



# Silex

ASX: SLX    OTCQX: SILXY

## Silex Systems Limited

ABN 69 003 372 067

### Appendix 4D

## ASX Half-year information – 31 December 2022

Lodged with the ASX under Listing Rule 4.2A

This information should be read in conjunction with the 30 June 2022 Annual Report.

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Silex Systems Limited  
half-year ended 31 December 2022  
(Previous corresponding period:  
half-year ended 31 December 2021)

Results for announcement to the market

	31 December 2022 \$	30 June 2022 \$	Movement \$	Movement %	
<b>Cash and cash equivalents and Term deposits</b>	<b>34,212,677</b>	42,536,333	(8,323,656)	19.6%	↓

  

	Half-year ended 31 December 2022 \$	Half-year ended 31 December 2021 \$	Movement \$	Movement %	
<b>Revenue from ordinary activities</b>	<b>3,777,502</b>	2,123,916	1,653,586	77.9%	↑
<b>Other income</b>	<b>1,698,769</b>	1,296,225	402,544	31.1%	↑
<b>Net loss from ordinary activities after tax attributable to members</b>	<b>(8,744,575)</b>	(4,463,677)	(4,280,898)	95.9%	↑
<b>Net loss for the period attributable to members</b>	<b>(8,744,575)</b>	(4,463,677)	(4,280,898)	95.9%	↑

  

<b>No dividends have been paid or proposed during the reporting period</b>					
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#### Overview

Silex Systems Limited (Silex) is focused on the commercialisation of the SILEX laser enrichment technology through the following global opportunities:

- i) Pursuit of the 'Triple Opportunity' emerging in the global nuclear fuel industry for the SILEX uranium enrichment technology through our ownership of a 51% interest in exclusive uranium technology licensee Global Laser Enrichment LLC (GLE);
- ii) Developing the SILEX technology for the production of enriched silicon in the form of Zero-Spin Silicon – a key material required for silicon quantum computer chip fabrication for the emerging quantum computing industry; and
- iii) Progressing our assessment of additional potential applications of the SILEX technology for the medical radioisotopes industry.

The development and 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 Cameco Corporation with 51% and 49% ownership interests respectively.

The SILEX Zero-Spin Silicon (ZS-Si) project commenced in late 2019 in conjunction with project partners Silicon Quantum Computing Pty Ltd (SQC) and UNSW Sydney (UNSW) at Silex's Lucas Heights facility, to develop a process for the commercial production of high-purity ZS-Si using a variant of the SILEX laser enrichment technology.

## Silex Systems Limited

### Results for announcement to the market (continued)

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As at 31 December 2022, the Company's balance sheet had total assets of \$48.8m and net assets of \$44.5m, which included \$34.2m in cash and term deposits, listed securities in a third-party company of \$5.8m and receivables of \$4.6m.

This half-year report should be read together with the Operational Update released in conjunction with this report and recent ASX announcements.

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

The net loss from ordinary activities of \$8.7m increased by \$4.3m compared to the previous corresponding period. The increase in loss was mainly due to the ramp up of activities at GLE during the half-year as the company increased its development and commercialisation activities associated with the SILEX technology. 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 \$3.9m in the prior period to \$7.3m for the current period. In addition, Research and development materials increased \$1.2m in the current period and Employee benefits expense increased \$0.8m as the Company's technology development activities increased. The increase in expenditure for the period was partly offset by an increase in Recoverable project costs revenue of \$1.4m (i.e., GLE's reimbursement to Silex of its costs on the uranium project).

#### **Cash and cash equivalents & Term Deposits**

The cash and term deposits balance as at 31 December 2022 was \$34.2m, a decrease of \$8.3m during the half-year. Net cash outflows from operating activities for the half-year to 31 December 2022 were \$1.5m compared to inflows of \$0.8m for the half-year ended 31 December 2021. Payments to suppliers and employees increased by \$2.2m as activities increased relative to the prior period. Payments for investments accounted for using the equity method (i.e., payments to fund the Company's investment in GLE) increased \$2.8m in the current period as GLE continued to increase its activities.

