

# Important Notice

### **Forward Looking Statements and Risk Factors:**

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

Silex Systems Limited ABN 69 003 372 067 (Silex or the Company) 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 Project; 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.

# Contents

Chair's Report	1
CEO's Report	3
About Silex	6
Directors' Report	19
Corporate Governance Statement	52
Financial Report	53
Directors' declaration	103
Independent Auditor's Report to the Members	104
Shareholder Information	109
Company Directory	111



Dear Fellow Shareholders,

On behalf of the Silex Board, it is my pleasure to present our 2023 Annual Report for Silex Systems Limited. Financial year 2023 was a decisive year for your Company. First and foremost, together with our Global Laser Enrichment LLC (GLE) joint venture partner, Cameco Corporation, we agreed to a plan and budget for CY2023 to accelerate activities in the commercial-scale pilot demonstration project for the SILEX uranium enrichment technology. This decision was driven by a desire to leverage the 'Triple Opportunity' that has emerged in the global nuclear fuel supply chain, being driven by global climate change and geopolitical issues.

The commercialisation of our innovative SILEX laser enrichment technology across multiple global markets is our priority, not only to contribute to the reliable and sustainable supply of nuclear fuel for the world's clean energy needs, but also to develop quantum materials for next-generation silicon quantum computing.

Acceleration of GLE's commercialisation activities preserves the option of commencing commercial operations at the planned Paducah Laser Enrichment Facility (PLEF) up to three years earlier than originally planned in 2028. The Triple Opportunity at the PLEF is underpinned by the agreement between GLE and the US Department of Energy, and has the potential to become a 'Tier 1' uranium resource producing up to 5 million pounds U<sub>3</sub>O<sub>8</sub> equivalent per year for approximately 30 years. This would rank in the top 10 of current uranium mines by production volume and be potentially the largest source of uranium in the US.

The PLEF is a large, multi-decade project that could enable the SILEX technology to become the 'go to' technology for the production of all three grades of nuclear fuel required for today's conventional nuclear power reactors and for next generation advanced reactors, including Small Modular Reactors (SMRs), currently under development.

We are also pleased with the increased support from industry and government for GLE's commercialisation. GLE signed a non-binding Letter of Intent (LOI) with US nuclear utility Dominion Energy in April 2023, following two similar LOIs signed with Constellation Energy Generation and Duke Energy in 2022. We are also seeing clear legislative signals from the US Congress, which may help support the establishment of new nuclear fuel production capacity in the US and the nuclear industry more broadly.

We also completed the Zero-Spin Silicon Project during the year, achieving all key target enrichment objectives, including producing enriched silicon-28 at the highest purity of ~99.998%, during extensive testing with the pilot demonstration facility. A path to production scalability was also identified and will be implemented through the recently launched Quantum Silicon Production Project. We again look forward to collaborating with our partners at Silicon Quantum Computing and UNSW Sydney to establish the Quantum Silicon Production Plant, and to develop the skills and capability to manufacture Quantum Silicon products at commercial scale.

During the year, the Company completed an equity raise by way of a placement, which was followed by a Share Purchase Plan (SPP). The net proceeds from the placement and SPP were \$114.7m. The proceeds from the equity raise are expected to fund our activities, including the continued acceleration of the SILEX uranium enrichment technology and the Quantum Silicon Production Project through to FY2026.



Our goal is to deliver long-term value to you, our shareholders, and to do this with a relentless focus on risk management and prudent governance.

We were also pleased that the Company re-entered the ASX 300 in March 2023 following the quarterly rebalance of S&P/ASX Indices.

Our progress during the year reflects the strategic positioning of your Company into global growth markets, specifically the uranium and nuclear fuel industry, and the emerging silicon quantum computing industry. We are also encouraged by progress in our new Medical Isotope Separation Technology (MIST) Project and look forward to sharing further updates of our proof-of-concept project later this year.

Our goal is to deliver long-term value to you, our shareholders, and to do this with a relentless focus on risk management and prudent governance. Our activities are driven by our values, prioritising health and safety in everything we do, and being environmentally responsible. I would like to sincerely thank our CEO, Michael Goldsworthy, and the outstanding Silex and GLE team for their hard work and commitment. They are an outstanding team of people and are diligently pursuing the execution of our strategy every single day.

Finally, my fellow Board members and I, and Silex Management, thank you for your continued support. I look forward to updating you again at our Annual General Meeting in October.



Craig Roy
Chair

24 August 2023



Dear Fellow Shareholders,

As the founder of Silex and co-inventor of the SILEX laser-based enrichment technology, I am very pleased to be able to report that the Company is making solid progress towards the final commercialisation steps for this unique third generation technology, in both the primary application for uranium enrichment, in conjunction with US-based uranium technology licensee, Global Laser Enrichment (GLE), and for the second application for the production of enriched silicon for silicon-based quantum computing.

The decision in February 2023 by Silex and our GLE joint venture partner, Cameco Corporation, to accelerate CY2023 activities for the commercial-scale pilot demonstration project, provides the opportunity to complete this pivotal demonstration of the technology as early as mid-2024. Achievement of this important milestone would potentially trigger a significant inflexion point in the valuation of the SILEX technology and GLE. This decision also enables GLE to leverage the 'Triple Opportunity' that has emerged in the global nuclear fuel supply chain, underpinned by the strong fundamentals for nuclear power as a reliable, baseload source of electricity for the world's clean energy needs, coupled with the more recent geopolitical events that threaten long term disruptions in the Western nuclear fuel supply chain. The commercialisation of our SILEX laser-based uranium enrichment technology at GLE's planned Paducah Laser Enrichment Facility (PLEF) will

During FY2023, we also continued to strengthen and diversify the business case for the SILEX technology, including progressing the development of the SILEX technology for the production of Quantum Silicon products, based on the successful demonstration of production technology for high purity Zero-Spin Silicon,

and with the commencement of the Medical Isotope Separation Technology (MIST) proof-of-concept project earlier in the year.

### SILEX Uranium Enrichment and the Triple Opportunity

Events over the past 18 months have had a profound effect on nuclear fuel markets. In response to geopolitical concerns and the climate crisis that is unfolding, many countries are prioritising government energy policy initiatives to achieve urgent decarbonisation targets and to ensure energy security through sovereign energy platforms. These factors, coupled with potential disruptions in the Western nuclear fuel supply chain precipitated by the Russian invasion of Ukraine, have resulted in market conditions and opportunities that have not previously been seen in the nuclear industry.

