



# Silex

ASX: SLX OTCQX: SILXY

**Silex Systems Limited**

ABN 69 003 372 067

**Appendix 4D**

**ASX Half-year information – 31 December 2023**

Lodged with the ASX under Listing Rule 4.2A

This information should be read in conjunction with the 30 June 2023 Annual Report

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Silex Systems Limited  
half-year ended 31 December 2023  
(Previous corresponding period:  
half-year ended 31 December 2022)

Results for announcement to the market

	31 December 2023 \$	30 June 2023 \$	Movement \$	Movement %	
<b>Cash and cash equivalents and Term deposits</b>	<b>126,716,208</b>	138,059,572	(11,343,364)	8.2%	↓

	Half-year ended 31 December 2023 \$	Half-year ended 31 December 2022 \$	Movement \$	Movement %	
<b>Revenue from ordinary activities</b>	<b>5,616,601</b>	3,777,502	1,839,099	48.7%	↑
<b>Other income</b>	<b>1,362,844</b>	1,698,769	(335,925)	19.8%	↓
<b>Net loss from ordinary activities after tax attributable to members</b>	<b>(10,161,246)</b>	(8,744,575)	(1,416,671)	16.2%	↑
<b>Net loss for the period attributable to members</b>	<b>(10,161,246)</b>	(8,744,575)	(1,416,671)	16.2%	↑

**No dividends have been paid or proposed during the reporting period**

**Overview**

Silex Systems Limited (Silex) is primarily focused on the development of the SILEX laser enrichment technology for two key global industries:

- i) The nuclear fuel industry – with the unique third-generation SILEX uranium enrichment technology; and
- ii) The emerging silicon quantum computing industry – with the SILEX Quantum Silicon Project.

The commercialisation program for the SILEX uranium enrichment technology is being undertaken jointly by Silex (at its Lucas Heights, Sydney facility) and by GLE (in Wilmington, North Carolina). GLE is the exclusive licensee of the SILEX uranium enrichment technology and is a jointly-controlled venture between Silex and global uranium and nuclear fuel provider Cameco Corporation, with 51% and 49% ownership interests respectively.

The SILEX Quantum Silicon (Q-Si) Production Project was announced on 17 August 2023 following the successful completion of the Zero-Spin Silicon Project in FY2023. The Q-Si Production Project is being undertaken with project partners Silicon Quantum Computing Pty Ltd (SQC) and UNSW Sydney (UNSW) at Silex's Lucas Heights facility, with the objective of commercialising a variant of the SILEX technology and for the commercial production of Quantum Silicon, a key enabling material for the emerging silicon quantum computing industry.

The Company commenced the Medical Isotope Separation Technology (MIST) Project in February 2023. The MIST Project will initially focus on identifying a process to economically produce enriched Ytterbium-176 (Yb-176) for Lutetium-177 (Lu-177) production. The Lu-177 radioisotope enables a breakthrough development for the diagnosis and treatment of aggressive metastatic cancers. The ~3-year MIST Project has the aim of verifying the enrichment of Yb-176 in a commercially-scalable process, through the development and demonstration of a commercial pilot-scale production module to be constructed at the Company's Lucas Heights facility.

Silex Systems Limited  
Results for announcement to the market (continued)

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As at 31 December 2023, the Company's balance sheet had total assets of \$146.4m and net assets of \$139.9m, which included \$126.7m in cash and term deposits, receivables of \$7.8m and investments accounted for using the equity method (investment in GLE) of \$6.7m. The Company has no corporate debt.

This half-year report should be read together with the Operational Update released in conjunction with this report, the Annual Report for the year ended 30 June 2023 and recent ASX announcements.

**Explanation of the net loss from ordinary activities after tax attributable to members**

The net loss from ordinary activities of \$10.2m increased by \$1.4m compared to the previous corresponding period. The increase in loss was mainly attributable to the increase in activities at GLE during the half-year. Silex's 51% share of GLE's net loss (recognised in Share of net loss of associates and joint ventures accounted for using the equity method) increased from \$7.3m in the prior period to \$9.6m for the current period. The increases in expenditure for the period were partly offset by an increase in interest revenue of \$2.7m.

**Cash and cash equivalents & Term deposits**

The cash and term deposits balance as at 31 December 2023 was \$126.7m, a decrease of \$11.3m during the half-year. Net cash inflows from operating activities for the half-year to 31 December 2023 were \$1.8m compared to outflows of \$1.5m for the half-year ended 31 December 2022. Receipts from customers and government grants (inclusive of GST) increased by \$5.4m during the half-year and included \$5.1m from the Defence Trailblazer Grant (\$nil in prior period). Payments to suppliers and employees (inclusive of GST) increased by \$3.9m during the half-year and included \$3.4m of payments to UNSW in respect of their share of the Trailblazer Grant (\$nil in prior period). Interest received increased by \$1.8m due to higher cash and term deposit holdings. Payments for investments accounted for using the equity method (i.e., payments to fund the Company's investment in GLE) increased \$6.1m in the current period as GLE continued to increase its activities.

**Revenue from ordinary activities**

There was a \$1.8m increase in revenue from ordinary activities during the half-year. Interest revenue increased by \$2.7m mainly due to higher average cash and term deposit holdings during the current period. Recoverable project costs, which are the reimbursement of allowable costs on the uranium enrichment project incurred by Silex, decreased by \$0.9m in the current period as the Company's expenditure on the uranium project decreased in line with the project plan for the period.