#### **Revenue from ordinary activities**

There was a \$1.7m increase in revenue from ordinary activities during the half-year. Recoverable project costs increased by \$1.4m in the current period as activities on the uranium project increased. Interest revenue increased by \$0.3m mainly due higher average cash and term deposit holdings during the current 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 2022 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.

## Silex Systems Limited Directors' report

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 2022.

### 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 2022 with comparatives for the half-year ended 31 December 2021. A summary is shown below:

	6 months ended 31 December 2022	6 months ended 31 December 2021
	\$	\$
Revenue from continuing operations	3,777,502	2,123,916
Other income	1,698,769	1,296,225
(Loss) before tax	(8,744,575)	(4,463,677)
Income tax expense	-	-
Net (loss) from continuing operations	(8,744,575)	(4,463,677)
Net (loss) for the half-year	(8,744,575)	(4,463,677)
(Loss) is attributable to:		
Owners of Silex Systems Limited	(8,744,575)	(4,463,677)

The Company incurred a loss attributable to owners of Silex Systems Limited for the half-year ended 31 December 2022 of \$8.7m (loss of \$4.5m for the previous corresponding period). The increase in loss was mainly due to the ramp up of activities at GLE during the half-year as the company increased its development and commercialisation activities associated with the SILEX technology. The Company's share of losses of GLE's operations (including the reimbursement to Silex for its Recoverable project costs) increased by \$3.4m in the current period. Research and development materials increased \$1.2m and Employee benefits expense increased \$0.8m in the current period as the Company's technology development activities increased. The increase in expenditure for the period was partly offset by an increase in revenue of \$1.7m. Recoverable project costs increased by \$1.4m in the current period and Interest revenue increased by \$0.3m.

The cash and term deposits balance as at 31 December 2022 was \$34.2m, a decrease of \$8.3m during the half-year. Net cash outflows from operating activities for the half-year to 31 December 2022 were \$1.5m compared to inflows of \$0.8m for the half-year ended 31 December 2021. Payments to suppliers and employees increased by \$2.2m as activities increased relative to the prior period. Payments for investments accounted for using the equity method (i.e., payments to fund the Company's investment in GLE) increased \$2.8m in the current period as GLE continued to ramp up its activities.

The value of Financial assets at fair value through other comprehensive income (listed company securities) increased by \$1.8m during the period as a result of an increase in the share price of the listed securities.

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 2022 Annual Report.

**4. Subsequent events**

The consolidated entity is not aware of any 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, 21 February 2023



## Auditor's Independence Declaration

As lead auditor for the review of Silex Systems Limited for the half-year ended 31 December 2022, 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', with a horizontal line underneath.

Aishwarya Chandran  
Partner  
PricewaterhouseCoopers

Sydney  
21 February 2023

Silex Systems Limited  
Consolidated income statement  
for the half-year ended 31 December 2022

	Notes	6 months ended 31 December 2022 \$	6 months ended 31 December 2021 \$
Revenue from contracts with customers	2(a)	3,459,169	2,069,104
Interest revenue	2(a)	318,333	54,812
<b>Revenue from continuing operations</b>		<b>3,777,502</b>	<b>2,123,916</b>
Other income	2(b)	1,698,769	1,296,225
Research and development materials		(1,725,754)	(479,171)
Finance costs		(27,084)	(694)
Depreciation and amortisation expense		(197,357)	(227,556)
Employee benefits expense		(3,502,820)	(2,716,369)
Consultants and professional fees		(640,322)	(318,306)
Printing, postage, freight, stationery and communications		(40,207)	(46,203)
Property outgoings		(34,321)	(30,125)
Net foreign exchange losses		(386,233)	-
Share of net loss of associates and joint ventures accounted for using the equity method		(7,308,940)	(3,913,323)
Other expenses from continuing activities		(357,808)	(152,071)
<b>(Loss) before income tax expense</b>		<b>(8,744,575)</b>	<b>(4,463,677)</b>
Income tax expense		-	-
<b>Net (loss) from continuing operations</b>		<b>(8,744,575)</b>	<b>(4,463,677)</b>
<b>Net (loss) for the half-year</b>		<b>(8,744,575)</b>	<b>(4,463,677)</b>
(Loss) is attributable to:			
Owners of Silex Systems Limited		(8,744,575)	(4,463,677)
		<b>Cents</b>	<b>Cents</b>
<b>Earnings per share for (loss) from continuing operations attributable to the ordinary equity holders of the company</b>			
Basic earnings per share		(4.3)	(2.4)
Diluted earnings per share		(4.3)	(2.4)
<b>Earnings per share for (loss) attributable to the ordinary equity holders of the company</b>			
Basic earnings per share		(4.3)	(2.4)
Diluted earnings per share		(4.3)	(2.4)