With Russia currently providing the global nuclear industry with ~14% of its uranium requirements, ~27% of its conversion services, and ~45% of enrichment capacity, Western governments and utilities are seeking to establish secure nuclear fuel production capabilities free of Russian (and Chinese) influence, particularly in light of the growing threat of sanctions on Russian-sourced enriched uranium. We believe Western nuclear fuel markets will undergo a fundamental realignment over the next 12 to 24 months towards a more resilient and sustainable footing, with the aim of becoming less dependent, or free of, reliance on Russian and other State-Owned nuclear fuel suppliers.

We believe this realignment could endure for decades, given the renewed focus on long-term energy security. As the nuclear industry bifurcates under the growing threat of sanctions on Russian-sourced uranium and enriched nuclear fuel, Western governments and



utilities are moving as quickly as possible to establish secure and resilient supply chains.

In this context, commercialisation of the SILEX uranium enrichment technology in the US provides GLE with the unique opportunity to produce all three grades of nuclear fuel required for current and future nuclear plants at the proposed PLEF Production Plant, which we call the 'Triple Opportunity':

- 1. Production of natural grade uranium in the form of converted UF<sub>6</sub>;
- 2. Production of low enriched uranium (LEU/LEU+) for existing and future nuclear power plants; and
- 3. Production of high assay LEU (HALEU) fuel for next-generation advanced reactors, including Small Modular Reactors (SMRs).

The acceleration of CY2023 activities for the commercial-scale pilot demonstration project provides the potential to complete the pilot demonstration program as early as mid-2024, which in turn preserves the option to commence commercial operations at the PLEF as early as 2028, depending on market factors and the level of support forthcoming from government and industry. Most importantly, successful completion of the pilot demonstration project in mid-2024 would result in the technology reaching TRL-6 level – a key milestone in the de-risking of the technology before the focus turns to the commercial feasibility assessment and construction of the first commercial SILEX uranium enrichment plant at the PLEF.

Support for GLE's commercialisation from both industry and government is growing. We are pleased that GLE now has non-binding LOIs with the three largest US nuclear utilities, with Dominion Energy

signing a LOI in April 2023. This follows two similar LOIs signed with Constellation Energy Generation and Duke Energy in 2022. We are also pleased to see what appear to be clear legislative signals from the US Congress that will support the establishment of new nuclear fuel production capacity in the US, including US\$700 million in funding for the HALEU Availability Program under the Inflation Reduction Act, passed in August 2022.

We believe the SILEX technology, the only third-generation laser enrichment technology being commercialised today, could help make nuclear power a more efficient and cost-effective solution for resilient and sustainable carbon-free base load electricity generation.

### Quantum Silicon Production Project

Silex successfully completed the Zero-Spin Silicon (ZS-Si) Project during the year. The SILEX pilot demonstration facility confirmed the capability to produce ZS-Si in the form of enriched silicon-28 at the highest purity of ~99.998% and verified a path to production scalability. This is the first time that the SILEX laser enrichment technology has been demonstrated at TRL-6 i.e. commercial-scale pilot demonstration.

We have now commenced the new Quantum Silicon (Q-Si) Production Project, which is being undertaken in conjunction with partners Silicon Quantum Computing Pty Ltd (SQC) and UNSW Sydney, and supported by a \$5.1m funding grant from the Defence Trailblazer for Concept to Sovereign Capability Program.

The objective of the new Project is to establish the first Quantum Silicon Production Plant and develop the skills and capability to manufacture commercial Q-Si products, based on ZS-Si, in multiple product forms at commercial scale. This new 3.5-year project has the



aim of producing between 5kg and 10kgs Q-Si product in the form of Quantum Silane gas and Quantum Silicon solid annually, and to develop a customer base and commercial arrangements for global sales of Q-Si products.

This Project continues to have strategic importance for Australia, given most of the world's current supply of enriched silicon has been sourced from Russia. Trade sanctions have translated into increased interest in our activities and greater urgency to commercialise this important technology.

### Prioritising Health and Safety, ESG

Core to our operations and values is prioritisation of the health, safety and wellbeing of our team. During the year, we reported no lost time injuries or reportable incidents across all sites.

Silex has strong Environmental, Social and Governance (ESG) credentials, and our activities at all times support our mission to be environmentally responsible. Our focus on environmental sustainability is underpinned by our aspirations in the nuclear fuel industry, which will help make zero-emissions nuclear energy more affordable and lead to greater uptake. Furthermore, our focus on social responsibility is leveraged through our Quantum Silicon Production Project for silicon-based quantum computing, an emerging technology that will drive innovation and solutions to many of society's intractable problems such as climate change, and more affordable medical treatment.

#### The Silex and GLE Team

The exceptionally talented Silex and GLE teams at the core of our activities and achievements are focused on harnessing excellence in technology innovation. We recruit carefully and strategically to ensure that we have the right people and expertise to deliver on our priorities and ultimately to create value for shareholders. We also expanded our executive team during the year, with the appointment of a Chief Commercial Officer to support the key commercial growth elements and the next phase of business development for Silex.

Finally, I would like to thank the Silex and GLE teams for their commitment and tenacity, and to our Board of Directors for their continued support of the Company's strategy. I would also like to take this opportunity to thank you, our shareholders, for your ongoing support. With the strongest tailwinds ever seen for the nuclear fuel markets and our acceleration of the SILEX uranium enrichment project with GLE, the outlook for Silex is robust. Furthermore, our opportunity to supply Q-Si, a key enabling material for the fabrication of next generation processor chips for silicon-based quantum computers, is another opportunity for us to deliver long-term value from the unique SILEX technology.

I look forward to providing a further update at the Annual General Meeting in October.



AMARINE .

**Dr Michael Goldsworthy** CEO/Managing Director 24 August 2023



## **Our ESG Commitment**

Sustainability is core to our mission and values, and is achieved by prioritising the health and safety of our people and ensuring environmental responsibility in everything we do.

We are focused on delivering value through the responsible development and commercialisation of our technology and by continually addressing any potential social and environmental impacts of our operations.

At Silex, we have a well-defined ESG commitment with three focus areas:

- 1. Health, safety and wellbeing of our people
- 2. Environmental responsibility
- 3. Strong corporate governance

### Health, safety and wellbeing

At the core of our ESG commitment is the health, safety and wellbeing of our people, and the safety of our operations and the communities in which we operate.

Our philosophy is defined by respect for each other and embracing diversity and inclusion. We recognise the benefits of diversity and promoting equal opportunities at all times.

### **Environment**

We are committed to bringing innovative technologies to market that can have a positive impact on the global environment. In particular, our SILEX technology is currently focused on:

- i. improving efficiencies and reliability in nuclear fuel production for the generation of zero-emissions electricity from nuclear power and contributing to climate change mitigation efforts;
- ii. developing novel isotopically engineered materials that are key to enabling next-generation quantum computing and nuclear medicine technologies, providing humanity with disruptive tools to solve many global-scale environmental and social issues.