**Explanation of dividends**

No dividends have been paid or proposed during the reporting period.

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This interim financial report does not include all the notes of the type normally included in an annual financial report. Accordingly, this report is to be read in conjunction with the Annual Report for the year ended 30 June 2023, and any public announcements made by Silex Systems Limited during the interim reporting period in accordance with the continuous disclosure requirements of the *Corporations Act 2001*.

Silex Systems Limited is a company limited by shares, incorporated and domiciled in Australia. Its registered office and principal place of business is Building 64, Lucas Heights Science and Technology Centre, New Illawarra Road, Lucas Heights NSW 2234.

Your directors present their report on the consolidated entity consisting of Silex Systems Limited (Silex or the Company) and the entities it controlled at the end of, or during, the half-year ended 31 December 2023.

**1. Directors**

The following persons were directors of Silex Systems Limited during the half-year and up to the date of this report:

Mr C A Roy – Chair  
Dr M P Goldsworthy – CEO / Managing Director  
Ms H G Cook  
Mr C D Wilks

**2. Dividend**

No dividend payment has been recommended or declared by the Board.

**3. Review of operations and activities**

The Consolidated income statement on page 8 of this report sets out the main revenue and expense items for the half-year ended 31 December 2023 with comparatives for the half-year ended 31 December 2022. A summary is shown below:

	6 months ended 31 December 2023	6 months ended 31 December 2022
	\$	\$
Revenue from continuing operations	5,616,601	3,777,502
Other income	1,362,844	1,698,769
	<hr/>	<hr/>
(Loss) before tax	(10,161,246)	(8,744,575)
Income tax expense	-	-
	<hr/>	<hr/>
Net (loss) from continuing operations	(10,161,246)	(8,744,575)
Net (loss) for the half-year	(10,161,246)	(8,744,575)
	<hr/>	<hr/>
(Loss) is attributable to:		
Owners of Silex Systems Limited	(10,161,246)	(8,744,575)
	<hr/>	<hr/>

The Company incurred a loss attributable to owners of Silex Systems Limited for the half-year ended 31 December 2023 of \$10.2m (loss of \$8.7m for the previous corresponding period). The increase in loss was mainly due to the increase in GLE's activities in the technology demonstration project for the SILEX uranium enrichment technology during the half-year. Silex's 51% share of GLE's net loss (recognised in Share of net loss of associates and joint ventures accounted for using the equity method) increased from \$7.3m in the prior period to \$9.6m for the current period. The increases in expenditure for the period were partly offset by an increase in interest revenue of \$2.7m to \$3.1m.

The cash and term deposits balance as at 31 December 2023 was \$126.7m, a decrease of \$11.3m during the half-year. Net cash inflows from operating activities for the half-year to 31 December 2023 were \$1.8m compared to outflows of \$1.5m for the half-year ended 31 December 2022. Receipts from customers and government grants (inclusive of GST) increased by \$5.4m during the half-year and included \$5.1m from the Defence Trailblazer Grant (\$nil in prior period). Payments to suppliers and employees (inclusive of GST) increased by \$3.9m during the half-year and included \$3.4m of payments to UNSW in respect of their share of the Trailblazer Grant (\$nil in prior period). Interest received increased by \$1.8m due to higher cash and term deposit holdings. Payments for investments accounted for using the equity method (i.e., payments to fund the Company's investment in GLE) increased \$6.1m in the current period as GLE continued to increase its activities.

Further information on the operations and position of the Company is included in the Operational Update that is released to the ASX on the same day as this Appendix 4D, and in the 2023 Annual Report.

**4. Subsequent events**

On 23 January 2024, Silex announced an expansion of the commercial arrangements with Silicon Quantum Computing Pty Ltd (SQC) in support of the Quantum Silicon (Q-Si) Production Project. This included an amendment to the 2019 Offtake Agreement increasing SQC's product offtake commitment for Q-Si products from \$0.9m to \$2.25m. A Subscription Agreement was also executed with SQC which will result in SQC acquiring up to 493,827 fully paid ordinary shares in Silex for \$2m. The subscription shares are anticipated to be issued on 29 February 2024.

On 19 February 2024, the CY2024 operating plan and budget totalling US\$54.5m for GLE was approved. Silex is required to contribute 51% of GLE's funding requirements, in accordance with its ownership interest.

The consolidated entity is not aware of any other matters or circumstances which are not otherwise dealt with in the financial statements that have significantly, or may significantly, affect the operations of the consolidated entity, the results of its operations or the state of the consolidated entity in subsequent years other than those referred to in the Operational Update released to the ASX at the same time as this document.

**5. Auditor's independence declaration**

A copy of the auditor's independence declaration as required under section 307C of the *Corporations Act 2001* is set out on page 7.

This report is made in accordance with a resolution of the directors.



Dr M P Goldsworthy  
CEO/MD



Mr C A Roy  
Chair

Sydney, 22 February 2024

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## Auditor's Independence Declaration

As lead auditor for the review of Silex Systems Limited for the half-year ended 31 December 2023, I declare that to the best of my knowledge and belief, there have been:

- (a) no contraventions of the auditor independence requirements of the *Corporations Act 2001* in relation to the review; and
- (b) no contraventions of any applicable code of professional conduct in relation to the review.

This declaration is in respect of Silex Systems Limited and the entities it controlled during the period.