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 2022

	6 months ended 31 December 2022 \$	6 months ended 31 December 2021 \$
<b>Net (loss) for the half-year</b>	<b>(8,744,575)</b>	<b>(4,463,677)</b>
<b>Other comprehensive income</b>		
<i>Items that may be reclassified to profit or loss:</i>		
Exchange differences on translation of foreign operations	101,311	241,466
<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	1,773,360	(1,750,182)
<b>Other comprehensive income for the half-year, net of tax</b>	<b>1,874,671</b>	<b>(1,508,716)</b>
<b>Total comprehensive income for the half-year</b>	<b>(6,869,904)</b>	<b>(5,972,393)</b>
 Attributable to:		
Owners of Silex Systems Limited	(6,869,904)	(5,972,393)
<b>Total comprehensive income for the half-year</b>	<b>(6,869,904)</b>	<b>(5,972,393)</b>

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

Silex Systems Limited  
Consolidated balance sheet  
as at 31 December 2022

	Notes	31 December 2022 \$	30 June 2022 \$
<b>ASSETS</b>			
<b>Current assets</b>			
Cash and cash equivalents		6,512,677	5,036,333
Other financial assets at amortised cost – term deposits		27,700,000	37,500,000
Trade and other receivables	3	4,566,059	2,817,239
Other current assets		433,935	332,219
Financial assets at fair value through other comprehensive income	4	5,815,253	3,997,980
Total current assets		45,027,924	49,683,771
<b>Non-current assets</b>			
Investments accounted for using the equity method	5	2,575,288	3,121,797
Right-of-use assets		881,814	990,489
Property, plant and equipment		280,808	320,802
Total non-current assets		3,737,910	4,433,088
<b>Total assets</b>		48,765,834	54,116,859
<b>LIABILITIES</b>			
<b>Current liabilities</b>			
Trade and other payables	6	2,485,312	1,717,766
Lease liabilities		234,696	200,191
Provisions		808,946	799,592
Total current liabilities		3,528,954	2,717,549
<b>Non-current liabilities</b>			
Lease liabilities		676,438	782,311
Provisions		74,412	70,845
Total non-current liabilities		750,850	853,156
<b>Total liabilities</b>		4,279,804	3,570,705
<b>Net assets</b>		44,486,030	50,546,154
<b>EQUITY</b>			
Contributed equity	7	271,921,209	271,543,434
Reserves		13,349,949	11,043,273
Accumulated losses		(240,785,128)	(232,040,553)
<b>Total equity</b>		44,486,030	50,546,154