At the same time, we are committed to protecting the environment in which we operate by mitigating any potential risks or impacts of our activities.

### Governance

Silex is committed to aspiring and demonstrating the highest standards of corporate governance. The Board's focus is on enhancing the interests of shareholders and other key stakeholders while ensuring the Company is operating responsibly so that risks are effectively managed or mitigated and our operations are consistent with our ESG commitments at all times.



### The SILEX Laser Uranium Enrichment Technology

The SILEX technology was invented by Silex Systems scientists Dr Michael Goldsworthy (our CEO) and Dr Horst Struve (retired), in the 1990s at Lucas Heights, Sydney. In order to facilitate the potential commercial deployment of the technology in the United States, an Agreement for Cooperation between the governments of the United States and Australia was signed in May 2000. In June 2001, the technology was officially Classified by the United States and Australian governments, bringing the SILEX technology commercialisation project formally under the strict nuclear safeguards, security and regulatory protocols of each country.

The development and commercialisation program for the SILEX uranium enrichment technology is being undertaken jointly by Silex (at its Lucas Heights, Sydney facility) and US-based Global Laser Enrichment (GLE) – the exclusive licensee and commercialisation vehicle for the SILEX uranium enrichment technology (in Wilmington, North Carolina). GLE is a jointly-controlled venture between Silex and Canadian-based Cameco Corporation, one of the world's leading uranium producers and nuclear fuel suppliers, with 51% and 49% ownership interest respectively.

The SILEX technology is the only third-generation laser-based uranium enrichment technology known to be under commercial development today. Subject to the successful completion of the commercialisation project, market conditions and other factors, the SILEX technology could become a major contributor to nuclear fuel production for the world's current and future nuclear reactor fleet, through the unique ability to produce uranium in several different forms at the planned Paducah Laser Enrichment Facility (PLEF), including:

- Natural Grade Uranium (U<sub>nat</sub>) as UF<sub>6</sub>
- Low Enriched Uranium (LEU/LEU+)
- High Assay LEU (HALEU)

These three fuels and the 'Triple Opportunity' that they represent are detailed below:

### PLEF UF

### Natural Grade Uranium (as UF,

via enrichment of DOE inventories of depleted tails to produce natural UF  $_{\! 6}$  with U  $^{\! 235}$  assay  $\sim\!0.7\%$ 

### **PLEF LEU**

### **Low Enriched Uranium (LEU)**

for conventional nuclear power reactors includes U<sup>235</sup> assays up to 5% LEU+ includes U<sup>235</sup> assays of 5% to 10%

### **PLEF HALEU**

### **High Assay LEU (HALEU)**

fuel for next generation advanced reactors, including SMRs includes U<sup>235</sup> assays up to 20%

Uranium production and enrichment are the two largest value drivers of the nuclear fuel supply chain, accounting for nearly 80% of the value of a reactor fuel bundle. Importantly, commercialisation of the SILEX uranium enrichment technology through licensee GLE could enable the SILEX technology to become a unique, nuclear fuel production platform for existing and emerging nuclear power generation systems.

### **Uranium enrichment**

Naturally occurring uranium is dominated by two isotopes, U<sup>235</sup> and U<sup>238</sup> Nuclear energy is produced by the splitting (or 'fission') of the U<sup>235</sup> atoms.

Natural uranium is made up of ~0.7% of the 'active' U<sup>235</sup> isotope with the balance (~99.3%) made up of the U<sup>238</sup> isotope. Uranium enrichment is the process of concentrating or enriching the U<sup>235</sup> isotope for use as fuel in a conventional nuclear power reactor. Enrichment is a technically difficult process and accounts for around 30% of the cost of nuclear fuel and approximately 5% of the total cost of the electricity generated by nuclear power.

The **S**eparation of **I**sotopes by **L**aser **EX**citation (**SILEX**) process is the only third-generation enrichment technology known to be at an advanced stage of commercialisation today. It can effectively enrich uranium through highly selective laser excitation of the <sup>235</sup>UF<sub>6</sub> isotopic molecule. UF<sub>6</sub> is the fluorinated gaseous form of uranium, which is made from the uranium oxide produced by miners by chemical conversion.

The two methods of uranium enrichment used to date are the now obsolete Gas Diffusion (first generation) and Gas Centrifuge (second generation). Silex's third-generation laser-based process provides much higher enrichment (process) efficiency compared to these earlier methods, potentially offering significantly lower overall costs.

### **Evolution of Enrichment Technology**

1st Generation Technology

### **Gaseous Diffusion**

Verv low efficiency

High cost

Obsolete



### 2nd Generation Technology

### Centrifuge

Modest efficiency

Lower cost

Current technology



### **3rd Generation Technology**

### **SILEX Laser**

High efficiency

Anticipated to be lowest cost

The future of uranium enrichment



SILEX laser proces —

 much higher separation efficiencies vs. centrifuge technology

### **Key features of the SILEX Uranium Enrichment Technology**

The SILEX technology is a unique laser-based process that has the potential to economically separate uranium isotopes (as well as other commercially valuable isotopes).

It has a number of advantages over other uranium enrichment processes, including:

- Inherently higher efficiency and throughput, resulting in lower enrichment costs;
- Smaller environmental footprint than centrifuge and diffusion plants;
- Greater flexibility in producing advanced fuels for advanced reactors, including SMRs; and
- Anticipated lowest capital costs.

### SILEX Uranium Enrichment Commercialisation - Global Laser Enrichment LLC (GLE)



GLE is the exclusive licensee of the SILEX uranium enrichment technology. GLE is a 51% / 49% jointly-controlled venture between Silex and global uranium and nuclear fuel provider, Cameco Corporation.

GLE's exclusive worldwide license to commercialise the SILEX technology for uranium enrichment is in accordance with a Technology Commercialisation and License Agreement, amended in 2021. The technology commercialisation project is being conducted jointly at GLE's Wilmington, North Carolina facility and at Silex's Sydney facility, with the current focus on completion of the commercial-scale demonstration of the SILEX uranium technology with a pilot facility being built at GLE's Test Loop facility.

Silex and Cameco have also negotiated terms for an option for Cameco to purchase from Silex, at fair market value, an additional 26% interest in GLE, potentially increasing Cameco's interest to 75% (subject to US Government approvals). This option opened in February 2023 and can be exercised by Cameco up until the date 30 months after the technology is satisfactorily demonstrated in the pilot demonstration facility.