A handwritten signature in black ink, appearing to read 'Aishwarya Chandran', written over a horizontal line.

Aishwarya Chandran  
Partner  
PricewaterhouseCoopers

Sydney  
22 February 2024

Silex Systems Limited  
Consolidated income statement  
for the half-year ended 31 December 2023

	Note	6 months ended 31 December 2023 \$	6 months ended 31 December 2022 \$
Revenue from contracts with customers	2(a)	2,548,316	3,459,169
Interest revenue	2(a)	3,068,285	318,333
<b>Revenue from continuing operations</b>		<b>5,616,601</b>	<b>3,777,502</b>
Other income	2(b)	1,362,844	1,698,769
Research and development materials		(941,914)	(1,725,754)
Finance costs		(21,674)	(27,084)
Depreciation and amortisation expense		(198,974)	(197,357)
Employee benefits expense		(4,153,054)	(3,502,820)
Consultants and professional fees		(385,424)	(640,322)
Printing, postage, freight, stationery and communications		(48,975)	(40,207)
Property outgoings		(98,604)	(34,321)
Net foreign exchange losses		(1,045,110)	(386,233)
Share of net loss of associates and joint ventures using the equity method		(9,589,678)	(7,308,940)
Other expenses from continuing activities		(657,284)	(357,808)
<b>(Loss) before income tax expense</b>		<b>(10,161,246)</b>	<b>(8,744,575)</b>
Income tax expense		-	-
<b>Net (loss) from continuing operations</b>		<b>(10,161,246)</b>	<b>(8,744,575)</b>
<b>Net (loss) for the half-year</b>		<b>(10,161,246)</b>	<b>(8,744,575)</b>
(Loss) is attributable to:			
Owners of Silex Systems Limited		(10,161,246)	(8,744,575)
		<b>Cents</b>	<b>Cents</b>
<b>Earnings per share for (loss) attributable to the ordinary equity holders of the company</b>			
Basic earnings per share		(4.3)	(4.3)
Diluted earnings per share		(4.3)	(4.3)

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



Silex Systems Limited  
Consolidated statement of comprehensive income  
for the half-year ended 31 December 2023

	6 months ended 31 December 2023	6 months ended 31 December 2022
	\$	\$
<b>Net (loss) for the half-year</b>	<b>(10,161,246)</b>	<b>(8,744,575)</b>
<b>Other comprehensive income</b>		
<i>Items that may be reclassified to profit or loss:</i>		
Exchange differences on translation of foreign operations	<b>(236,995)</b>	101,311
<i>Items that will not be reclassified to profit or loss:</i>		
Changes in the fair value of equity investments at fair value through other comprehensive income	<b>372,419</b>	1,773,360
<b>Other comprehensive income for the half-year, net of tax</b>	<b>135,424</b>	1,874,671
<b>Total comprehensive income for the half-year</b>	<b>(10,025,822)</b>	<b>(6,869,904)</b>
Attributable to:		
Owners of Silex Systems Limited	<b>(10,025,822)</b>	<b>(6,869,904)</b>
<b>Total comprehensive income for the half-year</b>	<b>(10,025,822)</b>	<b>(6,869,904)</b>
Total comprehensive income for the period attributable to owners of Silex Systems Limited arises from:		
Continuing operations	<b>(10,025,822)</b>	<b>(6,869,904)</b>

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

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Silex Systems Limited  
Consolidated balance sheet  
as at 31 December 2023

	Note	31 December 2023 \$	30 June 2023 \$
<b>ASSETS</b>			
<b>Current assets</b>			
Cash and cash equivalents		4,516,208	2,859,572
Other financial assets at amortised cost - term deposits		122,200,000	135,200,000
Trade and other receivables	3	7,776,164	5,964,296
Other current assets		1,183,040	827,096
Financial assets at fair value through other comprehensive income	4	2,983,215	2,676,381
<b>Total current assets</b>		<b>138,658,627</b>	<b>147,527,345</b>
<b>Non-current assets</b>			
Investments accounted for using the equity method	5	6,721,669	3,630,471
Right-of-use assets		660,408	755,489
Property, plant and equipment		390,197	286,239
<b>Total non-current assets</b>		<b>7,772,274</b>	<b>4,672,199</b>
<b>Total assets</b>		<b>146,430,901</b>	<b>152,199,544</b>
<b>LIABILITIES</b>			
<b>Current liabilities</b>			
Trade and other payables	6	4,940,086	1,813,167
Lease liabilities		241,706	233,011
Provisions		850,821	834,206
<b>Total current liabilities</b>		<b>6,032,613</b>	<b>2,880,384</b>
<b>Non-current liabilities</b>			
Lease liabilities		441,600	539,127
Provisions		97,741	90,841
<b>Total non-current liabilities</b>		<b>539,341</b>	<b>629,968</b>
<b>Total liabilities</b>		<b>6,571,954</b>	<b>3,510,352</b>
<b>Net assets</b>		<b>139,858,947</b>	<b>148,689,192</b>
<b>EQUITY</b>			
Contributed equity	7	387,784,379	386,753,717
Reserves		11,637,659	11,337,320
Accumulated losses		(259,563,091)	(249,401,845)
<b>Total equity</b>		<b>139,858,947</b>	<b>148,689,192</b>

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

Silex Systems Limited  
Consolidated statement of changes in equity  
for the half-year ended 31 December 2023

