutions, R&D companies with technical knowledge and product experience, R&D companies focusing on power devices in electric vehicle applications, and technology companies focusing on high-power automotive solutions.

In January 2022, FastSemi further subscribed 1,002.466 shares of the Fund at a consideration of approximately USD1 million.

Such investment was classified as an equity instrument at fair value through profit or loss amounting to approximately RMB33.9 million as at 31 December 2022, representing approximately 4.7% of the Group's consolidated total assets as at 31 December 2022. Fair value loss of approximately RMB468,000 was recognised through profit or loss during the Year. As the Fund's main focus is on investing the semiconductor industry and semiconductors have a wide range of applications in a huge and growing market, the outlook for the Fund remains positive.

Material Acquisitions and Disposals

On 23 December 2022, the Group has disposed 13.99% of Xuzhou GSR to an independent third party, at the consideration of USD3.5472 million.

Save as disclosed above, the Group had no material acquisitions and disposals of subsidiaries, associates and joint ventures during the Year.

Capital Commitments

As at 31 December 2022, the Group has capital commitments for the acquisition of property, plant and equipment, the amount contracted for amounted to approximately RMB64.5 million (31 December 2021: approximately RMB76.7 million).

Charge on the Group's assets

As at 31 December 2022, the Group has the following share charges subject to the loan agreement entered by the Company on 26 December 2022:

(i) the entire portfolio of issued shares in FastPower Holding Limited, a wholly-owned subsidiary of the Company;

(ii) the entire portfolio of issued shares in FastSemi; and

(iii) the entire portfolio of issued shares in Swift Power Limited, an indirect wholly-owned subsidiary of the Company.

As at 31 December 2021, the Group did not have any charge on its assets.

Contingent Liabilities

As at 31 December 2022, the Group did not have any significant contingent liabilities.

Foreign Exchange Exposure

The Group's main operations are in the PRC with most of its transactions settled in RMB. The Directors are of the opinion that the Group's exposure to foreign exchange risk is insignificant. During the Year, the Group did not hedge any exposure to foreign exchange risk.

Employees and Remuneration Policies

As at 31 December 2022, the Group employed 237 employees (31 December 2021: 179 employees). Employee costs (including Directors' remuneration, wages, salaries, performance related bonuses, other benefits and contribution to defined contribution pension plans) amounted to approximately RMB41.2 million for the Year (Previous Year: approximately RMB68.1 million). Apart from basic remuneration, share options may be granted under the share option scheme of the Company to eligible employees by reference to the Group's performance as well as the individual's contribution. The employee costs for the Year have included the share-based payment expenses of approximately RMB11.0 million (Previous Year: approximately RMB54.0 million), in relation to the share options granted by the Company on 17 June 2021. The Group will endeavor to ensure that the employees' salary levels are in line with industry practice and prevailing market conditions and that the employees' overall remuneration is determined based on the performance of the Company and the employees.

Use of Proceeds

Placing of New Shares under General Mandate

(1) *Placing on 22 July 2021*

In order to expand the production capacity of the Group, strengthen the Group's research and development capabilities and provide general working capital to meet the needs of its business development plan, on 13 June 2021, the Company entered into a placing agreement with VC Brokerage Limited in relation to the placing of a maximum of 96,000,000 new ordinary shares of HK$0.01 each in the share capital of the Company at a price of HK$5.8 per share (the "**July 2021 Placing**"). The closing price for the Company's shares on 11 June 2021 (being the last trading day prior to the date of signing the placing agreement) was HK$7.10 per share. On 22 July 2021, the July 2021 Placing was completed and the Company issued and allotted an aggregate of 69,245,000 new ordinary shares to not less than six independent third parties. The net price for such shares was approximately HK$5.63 per share and the aggregate nominal value of such shares was HK$692,450. The July 2021 Placing generated net proceeds of approximately HK$389.6 million (the "**July 2021 Placing Proceeds**"). Details of the July 2021 Placing were set out in the Company's announcements dated 15 June 2021 and 22 July 2021.