## The GLE/Silex Pilot Demonstration Project for the SILEX Technology:

In February 2023, GLE's owners agreed to a plan and budget for CY2023 that accelerates activities in the commercial-scale pilot demonstration project for the SILEX uranium enrichment technology.

Since February, Silex and GLE have continued to accelerate construction of full-scale laser and separator equipment being deployed in GLE's Test Loop facility in Wilmington, with the aim of completing a commercial-scale pilot demonstration (TRL-6) of the SILEX technology as early as mid-2024. Attaining the TRL-6 level is a key milestone in the de-risking of the SILEX technology before the focus turns to the potential preparation for, and construction of, the first commercial SILEX uranium enrichment plant at the PLEF.

Construction and integration of the pilot equipment is currently on track to be completed around the end of CY2023, with commissioning to commence as early as Q1 CY2024. Following commissioning activities, the full SILEX technology pilot demonstration facility is expected to be put into service as early as Q2 CY2024.

Throughout the year, numerous engineering and technical appointments were made and continue to be made for both the GLE technology team in Wilmington, and for the Silex technology team in Lucas Heights, Sydney. In addition, in July 2023, GLE executed a lease for a new facility in Wilmington that provides the required space for the planned growth in the GLE team and for the construction of in-house manufacturing capability to support GLE's scale-up to commercialisation.

The continued acceleration of GLE's commercialisation activities beyond CY2023 will preserve the option of commencing commercial operations at the planned PLEF as early as 2028, up to three years earlier than originally planned. The continued acceleration is subject to market factors and the level of support forthcoming from various government and industry initiatives.

## The 'Triple Opportunity' for GLE and the SILEX Technology:

Two key factors are driving potential transformation of the global nuclear fuel supply chain, presenting GLE with a 'Triple Opportunity' to produce three different grades of nuclear fuel – all via the deployment of SILEX laser-based uranium enrichment technology at the planned PLEF multi-purpose Production Plant:

- the growing shift towards utilisation of nuclear power by many countries around the world in response to heightened concerns over global climate change;
- 2. the impact of the Russian invasion of Ukraine, which threatens to disrupt the significant supply of Russian nuclear fuel to the US and other Western markets.

This has created urgency in establishing alternative supply sources to replace Russian-sourced fuel in the medium-term. While there is no short-term solution, GLE could be well positioned to help address the emerging nuclear fuel supply chain issues through its unique potential to produce all three grades of nuclear fuel required for current and future nuclear plants at the planned PLEF Production Plant:

- PLEF UF<sub>6</sub> Production: via enrichment of US
   Department of Energy (DOE) owned inventories
   of depleted UF<sub>6</sub> tails (at the proposed PLEF) to
   produce uranium (in the form of converted UF<sub>6</sub>)
   at a natural U<sup>235</sup> assay of ~0.7%;
- PLEF LEU Production: production of low enriched uranium (LEU) (U<sup>235</sup> assays up to 5%) and LEU+ (assays from 5% to 10%) from natural grade UF<sub>6</sub> with additional SILEX enrichment capacity – to supply fuel for existing reactors;
- PLEF HALEU Production: production of high assay LEU (HALEU) (U<sup>235</sup> assays up to ~20%) via enrichment with SILEX technology to supply fuel for next generation advanced reactors, including SMRs.

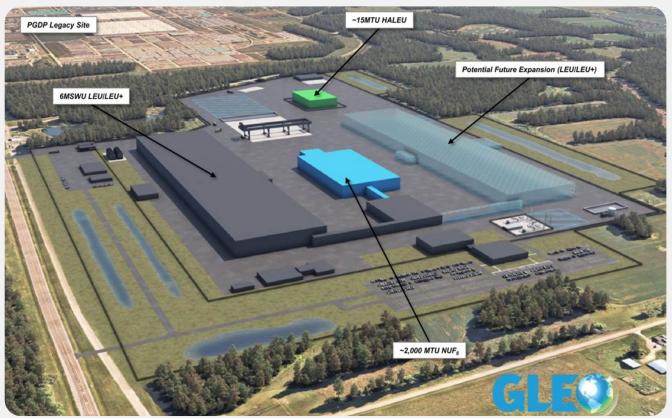
Underpinning GLE's commercialisation of the SILEX technology at the PLEF is the 2016 agreement between GLE and the DOE, which through the acquisition of over 200,000 metric tonnes of depleted tails owned by the DOE, provides the feedstock for the production of natural grade uranium hexafluoride (UF $_6$ ) over three decades.

The output of the proposed plant would be sold into the global uranium market at an expected production rate equivalent to a uranium mine with an annual output of up to 5 million pounds of uranium oxide, which would rank in the top 10 of today's uranium mines by production volume. Preliminary analysis by Silex of PLEF UF<sub>6</sub> Production indicates it could rank equal to a 'Tier 1' uranium project based on current estimates of the long-life and low cost of production.

With Russia currently holding around 45% of the world's uranium enrichment capacity, there is an urgent need for the Western nuclear industry to minimise or eliminate reliance on the sourcing of enriched nuclear fuel from Russia. This opens up the second opportunity for the PLEF facility – for the production of LEU fuel for the existing nuclear reactor fleet.

Potential production of HALEU at the PLEF has emerged as a third opportunity, as Western nuclear fuel supply chains prepare for the exclusion of Russian-sourced HALEU. HALEU will be required to fuel many advanced reactor designs, including SMRs.

### PLEF multi-purpose production plant (conceptual)



Source: GLE, Multi-purpose PLEF (conceptual)

### Commercialisation Timelines1:

The accelerated timeline currently anticipates completion of the pilot demonstration program as early as mid-2024, which preserves the option of commencing commercial operations as early as 2028, depending on market factors and the level of support available from various government and industry initiatives. This could also involve bringing forward a commercial feasibility assessment and NRC licensing activities for the proposed PLEF project. The diagram below shows the original baseline and accelerated timelines for commercialisation activities:

GLE is continuing with its preliminary activities for the engineering design of the PLEF, with the hiring of inhouse plant and systems engineering specialists. GLE also engaged a third-party contractor to undertake the PLEF front-end engineering design (FEED). In addition to advancing the facility design, along with the engineering cost model and plant economic study, GLE's current efforts are focused on preparing for regulatory licensing and site acquisition activities for the PLEF.

### **Baseline – GLE Commercialisation Timeline:**



### Potential Acceleration - GLE Commercialisation Timeline5:



<sup>1</sup> Timelines subject to technology demonstration outcomes, market conditions, licensing, commercial support and other factors.

<sup>2</sup> Includes achievement of Technology Readiness Level 6 (TRL-6) as defined by DOE Technology Readiness Assessment Guide (G 413.3-4A).

<sup>3</sup> PLEF: Paducah Laser Enrichment Facility.