**Attributable to owners of Silex Systems Limited**

	Contributed equity \$	Reserves \$	Accumulated losses \$	Total \$
<b>Balance at 30 June 2022</b>	<b>271,543,434</b>	<b>11,043,273</b>	<b>(232,040,553)</b>	<b>50,546,154</b>
Net (loss) for the half-year	-	-	(8,744,575)	(8,744,575)
Other comprehensive income	-	1,874,671	-	1,874,671
<b>Total comprehensive income for the half-year</b>	<b>-</b>	<b>1,874,671</b>	<b>(8,744,575)</b>	<b>(6,869,904)</b>
<b>Transactions with owners in their capacity as owners:</b>				
Contributions of equity net of transactions costs	209	-	-	209
Share based payments - value of services	-	809,571	-	809,571
Transfer from share-based payments reserve	377,566	(377,566)	-	-
	<b>377,775</b>	<b>432,005</b>	<b>-</b>	<b>809,780</b>
<b>Balance at 31 December 2022</b>	<b>271,921,209</b>	<b>13,349,949</b>	<b>(240,785,128)</b>	<b>44,486,030</b>
<b>Balance at 30 June 2023</b>	<b>386,753,717</b>	<b>11,337,320</b>	<b>(249,401,845)</b>	<b>148,689,192</b>
Net (loss) for the half-year	-	-	(10,161,246)	(10,161,246)
Other comprehensive income	-	135,424	-	135,424
<b>Total comprehensive income for the half-year</b>	<b>-</b>	<b>135,424</b>	<b>(10,161,246)</b>	<b>(10,025,822)</b>
<b>Transactions with owners in their capacity as owners:</b>				
Contributions of equity net of transactions costs	30,019	-	-	30,019
Share based payments - value of services	-	1,165,558	-	1,165,558
Transfer from share-based payments reserve	1,000,643	(1,000,643)	-	-
	<b>1,030,662</b>	<b>164,915</b>	<b>-</b>	<b>1,195,577</b>
<b>Balance at 31 December 2023</b>	<b>387,784,379</b>	<b>11,637,659</b>	<b>(259,563,091)</b>	<b>139,858,947</b>

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

Silex Systems Limited  
Consolidated cash flow statement  
for the half-year ended 31 December 2023

	6 months ended 31 December 2023 \$	6 months ended 31 December 2022 \$
<b>Cash flows from operating activities</b>		
Receipts from customers and government grants (inclusive of GST)	8,777,664	3,409,610
Payments to suppliers and employees (inclusive of GST)	(8,963,772)	(5,040,212)
Interest received	1,960,272	154,092
Interest paid	(21,674)	(27,084)
<b>Net cash inflows/(outflows) from operating activities</b>	<b>1,752,490</b>	<b>(1,503,594)</b>
<b>Cash flows from investing activities</b>		
Payment for investments accounted for using the equity method	(12,792,935)	(6,703,017)
Payments for financial assets at amortised cost - term deposits	(36,000,000)	(11,000,000)
Proceeds from other financial assets at amortised cost - term deposits	49,000,000	20,800,000
Payments for property, plant and equipment	(171,788)	(30,218)
Proceeds from sale of property, plant and equipment	5,945	-
<b>Net cash inflows from investing activities</b>	<b>41,222</b>	<b>3,066,765</b>
<b>Cash flows from financing activities</b>		
Proceeds from issues of shares, net of transaction costs	30,019	209
Repayment of principal elements of leases	(125,832)	(89,838)
<b>Net cash (outflows) from financing activities</b>	<b>(95,813)</b>	<b>(89,629)</b>
<b>Net increase in cash and cash equivalents</b>	<b>1,697,899</b>	<b>1,473,542</b>
Cash and cash equivalents at the beginning of the half-year	2,859,572	5,036,333
Effects of exchange rate changes on cash	(41,263)	2,802
<b>Cash and cash equivalents at end of half-year *</b>	<b>4,516,208</b>	<b>6,512,677</b>

*Term deposits excluded from Cash and cash equivalents	122,200,000	27,700,000
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The above consolidated cash flow statement should be read in conjunction with the accompanying notes.

**Note 1 Segment information**

**(a) Description of segments**

Operating segments are reported in a manner consistent with the internal reporting provided to the chief operating decision maker. The chief operating decision maker, who is responsible for allocating resources and assessing performance of the operating segments, has been identified as the Board of Directors. Management has determined that there are three operating segments based on the reports reviewed by Management and the Board of Directors to make strategic decisions. These segments are Silex Systems, Translucent and Silex USA. Silex Systems is based in New South Wales and Translucent and Silex USA are based in North Carolina. The Silex USA segment includes the share of loss from GLE.