As at 31 December 2022, the Group's planned application and the actual utilisation of the July 2021 Placing Proceeds are set out below:

	Net proceeds *HK$ million*	**Utilised** *HK$ million*	**Unutilised** *HK$ million*
Expansion of production capacity	144.9	144.9	—
Strengthening research and development capabilities	74.8	74.8	—
Repayment of borrowings	11.3	11.3	—
Provision of general working capital	158.6	158.6	—
	389.6	389.6	—

(2) *Placing on 1 December 2021*

In order to strengthen the Group's research and development capabilities, and provide general working capital to meet the needs of its business development plan, on 4 November 2021, the Company entered into a placing agreement with VC Brokerage Limited in relation to the placing of a maximum of 26,755,000 new ordinary shares of HK$0.01 each in the share capital of the Company at a price of HK$6.2 per share (the "**December 2021 Placing**"). The closing price for the Company's shares on 3 November 2021 (being the last trading day prior to the date of signing the placing agreement) was HK$6.8 per share. On 1 December 2021, the December 2021 Placing was completed and the Company issued and allotted an aggregate of 14,346,000 new ordinary shares to not less than six independent third parties. The net price for such shares was approximately HK$6.01 per share and the aggregate nominal value of such shares was HK$143,460. The December 2021 Placing generated net proceeds of approximately HK$86.2 million (the "**December 2021 Placing Proceeds**"). Details of the December 2021 Placing were set out in the Company's announcements dated 4 November 2021 and 1 December 2021.

As at 31 December 2022, the Group's planned application and the actual utilisation of the December 2021 Placing Proceeds are set out below:

	Net proceeds *HK$ million*	**Utilised** *HK$ million*	**Unutilised** *HK$ million*
Strengthening research and development capabilities	64.3	64.3	—
Provision of general working capital	21.9	21.9	—
	86.2	86.2	—

(3) *Placing on 2 September 2022*

In order to strengthen the Group's research and development capabilities, and provide general working capital to meet the needs of its business development plan, on 4 August 2022, the Company entered into a placing agreement with VC Brokerage Limited in relation to the placing of a maximum of 30,000,000 new ordinary shares of HK$0.01 each in the share capital of the Company at a price of HK$3.2 per share (the "**September 2022 Placing**"). The closing price for the Company's shares on 3 August 2022 (being the last trading day prior to the date of signing the placing agreement) was HK$3.59 per share. On 2 September 2022, the September 2022 Placing was completed and the Company issued and allotted an aggregate of 9,428,000 new ordinary shares to not less than six independent third parties. The net price for such shares was approximately HK$3.12 per share and the aggregate nominal value of such shares was HK$94,280. The September 2022 Placing generated net proceeds of approximately HK$29.4 million (the "**September 2022 Placing Proceeds**"). Details of the September 2022 Placing were set out in the Company's announcements dated 5 August 2022 and 2 September 2022.

As at 31 December 2022, the Group's planned application and the actual utilisation of the September 2022 Placing Proceeds are set out below:

	Net proceeds *HK$ million*	**Utilised** *HK$ million*	**Unutilised** *HK$ million*
Strengthening research and development capabilities	24.5	24.5	—
Provision of general working capital	4.9	4.9	—
	29.4	29.4	—

(4) *Placing on 13 October 2022*

In order to strengthen the Group's research and development capabilities, and provide general working capital to meet the needs of its business development plan, on 13 September 2022, the Company entered into a placing agreement with VC Brokerage Limited in relation to the placing of a maximum of 20,000,000 new ordinary shares of HK$0.01 each in the share capital of the Company at a price of HK$3.2 per share (the "**October 2022 Placing**"). The closing price for the Company's shares on 9 September 2022 (being the last trading day prior to the date of signing the placing agreement) was HK$4.09 per share. On 13 October 2022, the October 2022 Placing was completed and the Company issued and allotted an aggregate of 8,582,000 new ordinary shares to not less than six independent third parties. The net price for such shares was approximately HK$3.12 per share and the aggregate nominal value of such shares was HK$85,820. The October 2022 Placing generated net proceeds of approximately HK$26.8 million (the "**October 2022 Placing Proceeds**"). Details of the October 2022 Placing were set out in the Company's announcements dated 13 September 2022 and 13 October 2022.

As at 31 December 2022, the Group's planned application and the actual utilisation of the October 2022 Placing Proceeds are set out below:

	Net proceeds	**Utilised**	**Unutilised**
	HK$ million	*HK$ million*	*HK$ million*
Strengthening research and development capabilities	22.3	22.3	—
Provision of general working capital	4.5	4.5	—
	26.8	26.8	—

The July 2021 Placing Proceeds, December 2021 Placing Proceeds, September 2022 Placing Proceeds and October 2022 Placing Proceeds have been fully utilised as at 31 December 2022.