<sup>4</sup> Engineering, Procurement and Construction (EPC) of commercial plant.

<sup>5</sup> Potential acceleration remains subject to due diligence assessment and may vary according to differing scenarios. Up to 3 years earlier than originally planned

### Strategic Engagement with Industry and Government Organisations:

Execution of GLE's business strategy includes active engagement with industry and government organisations, aimed at developing areas of collaboration and support that will help to expedite and de-risk GLE's commercialisation of the SILEX technology and the potential commencement of the PLEF.

GLE's strategic engagement includes the following:

### US Nuclear Utility Collaborations – Letters of Intent

In April 2023, a non-binding Letter of Intent (LOI) between GLE and Dominion Energy Services Inc. was executed for the purpose of developing areas of mutual interest and potential cooperation in the nuclear fuel supply chain. This follows similar LOIs signed with Constellation Energy Generation and Duke Energy in mid-2022. The LOIs identify a number of key areas of potential cooperation, including supporting the acceleration of GLE's deployment of the SILEX laser enrichment technology in the US and additional activities related to the planned PLEF. The LOIs reflect the broader support of the US nuclear industry to establish greater diversification in the supply of nuclear fuel.

### 2. US Government Initiatives

In response to the continuing geopolitical issues, energy security concerns, and focus on the need for carbon-free electricity generation, the US Congress has moved to provide clear bipartisan legislative signals that will support the establishment of new nuclear fuel production capacity in the country and the nuclear industry more broadly.

The US Congress passed the Inflation Reduction Act in August 2022, which included a US\$700m funding package for the DOE's HALEU Availability Program. The Inflation Reduction Act also provided a series of tax credits for existing nuclear power reactors and sought to incentivise the development and deployment of advanced reactors, including SMRs.

The DOE released its draft Request for Proposal (RFP) in relation to the HALEU Availability Program on 5 June 2023. The issuance of the draft RFP was intended to allow interested parties to provide feedback to the DOE prior to the release of the final RFP. Submissions in response to the draft RFP were due in July 2023, and GLE provided a response.

GLE is exploring opportunities to participate in the various US government programs as they unfold.

### 3. Industry Trade Organisations

GLE is a member of several trade and industry organisations. These include Uranium Producers of America (UPA), the Nuclear Energy Institute (NEI) based in Washington DC, and the World Nuclear Association (WNA) based in London.

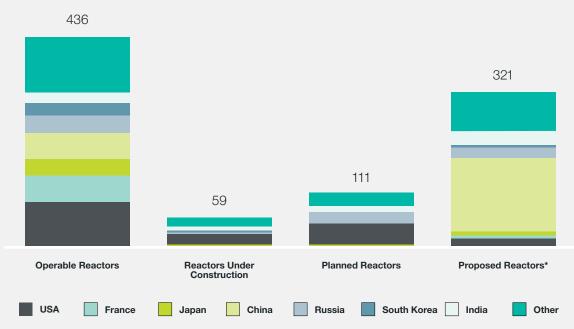
### The SILEX Technology Commercialisation and License Agreement with GLE:

The Technology Commercialisation and License Agreement between Silex and GLE is an exclusive worldwide license for exploitation of the SILEX technology for uranium enrichment. The License Agreement is independent of Silex's 51% equity interest in GLE and related commercial benefits flowing from that equity interest. The License Agreement includes royalty revenues and milestone payments to Silex as follows:

- Perpetual royalty of 7% to 12% on GLE's enrichment SWU revenues from use of the SILEX technology
- US\$20 million in Milestone Payments triggered by commercial development milestones

A US\$15 million milestone payment was also received by Silex in July 2013. This was triggered by the successful completion of the Test Loop Phase 1 Program Milestone: Technology Demonstration and Validation. This milestone involved the demonstration of efficient enrichment with the SILEX laser technology at the prototype level.

### **World Nuclear Reactor Population**



\* Other Proposed Reactors include 10 proposed in UK, 9 in Ukraine, 8 in Turkey and 8 in South Africa Source: World Nuclear Association, July 2023

### **Nuclear power outlook**

Nuclear power plays an increasingly important role in the supply of carbon-free base load electricity and is anticipated to play a much greater role in the energy mix as countries around the world adopt new energy policies to meet more urgent and stringent net-zero emissions targets. Today's operating nuclear reactor fleet currently generates ~10% of the world's electricity supply, and the number of reactors could rise significantly over the next decade as governments strive to address the key issues of climate change and energy security. We are seeing many countries' policies shift in favour of nuclear energy as an ideal companion to renewable energy sources.

According to the World Nuclear Association (WNA), there are currently 436 operable nuclear reactors globally with significant growth in nuclear power expected from the additional 59 reactors under construction and with hundreds more planned. Notwithstanding bold nuclear construction programs in China, India and the Middle East, the US remains the world's largest producer of nuclear power, with 93 operable reactors. The US currently accounts for more

than 30% of worldwide nuclear generation of electricity and is expected to remain the largest nuclear power generator for years to come.

Growth in demand for nuclear power is also being demonstrated in life extensions for existing reactors. In the US, nearly all of the operable reactors have been granted operating licence extensions from 40 to 60 years, with some potentially planning to operate for 80 years or more.

There is also growing interest and significant international investment being made into the development of next generation advanced reactors technologies, including SMRs. Many advanced reactors and SMRs are being designed to operate with HALEU fuel, whilst others will use conventional LEU fuel or, in some cases, LEU+ fuel.

With significant growth forecast in nuclear power generation around the world and the ever-increasing awareness of the potential contribution of nuclear energy to mitigate the adverse effects of climate change, we remain encouraged by the various opportunities emerging for the SILEX uranium enrichment technology and GLE in the global nuclear industry.

### **Fuel Market Update**

With many countries prioritising government policy initiatives to address the climate crisis and to ensure energy security by supporting sovereign energy platforms, we expect to see nuclear power form a more meaningful part of the energy mix for a growing number of countries. These factors, coupled with potential near-term disruptions in the Western nuclear fuel supply chain precipitated by the Russian invasion of Ukraine, have resulted in market conditions and opportunities that have not previously been seen in the nuclear industry.

With Russia currently providing the global nuclear industry with ~14% of its uranium requirements, ~27% of its conversion services, and ~45% of enrichment capacity, Western governments and utilities are seeking to establish secure nuclear fuel production capabilities free of Russian (and Chinese) influence, particularly in light of the growing threat of sanctions on Russian-sourced enriched uranium. As the global nuclear industry bifurcates, Western utilities are under the growing threat of sanctions on Russian-sourced uranium and enriched nuclear fuel.