**(b) Segment information provided to the Board of Directors**

Half-year ended 31 December 2023	Silex Systems \$	Translucent \$	Silex USA \$	Total \$
Total segment revenue	2,572,515	662,936	-	3,235,451
Inter-segment revenue	(24,199)	(662,936)	-	(687,135)
<b>Revenue from external customers</b>	<b>2,548,316</b>	<b>-</b>	<b>-</b>	<b>2,548,316</b>
<b>Interest revenue</b>	<b>3,068,285</b>	<b>-</b>	<b>-</b>	<b>3,068,285</b>
<b>Revenue from continuing operations</b>	<b>5,616,601</b>	<b>-</b>	<b>-</b>	<b>5,616,601</b>
<b>Segment result</b>	<b>(677,985)</b>	<b>22,467</b>	<b>(9,505,728)</b>	<b>(10,161,246)</b>
Half-year ended 31 December 2022	Silex Systems \$	Translucent \$	Silex USA \$	Total \$
Total segment revenue	3,478,297	633,625	-	4,111,922
Inter-segment revenue	(19,128)	(633,625)	-	(652,753)
<b>Revenue from external customers</b>	<b>3,459,169</b>	<b>-</b>	<b>-</b>	<b>3,459,169</b>
<b>Interest revenue</b>	<b>318,333</b>	<b>-</b>	<b>-</b>	<b>318,333</b>
<b>Revenue from continuing operations</b>	<b>3,777,502</b>	<b>-</b>	<b>-</b>	<b>3,777,502</b>
<b>Segment result</b>	<b>(1,589,780)</b>	<b>9,917</b>	<b>(7,164,712)</b>	<b>(8,744,575)</b>

The Board of Directors assesses the performance of the operating segments based on a result that excludes exchange gains and losses on intercompany loans which eliminate on consolidation. The segment result reconciles to the Net (loss) from continuing operations.

Silex Systems Limited  
Notes to the consolidated financial statements  
31 December 2023 (continued)

<b>Total segment assets</b>	<b>Silex Systems \$</b>	<b>Translucent \$</b>	<b>Silex USA \$</b>	<b>Total \$</b>
31 December 2023	<b>135,015,599</b>	<b>4,649,549</b>	<b>6,765,753</b>	<b>146,430,901</b>
30 June 2023	143,305,162	5,043,047	3,851,335	152,199,544

Assets which eliminate on consolidation, such as investments in controlled entities and intercompany receivables are excluded from segment assets.

<b>Total segment liabilities</b>	<b>Silex Systems \$</b>	<b>Translucent \$</b>	<b>Silex USA \$</b>	<b>Total \$</b>
31 December 2023	<b>6,345,417</b>	<b>17,775</b>	<b>208,762</b>	<b>6,571,954</b>
30 June 2023	3,495,406	14,946	-	3,510,352

**Note 2 Revenue and Other income**

<b>(a) Revenue</b>	<b>6 months ended 31 December 2023 \$</b>	<b>6 months ended 31 December 2022 \$</b>
Recoverable project costs	<b>2,548,316</b>	3,459,169
Interest revenue	<b>3,068,285</b>	318,333
	<b>5,616,601</b>	3,777,502

Project costs recoverable from GLE for the Company's costs incurred for the SILEX uranium enrichment development program is recorded as Revenue in the month when the related costs are incurred. Revenue is recognised at a point in time.

<b>(b) Other income</b>	<b>6 months ended 31 December 2023 \$</b>	<b>6 months ended 31 December 2022 \$</b>
Research and development tax incentive	<b>941,950</b>	1,365,667
Government grants	<b>264,128</b>	183,102
Other income - project subsidies	<b>150,821</b>	150,000
Profit on sale of property, plant and equipment	<b>5,945</b>	-
	<b>1,362,844</b>	1,698,769

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Silex Systems Limited  
Notes to the consolidated financial statements  
31 December 2023 (continued)

**Note 3 Trade and other receivables**

	31 December 2023	30 June 2023
	\$	\$
Trade receivables from contracts with customers	1,214,021	1,062,237
Accrued income - other	6,594,300	4,872,300
Other receivables	907	63,651
Loss allowance	(33,064)	(33,892)
	<b>7,776,164</b>	<b>5,964,296</b>

**Note 4 Financial assets at fair value through other comprehensive income**

	31 December 2023	30 June 2023
	\$	\$
Listed securities		
Equity securities – shares in IQE Plc (AIM: IQE)	2,983,215	2,676,381

**Note 5 Investments accounted for using the equity method**

Set out below are details of the Global Laser Enrichment Holdings LLC (GLE Holdco) joint venture as at 31 December 2023 which is material to the Company.

Name of entity	Place of business / country of incorporation	% of ownership interest		Nature of relationship	Measurement method	Carrying amount	
		31 December 2023	30 June 2023			31 December 2023	30 June 2023
Global Laser Enrichment Holdings LLC	USA	51%	51%	Joint venture	Equity method	6,721,669	3,630,471

GLE Holdco acquired Global Laser Enrichment LLC (GLE) on 31 January 2021. GLE holds the exclusive worldwide license to commercialise the SILEX technology for uranium enrichment. GLE's current focus is to complete the demonstration of the SILEX uranium enrichment technology in Wilmington, NC. Cameco Corporation indirectly owns the remaining 49% of GLE Holdco.

	31 December 2023*	30 June 2023
	\$	\$
<i>Commitments – joint ventures</i>		
Commitment to provide funding for joint ventures capital commitments, if called	-	9,986,850

\* As at 31 December 2023, the CY2024 operating plan and budget for GLE and associated capital calls, were pending for resolution by the GLE Holdco Governing Board. On 19 February 2024, the CY2024 operating plan and budget totalling US\$54.5m for GLE was approved. Silex is required to contribute 51% of GLE's funding requirements, in accordance with its ownership interest.

On 28 July 2023, GLE entered into a lease for a new facility in Wilmington, NC. A parent company guarantee was required to be provided by the Company and Cameco Corporation in relation to the rent and other lease related obligations associated with the premises tenanted by GLE. As at the date of execution of the lease, the Company's 51% share of the parent company guarantee was US\$3,264,690, which represents the estimated financial exposure as at commencement of the lease and will reduce over the term of the lease.