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 2022

	Attributable to owners of Silex Systems Limited			
	Contributed equity	Reserves	Accumulated losses	Total
	\$	\$	\$	\$
<b>Balance at 30 June 2021</b>	<b>232,645,003</b>	<b>12,002,259</b>	<b>(222,576,131)</b>	<b>22,071,131</b>
Net (loss) for the half-year	-	-	(4,463,677)	(4,463,677)
Other comprehensive income	-	(1,508,716)	-	(1,508,716)
<b>Total comprehensive income for the half-year</b>	<b>-</b>	<b>(1,508,716)</b>	<b>(4,463,677)</b>	<b>(5,972,393)</b>
<b>Transactions with owners in their capacity as owners:</b>				
Contributions of equity net of transaction costs	38,467,500	-	-	38,467,500
Employee share schemes – value of employee services	-	409,136	-	409,136
Transfer from share-based payments reserve	213,928	(213,928)	-	-
	<b>38,681,428</b>	<b>195,208</b>	<b>-</b>	<b>38,876,636</b>
<b>Balance at 31 December 2021</b>	<b>271,326,431</b>	<b>10,688,751</b>	<b>(227,039,808)</b>	<b>54,975,374</b>
<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
Employee share schemes – value of employee 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>

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 2022

	6 months ended 31 December 2022 \$	6 months ended 31 December 2021 \$
<b>Cash flows from operating activities</b>		
Receipts from customers and government grants (inclusive of GST)	3,409,610	3,605,288
Payments to suppliers and employees (inclusive of GST)	(5,040,212)	(2,797,731)
Interest received	154,092	23,274
Interest paid	(27,084)	(694)
<b>Net cash (outflows)/inflows from operating activities</b>	<b>(1,503,594)</b>	<b>830,137</b>
 <b>Cash flows from investing activities</b>		
Payment for investments accounted for using the equity method	(6,703,017)	(3,861,060)
Payments for financial assets at amortised cost – term deposits	(11,000,000)	(33,300,000)
Proceeds from other financial assets at amortised cost – term deposits	20,800,000	1,000,000
Payments for property, plant and equipment	(30,218)	(77,903)
<b>Net cash inflows/(outflows) from investing activities</b>	<b>3,066,765</b>	<b>(36,238,963)</b>
 <b>Cash flows from financing activities</b>		
Proceeds from issues of shares, net of transaction costs	209	38,354,683
Repayment of principal elements of leases	(89,838)	(173,608)
<b>Net cash (outflows)/inflows from financing activities</b>	<b>(89,629)</b>	<b>38,181,075</b>
 <b>Net increase in cash and cash equivalents</b>	<b>1,473,542</b>	<b>2,772,249</b>
Cash and cash equivalents at the beginning of the half-year	5,036,333	6,402,798
Effects of exchange rate changes on cash	2,802	33,231
<b>Cash and cash equivalents at end of half-year *</b>	<b>6,512,677</b>	<b>9,208,278</b>
 * Term deposits excluded from Cash and cash equivalents	<b>27,700,000</b>	<b>40,000,000</b>

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

Silex Systems Limited  
Notes to the consolidated financial statements  
31 December 2022

**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.

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

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>

  

Half-year ended 31 December 2021	Silex Systems \$	Translucent \$	Silex USA \$	Total \$
Total segment revenue	2,089,744	518,383	-	2,608,127
Inter-segment revenue	(20,640)	(518,383)	-	(539,023)
<b>Revenue from external customers</b>	<b>2,069,104</b>	<b>-</b>	<b>-</b>	<b>2,069,104</b>
<b>Interest revenue</b>	<b>54,812</b>	<b>-</b>	<b>-</b>	<b>54,812</b>
<b>Revenue from continuing operations</b>	<b>2,123,916</b>	<b>-</b>	<b>-</b>	<b>2,123,916</b>
 <b>Segment result</b>	 <b>(707,807)</b>	 <b>14,589</b>	 <b>(3,770,459)</b>	 <b>(4,463,677)</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 2022 (continued)

	Silex Systems \$	Translucent \$	Silex USA \$	Total \$
<b>Total segment assets</b>				
31 December 2022	<b>38,937,100</b>	<b>7,067,482</b>	<b>2,761,252</b>	<b>48,765,834</b>
30 June 2022	46,623,708	4,258,888	3,234,263	54,116,859