As a consequence, the global nuclear fuel markets for uranium, conversion services and enrichment services, have continued to tighten, with price increases being witnessed across all components of the fuel cycle in recent years. From 2017, when the term price of

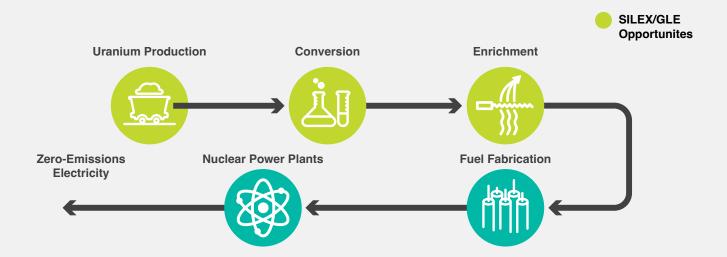
uranium traded at ~US\$30 per pound, the term price of uranium has rallied to ~US\$56 per pound. Term conversion prices have increased from ~US\$12/kg to ~US\$30/kg and term enrichment prices from ~US\$45/SWU to ~US\$146/SWU over the same period.

In addition to the traditional fuel markets, which provide LEU for today's reactor fleet, there is significant supply risk in the emerging market for HALEU fuel, required for next generation advanced reactors, including SMRs. With no sizeable HALEU production capability available anywhere in the West in the short-term, several advanced reactor developers had planned to purchase Russian-sourced HALEU to cover their fuel requirements for at least their early years of operation.

This has given rise to some urgency around the world to establish Western HALEU production capability as soon as possible. The abovementioned HALEU Availability Program, being planned by the US DOE, is seeking to address this issue.

In summary, we believe Western nuclear fuel markets will undergo a fundamental realignment over the next 12 to 24 months towards a more resilient and sustainable footing, with the aim of becoming less dependent, or free, of reliance on Russian and other State-Owned nuclear fuel suppliers. We believe this realignment could endure for decades, given the renewed focus on long-term energy security.

### The Nuclear Fuel Supply Chain





### **Quantum Silicon Production for Quantum Computing**

In late 2019, Silex launched a R&D project in conjunction with project partners Silicon Quantum Computing Pty Ltd (SQC) and UNSW Sydney (UNSW) to develop a process for the commercial production of high-purity 'Zero-Spin Silicon' (ZS-Si) using a variant of the SILEX laser isotope separation (LIS) technology. The project was successfully completed during the year and demonstrated efficient production of gram quantities of ZS-Si (in the form of halo-silane), with enrichment of silicon-28 up to ~99.998% purity. Additionally, a path to production scalability was also verified.

ZS-Si is a unique form of isotopically enriched silicon, which is a key enabling material for the fabrication of next generation processor chips that will power siliconbased quantum computers. Until recently, most of the world's supply of enriched silicon came from Russia, produced with conventional centrifuge technology. The Russian invasion of Ukraine has disrupted this supply, which has given rise to some urgency in establishing alternative supply. Silex aims to provide a secure and resilient alternative source of enriched silicon for users around the world.

### **Quantum Silicon Production Project:**

The launch of the new Quantum Silicon Production Project was announced on 17 August 2023, and is being undertaken in conjunction with partners SQC and UNSW. The new Project's objective is to establish the first Quantum Silicon Production Plant and develop the skills and capability to manufacture commercial 'Quantum Silicon' (Q-Si) products, produced from ZS-Si halo-silane, in multiple product forms at commercial scale.

The new 3.5-year Project has been awarded \$5.1m in funding from the Defence Trailblazer for Concept to Sovereign Capability Program, a strategic partnership between The University of Adelaide and UNSW Sydney, supported by the Department of Education through the Trailblazer Universities Program.

If successful, the Quantum Silicon Production Project will establish an end-to-end manufacturing facility at the Company's Lucas Heights technology centre. It is anticipated that the first production module will produce between 5kg to 10kg annually of ZS-Si (in the form of halo-silane), which will then be converted to multiple Q-Si product forms required by potential customers in the global silicon-based quantum computing industry.

The Production Plant will include significant additional equipment for conversion of ZS-Si into two different product forms that are compatible with quantum chip fabrication technologies utilised by manufacturers, namely:

- Quantum Silane gas used in chemical vapour deposition (CVD) based processes utilised for quantum chip fabrication
- 2. Quantum Silicon solid used in atomic and molecular beam epitaxy (ABE / MBE) based processes utilised for quantum chip fabrication.

A key benefit of the SILEX laser isotope separation technology is its modular nature, allowing the possibility for the Production Plant to be scaled up with additional modules, based on market demand and other factors.

Silex will retain ownership of the ZS-Si and Q-Si production technology and related Intellectual Property developed through the Project.

### **Quantum Computing and Q-Si Outlook:**

Australia is at the forefront of global efforts to develop and commercialise quantum computing and associated quantum technologies, which have the potential to underpin transformational technological advancements in many fields, including artificial intelligence, robotics, advanced communications, and sensing, and in complex global industries, such as defence and aerospace, finance, biomedical science, chemicals, and logistics. UNSW Sydney and its commercial spin out, SQC, are world leaders in developing silicon-based quantum computing technology, which, if

successful, will allow Australia to establish sovereign capability in a key strategic technology that will advance the country's future defence, national security, and economic competitiveness in the emerging quantum technology era.

Many other countries around the world are also investing heavily in the development of quantum computing technology, with governments and key corporates (such as Intel, IBM, Google, Microsoft, Amazon, and others) vying for leadership in this emerging strategic industry.

Silicon-based quantum computing technology is reliant on the use of enriched silicon, as natural silicon prohibits the fundamental operation of quantum spin qubits. Current methods for production of enriched silicon are limited and costly, with only small quantities produced annually, mostly using gas centrifuge technology in Russia. Due to the Russian-Ukrainian conflict, this fragile supply chain has been disrupted, which could threaten the viability of silicon quantum computing. Should the Q-Si Production Project be successful, it could potentially enable Australia to establish itself as a world-leader in Q-Si production.



## Medical Isotope Separation Technology (MIST) Project

In February 2023, the Company announced the MIST opportunity and the commencement of the MIST Project. The MIST Project is initially focused on identifying a process to economically produce enriched Ytterbium (Yb-176), which is the precursor isotope required for Lutetium (Lu-177) production. The Lu-177 radioisotope has enabled a breakthrough development for the diagnosis and treatment of aggressive metastatic cancers and is currently facing global supply disruption due to the supply of enriched Yb-176 previously being almost entirely sourced from Russia.