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Silex Systems Limited  
Notes to the consolidated financial statements  
31 December 2023 (continued)

<b>Summarised balance sheet</b>	<b>GLE Holdco</b>	
	<b>31 December 2023</b>	<b>30 June 2023</b>
	<b>\$</b>	<b>\$</b>
Current assets		
Cash and cash equivalents	12,156,385	11,021,801
Other current assets	2,808,686	2,267,678
<b>Total current assets</b>	<b>14,965,071</b>	<b>13,289,479</b>
Non-current assets	16,088,102	7,010,303
<b>Total assets</b>	<b>31,053,173</b>	<b>20,299,782</b>
Current liabilities		
Financial liabilities (excluding trade payables)	1,189,240	953,423
Other current liabilities	5,094,742	4,561,577
<b>Total current liabilities</b>	<b>6,283,982</b>	<b>5,515,000</b>
Non-current liabilities		
Financial liabilities (excluding trade payables)	11,538,019	7,622,529
Other non-current liabilities	51,429	43,683
<b>Total non-current liabilities</b>	<b>11,589,448</b>	<b>7,666,212</b>
<b>Total liabilities</b>	<b>17,873,430</b>	<b>13,181,212</b>
<b>Net assets</b>	<b>13,179,743</b>	<b>7,118,570</b>
	<b>6 months ended</b>	<b>6 months ended</b>
	<b>31 December 2023</b>	<b>31 December 2022</b>
	<b>\$</b>	<b>\$</b>
<b>Reconciliation to carrying amounts</b>		
Opening net assets	7,118,570	6,121,171
Additional capital contributed	25,084,186	13,143,171
(Loss) for the period	(18,803,290)	(14,331,254)
Other comprehensive income	(219,723)	116,496
<b>Closing net assets</b>	<b>13,179,743</b>	<b>5,049,584</b>
Company's share in %	51%	51%
Company's share in \$	6,721,669	2,575,288
<b>Carrying amount</b>	<b>6,721,669</b>	<b>2,575,288</b>

**Note 6 Trade and other payables**

	<b>31 December 2023</b>	<b>30 June 2023</b>
	<b>\$</b>	<b>\$</b>
Trade creditors	652,697	502,891
Unearned income	2,929,238	900,000
Derivative financial instruments - forward exchange contracts	968,972	8,589
Other payables	389,179	401,687
	<b>4,940,086</b>	<b>1,813,167</b>



Silex Systems Limited  
Notes to the consolidated financial statements  
31 December 2023 (continued)

**Note 7 Equity**

(a) Share capital:	31/12/2023 Shares	30/06/2023 Shares	31/12/2023 \$	30/06/2023 \$
Ordinary shares, fully paid	<b>235,946,075</b>	235,423,937	<b>387,784,379</b>	386,753,717

**(b) Movements in ordinary share capital:**

Details	Number of shares	Total \$
Opening balance 1 July 2023	235,423,937	386,753,717
Issue of shares - performance rights	395,138	990,710
Issue of shares - options exercise	127,000	37,870
Transfer from share-based payments reserve - options	-	9,933
	<b>235,946,075</b>	<b>387,792,230</b>
Less: Transaction costs arising on share issues	-	(7,851)
Balance 31 December 2023	<b>235,946,075</b>	<b>387,784,379</b>

**(c) Movements in share options:**

Grant date	Expiry date	Exercise price (cents)	Balance at start of half-year (Number)	Issued during the half-year (Number)	Lapsed/forfeited during the half-year (Number)	Exercised during the half-year (Number)	Balance at the end of the half-year (Number)
21/05/2019	20/05/2024	35	120,000	-	-	(80,000)	40,000
01/04/2020	31/03/2025	21	227,000	-	-	(47,000)	180,000
23/11/2020	22/11/2025	57	150,000	-	-	-	150,000
24/03/2021	23/03/2026	120	1,000,000	-	-	-	1,000,000
26/07/2021	28/10/2026	94	100,000	-	-	-	100,000
26/07/2021	30/06/2027	94	100,000	-	-	-	100,000
26/07/2021	30/06/2028	94	100,000	-	-	-	100,000
14/10/2021	28/10/2026	94	150,000	-	-	-	150,000
14/10/2021	28/10/2026	94	150,000	-	-	-	150,000
14/10/2021	28/10/2027	94	150,000	-	-	-	150,000
14/10/2021	28/10/2028	94	150,000	-	-	-	150,000
14/10/2021	28/10/2029	94	150,000	-	-	-	150,000
18/03/2022	17/03/2027	119	600,000	-	-	-	600,000
25/08/2022	25/08/2025	319	50,000	-	-	-	50,000
17/04/2023	16/04/2028	377	650,000	-	-	-	650,000
19/12/2023	18/12/2026	347	-	50,000	-	-	50,000
			<b>3,847,000</b>	<b>50,000</b>	<b>-</b>	<b>(127,000)</b>	<b>3,770,000</b>

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Silex Systems Limited  
Notes to the consolidated financial statements  
31 December 2023 (continued)

(d) Movements in performance rights:

Grant date	Exercise Price	Balance at start of half-year (Number)	Issued during the half-year (Number)	Lapsed/forfeited during the half-year (Number)	Exercised during the half-year (Number)	Balance at end of half-year (Number)
14/10/2021	Nil	412,500	-	-	-	412,500
21/06/2022	Nil	300,000	-	-	(75,000)	225,000
26/08/2022	Nil	200,000	-	(36,163)	(163,837)	-
30/08/2022	Nil	145,000	-	(11,512)	(133,488)	-
21/11/2022	Nil	25,000	-	(2,187)	(22,813)	-
21/08/2023	Nil	-	185,000	-	-	185,000
29/09/2023	Nil	-	300,000	-	-	300,000
		<b>1,082,500</b>	<b>485,000</b>	<b>(49,862)</b>	<b>(395,138)</b>	<b>1,122,500</b>

**Note 8 Net tangible asset backing**

	31 December 2023	30 June 2023	31 December 2022
	\$	\$	\$
Net tangible asset backing per ordinary security	<b>59.28 cents</b>	63.16 cents	21.67 cents

**Note 9 Events occurring after reporting date**

On 23 January 2024, Silex announced an expansion of the commercial arrangements with Silicon Quantum Computing Pty Ltd (SQC) in support of the Quantum Silicon (Q-Si) Production Project. This included an amendment to the 2019 Offtake Agreement increasing SQC's product offtake commitment for Q-Si products from \$0.9m to \$2.25m. A Subscription Agreement was also executed with SQC which will result in SQC acquiring up to 493,827 fully paid ordinary shares in Silex for \$2m. The subscription shares are anticipated to be issued on 29 February 2024.

On 19 February 2024, the CY2024 operating plan and budget totalling US\$54.5m for GLE was approved. Silex is required to contribute 51% of GLE's funding requirements, in accordance with its ownership interest.

The consolidated entity is not aware of any other matters or circumstances which are not otherwise dealt with in the financial statements that have significantly, or may significantly, affect the operations of the consolidated entity, the results of its operations or the state of the consolidated entity in subsequent years other than those referred to in the Operational Update released to the ASX at the same time as this document.

**Note 10 Fair value measurement**

**Derivatives**

Foreign exchange contracts are used to manage foreign exchange risk. The Company may enter into forward exchange contracts which are economic hedges for foreign currencies to be traded at a future date but do not satisfy the requirements for hedge accounting. These contracts are valued at fair value by comparing the contracted foreign exchange rate to the current market foreign exchange rate for a contract with the same remaining period to maturity. Any changes in fair values are immediately taken to the income statement.

The Company's policy is to hedge a proportion of its anticipated USD cash flows. The Board monitors the Company's hedging strategy on a continuing basis. At 31 December 2023, the Company held US\$13,475,000 forward exchange contracts (30 June 2023: US\$4,100,000). The fair value of derivative contracts outstanding at 31 December 2023 totalled \$968,972 (30 June 2023: \$8,589) and was recorded in Current liabilities – trade and other payables at 31 December 2023 (30 June 2023: \$8,589).

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**Note 11 Basis of preparation of the half-year financial report**

This condensed consolidated interim financial report for the half-year reporting period ended 31 December 2023 has been prepared in accordance with Accounting Standard AASB 134 *Interim Financial Reporting* and the *Corporations Act 2001*.

This condensed consolidated interim financial report does not include all the notes of the type normally included in an annual financial report. Accordingly, this report is to be read in conjunction with the Annual Report for the year ended 30 June 2023, and any public announcements made by Silex Systems Limited during the interim reporting period in accordance with the continuous disclosure requirements of the *Corporations Act 2001*.

The accounting policies adopted are consistent with those of the previous financial year and corresponding interim reporting period.

***New and amended standards adopted by the Company***

The Company was not required and did not change its accounting policies or make retrospective adjustments as a result of adopting amended standards.

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In the directors' opinion:

- (a) the financial statements and notes set out on pages 8 to 19 are in accordance with the *Corporations Act 2001*, including:
- (i) complying with Accounting Standards, the *Corporations Regulations 2001* and other mandatory professional reporting requirements; and
  - (ii) giving a true and fair view of the consolidated entity's financial position as at 31 December 2023 and of its performance for the half-year ended on that date: and
- (b) there are reasonable grounds to believe that Silex Systems Limited will be able to pay its debts as and when they become due and payable.

This declaration is made in accordance with a resolution of the directors.

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Dr M P Goldsworthy  
CEO/MD



Mr C A Roy  
Chair

Sydney  
22 February 2024



# ***Independent auditor's review report to the members of Silex Systems Limited***

## **Report on the half-year financial report**

### ***Conclusion***

We have reviewed the half-year financial report of Silex Systems Limited (the Company) and the entities it controlled during the half-year (together the Group), which comprises the consolidated balance sheet as at 31 December 2023, the consolidated statement of comprehensive income, consolidated statement of changes in equity, consolidated cash flow statement and consolidated income statement for the half-year ended on that date, selected explanatory notes and the directors' declaration.

Based on our review, which is not an audit, we have not become aware of any matter that makes us believe that the accompanying half-year financial report of Silex Systems Limited does not comply with the *Corporations Act 2001* including:

1. giving a true and fair view of the Group's financial position as at 31 December 2023 and of its performance for the half-year ended on that date
2. complying with Accounting Standard AASB 134 *Interim Financial Reporting* and the *Corporations Regulations 2001*.

### ***Basis for conclusion***

We conducted our review in accordance with ASRE 2410 *Review of a Financial Report Performed by the Independent Auditor of the Entity* (ASRE 2410). Our responsibilities are further described in the *Auditor's responsibilities for the review of the half-year financial report* section of our report.