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

	Silex Systems \$	Translucent \$	Silex USA \$	Total \$
<b>Total segment liabilities</b>				
31 December 2022	<b>4,268,202</b>	<b>11,602</b>	-	<b>4,279,804</b>
30 June 2022	3,559,673	11,032	-	3,570,705

**Note 2 Revenue and Other income**

**(a) Revenue**

	6 months ended 31 December 2022 \$	6 months ended 31 December 2021 \$
Recoverable project costs	<b>3,459,169</b>	2,069,104
Interest revenue	<b>318,333</b>	54,812
	<b>3,777,502</b>	2,123,916

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

**(b) Other income**

	6 months ended 31 December 2022 \$	6 months ended 31 December 2021 \$
Research and development tax incentive	<b>1,365,667</b>	687,324
Cooperative Research Centres Projects (CRC-P) Grant	<b>183,102</b>	207,315
Other income – project subsidy	<b>150,000</b>	150,160
Net foreign exchange gains	-	251,426
	<b>1,698,769</b>	1,296,225

Silex Systems Limited  
Notes to the consolidated financial statements  
31 December 2022 (continued)

**Note 3 Trade and other receivables**

	31 December 2022	30 June 2022
	\$	\$
Trade receivables from contracts with customers	408,951	425,755
Accrued income – other	4,075,648	2,144,404
Derivative financial instruments – forward exchange contracts	-	158,603
Other receivables	81,460	88,477
	<b>4,566,059</b>	<b>2,817,239</b>

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

	31 December 2022	30 June 2022
	\$	\$
Listed securities		
Equity securities – shares in IQE Plc (AIM: IQE)	5,815,253	3,997,980

The value of the shares at 31 December 2022 was impacted by a significant increase in the IQE share price during the half-year.

**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 2022 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 2022	30 June 2022			31 December 2022	30 June 2022
Global Laser Enrichment Holdings LLC	USA	51%	51%	Joint venture	Equity method	2,575,288	3,121,797

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 full-scale demonstration of the technology utilising a pilot plant currently being built in Wilmington, NC. Cameco Corporation indirectly owns the remaining 49% of GLE Holdco.

	31 December 2022*	30 June 2022
	\$	\$
Commitments – joint ventures		
Commitment to provide funding for joint ventures capital commitments, if called	-	6,512,588

\* As at 31 December 2022, the CY2023 operating plan and budget for GLE and associated capital calls, were pending for resolution by the GLE Holdco Governing Board.

Silex Systems Limited  
Notes to the consolidated financial statements  
31 December 2022 (continued)

Summarised balance sheet	GLE Holdco	
	31 December 2022	30 June 2022
	\$	\$
Current assets		
Cash and cash equivalents	9,321,714	8,923,862
Other current assets	620,568	625,447
Total current assets	9,942,282	9,549,309
Non-current assets	7,084,754	7,186,774
Current liabilities		
Financial liabilities (excluding trade payables)	899,337	855,117
Other current liabilities	3,556,913	2,271,850
Total current liabilities	4,456,250	3,126,967
Non-current liabilities		
Financial liabilities (excluding trade payables)	7,487,460	7,463,276
Other non-current liabilities	33,742	24,669
Total non-current liabilities	7,521,202	7,487,945
<b>Net assets</b>	<b>5,049,584</b>	<b>6,121,171</b>
	6 months ended 31 December 2022	6 months ended 31 December 2021
	\$	\$
<b>Reconciliation to carrying amounts</b>		
Opening net assets	6,121,171	1,796,576
Additional capital contributed	13,143,171	7,582,815
(Loss) for the period	(14,331,254)	(7,673,183)
Other comprehensive income	116,496	(35,424)
<b>Closing net assets</b>	<b>5,049,584</b>	<b>1,670,784</b>
Company's share in %	51%	51%
Company's share in \$	2,575,288	852,100
Carrying amount	2,575,288	852,100