The three-year MIST Project has the aim of verifying capability for enrichment of Yb-176 in a commercially scalable process. Silex is currently undertaking Stage 1 of the Project at the Company's Lucas Heights facility, the proof-of-concept lab-scale assessment, to investigate process viability for production of high purity Yb-176, and is due for completion at the end of CY2023.

Assuming viable economic enrichment of Yb-176 can be demonstrated in the MIST Project, the potential to partner with the global pharmaceutical industry will be explored. The MIST Project also has the potential to provide a technology platform for application to other high-value medical isotopes.



# Financial Report

for the year ended 30 June 2023 Silex Systems Limited & its subsidiaries ABN 69 003 372 067

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 year ended 30 June 2023.

### 1. Directors

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

Mr C A Roy Dr M P Goldsworthy Ms H G Cook Mr C D Wilks

### 2. Principal activities

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 quantum computing industry with the SILEX Quantum Silicon Project.

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 Global Laser Enrichment LLC (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 interest respectively. In February 2023, GLE's owners agreed to a plan and budget for CY2023 that accelerates activities in the commercial-scale pilot demonstration project for the SILEX uranium enrichment technology.

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 Quantum Silicon 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.

### 3. Dividend

No dividend payments were made during the year. No dividend has been recommended or declared by the Board.

### 4. Operating and Financial Review

The review contains the following sections:

- (a) Operations
- (b) Financial Results
- (c) Financial Position
- (d) Business Strategy and Future Prospects

19

### a) Operations

Silex's operations are currently focused on the development and commercialisation of the SILEX enrichment technology for two commercial applications:

- (i) Uranium production and enrichment for the production of nuclear fuel for the nuclear power industry; and
- (ii) Silicon enrichment for the production of 'Quantum Silicon' used in the emerging silicon quantum computing industry.

In February 2023, the Company commenced the Medical Isotope Separation Technology (MIST) Project, focussing initially on a proof-of-concept project to investigate processes for economic production of high purity Ytterbium (Yb-176) for medical isotope production.

### **SILEX Uranium Enrichment**

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 and commercialisation vehicle for the SILEX uranium enrichment technology. GLE is a jointly-controlled venture between Silex and Cameco Corporation, with 51% and 49% ownership interest respectively.

Cameco holds an option to purchase from Silex at fair market value, an additional 26% interest in GLE, potentially increasing their interest to 75% (subject to US Government approvals). This option can now be exercised by Cameco up until the date that is 30 months after the technology is satisfactorily demonstrated at commercial pilot scale.

In February 2023, GLE's owners agreed to a plan and budget for CY2023 that accelerates activities in the commercial-scale pilot demonstration project for the SILEX uranium enrichment technology with the aim of completing the commercial-scale pilot demonstration (i.e., TRL-6) of the SILEX technology as early as mid-2024. The acceleration also preserves the option of commencing commercial operations at the planned Paducah Laser Enrichment Facility (PLEF) as early as 2028, up to three years earlier than originally planned and to address the 'Triple Opportunity' that has emerged in the global nuclear fuel supply chain, being driven by global climate change and geopolitical issues.

### **Quantum Silicon Production**

During the year, Silex successfully completed a R&D project in conjunction with project partners Silicon Quantum Computing Pty Ltd (SQC) and UNSW Sydney (UNSW), to develop a process for the commercial production of high-purity 'Zero-Spin Silicon' (ZS-Si) using a variant of the SILEX laser isotope separation (LIS) technology. The project demonstrated efficient production of gram quantities of ZS-Si (in the form of halo-silane) and enrichment of silicon-28 up to ~99.998% purity. A path to production scalability was also verified.

The new 3.5-year Quantum Silicon Production Project was announced on 17 August 2023 and is being undertaken in conjunction with partners SQC and UNSW. The new project's objective is to establish the first Quantum Silicon Production Plant, and develop the skills and capability to manufacture commercial products, based on ZS-Si, in multiple product forms at commercial scale.

### Medical Isotope Separation Technology (MIST)

The Company commenced the MIST Project during the year. The MIST Project will initially focus on identifying a process to economically produce enriched Ytterbium (Yb-176) for Lutetium (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.

### Corporate

During the year, the Company completed an equity raise by way of a placement which was followed by a Share Purchase Plan (SPP). The proceeds from the placement and SPP were \$114.7m (net of transaction costs), following the issue of 29.7 million shares at an offer price of \$4.05 per share. The Company also re-entered the ASX 300 in March 2023 following the quarterly rebalance of S&P/ASX Indices.

### b) Financial Results

A summary of consolidated revenue and results is set out below:

	2023 \$	2022 \$
Revenue from continuing operations	9,235,424	4,394,754
Other income	2,828,484	2,817,759
(Loss) before tax	(17,361,292)	(9,464,422)
Income tax expense	-	-
Net (loss) from continuing operations	(17,361,292)	(9,464,422)
Net (loss) for the year	(17,361,292)	(9,464,422)
Net (loss) is attributable to:		
Owners of Silex Systems Limited	(17,361,292)	(9,464,422)

The net loss from ordinary activities was \$17.4m compared to \$9.5m in the prior year. The increase in net loss from ordinary activities is mainly attributable to the increase in activities at GLE during the year. In addition, a decision to increase GLE's CY2023 budget to accelerate activities in the commercial-scale pilot demonstration project for the SILEX uranium enrichment technology was made in February 2023. Silex's 51% share of the GLE loss increased by \$8.2m in the current year to \$16.1m (reported as share of net loss of associates and joint ventures accounted for using the equity method).

Revenue from continuing operations increased by \$4.8m to \$9.2m in the current year. Interest revenue increased \$2.2m mainly due to the increase in cash holdings following the investment of the net proceeds of the equity raise of \$114.7m. Recoverable project costs, being Silex's reimbursement of its costs on the uranium enrichment project, also increased by \$1.9m following the increase in activities in the commercial-scale pilot demonstration project.

Employee benefits expense and Research and development materials were also higher in the current year, with increases of \$1.8m and \$1.5m respectively to the prior period, as the Company's headcount and project activities increased.

Further commentary on the results from our operations and the factors contributing to the increased net loss from ordinary activities (after tax) attributable to members is provided below.

### Silex Systems

The loss generated by Silex Systems increased from \$1.8m in the prior year to \$1.9m in the current year.

### **Translucent**

The Translucent segment result was a \$0.7m profit in the current year compared to a profit of \$0.03m the prior year. The current year result included Royalty revenue of \$0.7m from the sale of intellectual property related to the cREO® technology to IQE Plc in 2018 (\$nil in the prior year).

### Silex USA

The Silex USA segment result was a loss of \$16.2m compared to a loss of \$7.7m in the prior year, primarily representing Silex's 51% share of GLE's loss and the increase in GLE's activities in the commercial-scale pilot demonstration project for the SILEX uranium enrichment technology.