We are independent of the Group in accordance with the auditor independence requirements of the *Corporations Act 2001* and the ethical requirements of the Accounting Professional & Ethical Standards Board's APES 110 *Code of Ethics for Professional Accountants (including Independence Standards)* (the Code) that are relevant to the audit of the annual financial report in Australia. We have also fulfilled our other ethical responsibilities in accordance with the Code.

### ***Responsibilities of the directors for the half-year financial report***

The directors of the Company are responsible for the preparation of the half-year financial report that gives a true and fair view in accordance with Australian Accounting Standards and the *Corporations Act 2001* and for such internal control as the directors determine is necessary to enable the preparation of the half-year financial report that gives a true and fair view and is free from material misstatement whether due to fraud or error.

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**Auditor's responsibilities for the review of the half-year financial report**

Our responsibility is to express a conclusion on the half-year financial report based on our review. ASRE 2410 requires us to conclude whether we have become aware of any matter that makes us believe that the half-year financial report is not in accordance with the *Corporations Act 2001* including giving a true and fair view of the Group's financial position as at 31 December 2023 and of its performance for the half-year ended on that date, and complying with Accounting Standard AASB 134 *Interim Financial Reporting* and the *Corporations Regulations 2001*.

A review of a half-year financial report consists of making enquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures. A review is substantially less in scope than an audit conducted in accordance with Australian Auditing Standards and consequently does not enable us to obtain assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an audit opinion.

A handwritten signature in cursive script that reads 'PricewaterhouseCoopers'.

PricewaterhouseCoopers

A handwritten signature in cursive script that reads 'Aishwarya Chandran'.

Aishwarya Chandran  
Partner

Sydney  
22 February 2024

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**Forward Looking Statements and Risk Factors:**

**About Silex Systems Limited (ASX: SLX) (OTCQX: SILXY)**

Silex Systems Limited ABN 69 003 372 067 (Silex) is a technology commercialisation company whose primary asset is the SILEX laser enrichment technology, originally developed at the Company's technology facility in Sydney, Australia. The SILEX technology has been under development for uranium enrichment jointly with US-based exclusive licensee Global Laser Enrichment LLC (GLE) for a number of years. Success of the SILEX uranium enrichment technology development program and the proposed Paducah commercial project remain subject to a number of factors including the satisfactory completion of the engineering scale-up program and nuclear fuel market conditions and therefore remains subject to associated risks.

Silex is also at various stages of development of additional commercial applications of the SILEX technology, including the production of 'Zero-Spin Silicon' for the emerging technology of silicon-based quantum computing. The 'Quantum Silicon' project remains dependent on the outcomes of the project and the viability of silicon quantum computing and is therefore subject to various risks. Silex is also conducting research activities in its Medical Isotope Separation Technology (MIST) Project, which is early-stage and subject to numerous risks. The commercial future of the SILEX technology in application to uranium, silicon, medical and other isotopes is therefore uncertain and any plans for commercial deployment are speculative.

Additionally, Silex has an interest in a unique semiconductor technology known as 'cREO®' through its 100% ownership of subsidiary Translucent Inc. The cREO® technology developed by Translucent has been acquired by IQE Plc based in the UK. IQE has paused the development of the cREO® technology until a commercial opportunity arises. The future of IQE's development program for cREO® is very uncertain and remains subject to various technology and market risks.

**Forward Looking Statements**

The commercial potential of these technologies is currently unknown. Accordingly, no guarantees as to the future performance of these technologies can be made. The nature of the statements in this Report regarding the future of the SILEX technology as applied to uranium enrichment, Zero-Spin Silicon production, medical and other isotope separation projects, the cREO® technology and any associated commercial prospects are forward-looking and are subject to a number of variables, including but not limited to, unknown risks, contingencies and assumptions which may be beyond the control of Silex, its directors and management. You should not place reliance on any forward-looking statements as actual results could be materially different from those expressed or implied by such forward-looking statements as a result of various risk factors. Further, the forward-looking statements contained in this Report involve subjective judgement and analysis and are subject to change due to management's analysis of Silex's business, changes in industry trends, government policies and any new or unforeseen circumstances. The Company's management believes that there are reasonable grounds to make such statements as at the date of this Report. Silex does not intend, and is not obligated, to update the forward-looking statements except to the extent required by law or the ASX Listing Rules.

**Risk Factors**

Risk factors that could affect future results and commercial prospects of Silex include, but are not limited to: ongoing economic and social uncertainty, including in relation to the impacts of the COVID-19 pandemic; geopolitical risks, in particular relating to Russia's invasion of Ukraine and tensions between China and Taiwan which may impact global supply chains, among other risks; uncertainties related to the effects of climate change and mitigation efforts; the results of the GLE/SILEX uranium enrichment pilot demonstration program; the market demand for natural uranium and enriched uranium; the outcome of the project for the production of Zero-Spin Silicon for the emerging technology of silicon-based quantum computing; the outcome of the MIST program; the potential development of, or competition from alternative technologies; the potential for third party claims against the Company's ownership of Intellectual Property; the potential impact of prevailing laws or government regulations or policies in the USA, Australia or elsewhere; whether IQE's commercialisation program for cREO® is resumed, the results from the program and the market opportunities for cREO® products; actions taken by the Company's commercialisation partners and other stakeholders that could adversely affect the technology development programs and commercialisation strategies; and the outcomes of various strategies and projects undertaken by the Company.

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