Purchase, Sales or Redemption of the Company's Listed Securities

Save as disclosed in the announcements of the Company dated 5 August 2022, 2 September 2022, 13 September 2022 and 13 October 2022 and in this announcement, neither the Company nor any of its subsidiaries had purchased, sold or redeemed any of the Company's listed securities during the Year.

Model Code for Securities Transactions by Directors

The Company has adopted the Model Code for Securities Transactions by Directors of Listed Issuers set out in Appendix 10 of the Listing Rules as the code of conduct for dealing in securities of the Company by the Directors (the "**Required Standard of Dealings**"). The Company had also made specific enquiry of all the Directors and the Company is not aware of any non-compliance with the Required Standard of Dealings regarding securities transactions by the Directors for the Year.

Corporate Governance and Compliance with the Corporate Governance Code

The Company adopted the Corporate Governance Code (the "**CG Code**") contained in Appendix 14 to the Listing Rules as its own code of corporate governance. Save for the provision C.2.1 of the CG Code, the Board is satisfied that the Company had complied with the CG Code for the Year.

CG Code provision C.2.1 stipulates that the roles of chairman and chief executive should be separate and should not be performed by the same individual. Mr. Zhao Yi Wen ("**Mr. Zhao**") is the chairman of the Board. Mr. Zhao was also the chief executive officer of the Company during the Year. In view of the fact that Mr. Zhao, being one of the founders of the Group and has been operating and managing Zhuhai HongGuang, the operating subsidiary of the Company, since 2010, the Board believes that it was in the best interest of the Group to have Mr. Zhao taking up both roles for effective management and business development.

On 6 February 2023, Mr. Zhao has resigned as the chief executive officer of the Company but remained as the chairman of the Board.

CLOSURE OF REGISTER OF MEMBERS

To ascertain the members' entitlement to attend and vote at the forthcoming annual general meeting of the Company to be held on Thursday, 25 May 2023, the register of members will be closed from Monday, 22 May 2023 to Thursday, 25 May 2023, both days inclusive, during which period no transfer of shares can be registered. In order to be eligible to attend and vote at the meeting, all transfers of shares, accompanied by the relevant share certificates, must be lodged with Boardroom Share Registrars (HK) Limited at the Company's branch share registrar, Room 2103B, 21st Floor, 148 Electric Road, North Point, Hong Kong, for registration not later than 4:30 p.m. on Friday, 19 May 2023.

AUDIT COMMITTEE AND REVIEW OF ACCOUNTS

The audit committee of the Company (the "**Audit Committee**") has discussed and reviewed with management and the Group's auditor, BDO Limited, the annual consolidated financial statements of the Group for the Year. The Audit Committee comprises four Independent Non-executive Directors, namely Mr. Chan Chung Kik, Lewis, Mr. Wu Wing Kuen, *B.B.S.*, Professor Chow Wai Shing, Tommy and Mr. Li Yang. Mr. Chan Chung Kik, Lewis, is the chairman of the Audit Committee who has appropriate professional qualifications and experience as required by the Listing Rules.

REVIEW OF THIS FINAL RESULTS ANNOUNCEMENT

The figures in respect of the Group's consolidated statement of financial position, consolidated statement of profit or loss and other comprehensive income and the related notes thereto for the Year as set out in the preliminary announcement have been agreed by the Group's auditor, BDO Limited, to the amounts set out in the Group's audited consolidated financial statements for the Year. The work performed by BDO Limited in this respect did not constitute an assurance engagement in accordance with Hong Kong Standards on Auditing, Hong Kong Standards on Review Engagements or Hong Kong Standards on Assurance Engagements issued by the HKICPA and consequently no assurance has been expressed by BDO Limited on the preliminary announcement.

By order of the Board
HG Semiconductor Limited
Zhao Yi Wen
Chairman and Executive Director

Hong Kong, 31 March 2023

As at the date of this announcement, the Executive Directors are Mr. Zhao Yi Wen, Dr. Xu Zhihong, Dr. Cao Yu, Mr. Lyu Xiangrong, Mr. Leung Kin Pang and Dr. Chen Zhen; the Non-executive Director is Dr. Wang David Nin-kou; and the Independent Non-executive Directors are Professor Chow Wai Shing, Tommy, Mr. Wu Wing Kuen, B.B.S., Mr. Chan Chung Kik, Lewis and Mr. Li Yang.

* *For identification purpose only*