**Note 6 Trade and other payables**

	31 December 2022	30 June 2022
	\$	\$
Trade creditors	891,485	479,548
Unearned income	906,991	918,785
Derivative financial instruments – forward exchange contracts	323,162	-
Other payables	363,674	319,433
	<b>2,485,312</b>	<b>1,717,766</b>



Silex Systems Limited  
Notes to the consolidated financial statements  
31 December 2022 (continued)

**Note 7 Equity**

(a) Share capital:	31/12/2022 Shares	30/06/2022 Shares	31/12/2022 \$	30/06/2022 \$
Ordinary shares, fully paid	205,311,027	204,974,961	271,921,209	271,543,434

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

Details	Number of shares	Total \$
Opening balance 1 July 2022	204,974,961	271,543,434
Issue of shares – performance rights	331,897	-
Issue of shares – options exercise	4,169	1,459
Transfer from share-based payments reserve	-	377,566
	205,311,027	271,922,459
Less: Transaction costs arising on share issues	-	(1,250)
Balance 31 December 2022	205,311,027	271,921,209

**(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 31 December 2022 (Number)
21/05/2019	20/05/2024	35	140,000	-	(15,831)	(4,169)	120,000
01/04/2020	31/03/2025	21	660,000	-	-	-	660,000
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
			3,600,000	50,000	(15,831)	(4,169)	(3,630,000)

Silex Systems Limited  
Notes to the consolidated financial statements  
31 December 2022 (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 31 December 2022 (Number)
26/07/2021	Nil	70,000	-	(3,500)	(66,500)	-
14/10/2021	Nil	487,500	-	(3,750)	(71,250)	412,500
25/10/2021	Nil	250,000	-	(55,853)	(194,147)	-
21/06/2022	Nil	-	300,000	-	-	300,000
26/08/2022	Nil	-	200,000	-	-	200,000
30/08/2022	Nil	-	145,000	-	-	145,000
21/11/2022	Nil	-	25,000	-	-	25,000
		807,500	670,000	(63,103)	(331,897)	1,082,500

**Note 8 Net tangible asset backing**

	31 December 2022	30 June 2022	31 December 2021
	\$	\$	\$
Net tangible asset backing per ordinary security	21.67 cents	24.66 cents	26.88 cents

**Note 9 Events occurring after reporting date**

The consolidated entity is not aware of any 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 2022, the Company held US\$2,600,000 forward exchange contracts (30 June 2022: US\$1,650,000). The fair value of derivative contracts outstanding at 31 December 2022 totalled \$323,162 (30 June 2022: \$158,603). The \$323,162 was recorded in Current liabilities – trade and other payables at 31 December 2022 (30 June 2022: \$158,603 in Current assets – trade and other receivables).

**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 2022 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 2022, 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.

In the directors' opinion:

- (a) the financial statements and notes set out on pages 8 to 18 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 2022 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.



Dr M P Goldsworthy  
CEO/MD



Mr C A Roy  
Chair

Sydney  
21 February 2023



## ***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 2022, 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, significant accounting policies and 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 2022 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.

PricewaterhouseCoopers, ABN 52 780 433 757  
One International Towers Sydney, Watermans Quay, Barangaroo, GPO BOX 2650, SYDNEY NSW 2001  
T: +61 2 8266 0000, F: +61 2 8266 9999  
Level 11, 1PSQ, 169 Macquarie Street, Parramatta NSW 2150, PO Box 1155 Parramatta NSW 2124  
T: +61 2 9659 2476, F: +61 2 8266 9999



### ***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 2022 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 stylized, cursive signature of the PricewaterhouseCoopers firm, written in black ink.

PricewaterhouseCoopers

A stylized, cursive signature of Aishwarya Chandran, written in black ink.

Aishwarya Chandran  
Partner

Sydney  
21 February 2023

**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 'Zero-Spin Silicon' project remains dependent on the outcomes of the project and the viability of silicon quantum computing and is therefore subject to various risks. The commercial future of the SILEX technology 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 and Zero-Spin Silicon production, 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 SILEX uranium enrichment engineering development 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 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.