### c) Financial Position

A summary of our balance sheet is set out below:

	30 June 2023 \$	30 June 2022 \$
Assets		
Total current assets	147,527,345	49,683,771
Total non-current assets	4,672,199	4,433,088
Total assets	152,199,544	54,116,859
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Liabilities		
Total current liabilities	2,880,384	2,717,549
Total non-current liabilities	629,968	853,156
Total liabilities	3,510,352	3,570,705
Net assets	148,689,192	50,546,154

Equity		
Total equity	148,689,192	50,546,154

As at 30 June 2023, Silex's net assets were \$148.7m. Significant assets include cash holdings of \$138.1m (cash and term deposits) and Trade and other receivables of \$6.0m. The Company holds no corporate debt.

### d) Business Strategy and Future Prospects

### Silex's Business Strategy

We are committed to the commercialisation of our innovative SILEX laser enrichment technology across multiple markets, with a priority focus on contributing to the reliable and sustainable supply of nuclear fuel for the world's clean energy needs and quantum materials for next generation quantum computing technology.

The execution of our strategy is being pursued through the following activities:

- Pursuit of the 'Triple Opportunity' that has emerged in the global nuclear fuel supply chain for the SILEX uranium enrichment technology through our ownership of a 51% interest in exclusive uranium technology licensee, GLE;
- Developing the SILEX technology for the production of Quantum Silicon products based on Zero-Spin Silicon (ZS-Si) a key enabling material required for silicon quantum computer chip fabrication; and
- Further diversifying the business case for the SILEX technology through potential production of medical isotopes, initially focusing on enrichment of Ytterbium-176 - a key enabling material for a breakthrough nuclear medicine cancer treatment.

### SILEX Uranium Enrichment for Nuclear Fuel Production - Overview and Future Prospects

The SILEX technology is the only third-generation laser-based uranium enrichment technology known to be under commercial development today. Subject to the successful completion of the commercialisation project, market conditions and other factors, the SILEX technology could become a major contributor to nuclear fuel production for the world's current and future nuclear reactor fleet, through the production of uranium in several different forms, including:

- Natural Grade Uranium (U<sub>nat</sub>) as UF<sub>6</sub>: via enrichment of Department of Energy (DOE) owned inventories of depleted UF<sub>6</sub> tails at the proposed PLEF to produce uranium (in the form of converted UF<sub>6</sub>) at natural U<sup>235</sup> assay of ~0.7%;
- **Low Enriched Uranium (LEU+):** for use as fuel in today's conventional large-scale nuclear power reactors which require fuel with U<sup>235</sup> assays up to 5%, and potentially LEU+, a new grade of fuel with U<sup>235</sup> assays between 5% and 10% being considered by several utilities for use in current and future nuclear reactors to improve economic performance; and
- **High Assay LEU (HALEU):** a customised fuel for next generation advanced reactors, including Small Modular Reactors (SMRs) currently under development many of which require fuel with U<sup>235</sup> assays of between 10% and 20%.

Uranium production and enrichment are the two largest value drivers of the nuclear fuel supply chain, accounting for nearly 80% of the value of a reactor fuel bundle. Importantly, commercialisation of the SILEX uranium enrichment technology through licensee GLE could enable the SILEX technology to become a unique, nuclear fuel production platform for existing and emerging nuclear power generation systems.

### Status of Nuclear Fuel Markets

With many countries prioritising government policy initiatives to address the climate crisis and to ensure energy security by supporting sovereign energy platforms, we expect to see nuclear power form a more meaningful part of the energy mix for a growing number of countries. These factors, coupled with potential near-term disruptions in the Western nuclear fuel supply chain precipitated by the Russian invasion of Ukraine, have resulted in market conditions and opportunities that have not previously been seen in the nuclear industry.

According to the World Nuclear Association (WNA), there are currently 436 operable nuclear reactors globally with significant growth in nuclear power expected from the additional 59 reactors under construction and hundreds more planned. Notwithstanding bold nuclear construction programs in China, India and the Middle East, the US remains the world's largest producer of nuclear power, with 93 operable reactors. The US currently accounts for more than 30% of worldwide nuclear generation of electricity and is expected to remain the largest nuclear power generator for years to come. Growth in demand for nuclear power is also being demonstrated in life extensions for existing reactors. In the US, nearly all of the operable reactors have been granted operating licence extensions from 40 to 60 years, with some potentially planning to operate for 80 years or more.

There is also growing interest and significant international investment being made into the development of next generation advanced reactor technologies, including SMRs. Many advanced reactors, including SMRs, are being designed to operate with HALEU fuel, whilst others will use conventional LEU fuel or in some cases, LEU+ fuel.

With Russia currently providing the global nuclear industry with ~14% of its uranium requirements, ~27% of its conversion services and ~45% of enrichment capacity, Western governments and utilities are seeking to establish secure nuclear fuel production capabilities free of Russian (and Chinese) influence, particularly in light of the growing threat of sanctions on Russian-sourced enriched uranium. As the global nuclear industry bifurcates, Western utilities are under the growing threat of sanctions on Russian-sourced uranium and enriched nuclear fuel.

As a consequence, the global nuclear fuel markets for uranium, conversion services and uranium enrichment services, have continued to tighten, with price increases being witnessed across all components of the fuel cycle

23

in recent years. From 2017, when the term price of uranium traded at ~US\$30 per pound, the term price of uranium has rallied to ~US\$56 per pound. Term conversion prices have increased from ~US\$12/kg to ~US\$30/kg and term enrichment prices from ~US\$45/SWU to ~US\$146/SWU over the same period.

With significant growth forecast in nuclear power generation around the world and the ever-increasing awareness of the potential contribution of nuclear energy to mitigate the adverse effects of climate change, we remain encouraged by the opportunities that have emerged for the SILEX technology and GLE in the global nuclear industry.

### The 'Triple Opportunity' for GLE and SILEX Technology

Two key factors are driving potential transformation of the global nuclear fuel supply chain, presenting GLE with a 'Triple Opportunity' to produce three different grades of nuclear fuel - all via the deployment of SILEX laser-based uranium enrichment technology at the proposed PLEF Production Plant:

- (i) the growing shift towards utilisation of nuclear power by many countries around the world in response to heightened concerns over global climate change;
- (ii) the impact of the Russian invasion of Ukraine, which threatens to disrupt the significant supply of Russian nuclear fuel to the US and other Western markets.

This has created urgency in establishing alternative supply sources to replace Russian-sourced fuel in the medium-term. While there is no short-term solution to this situation, GLE could be well positioned to help address the emerging nuclear fuel supply chain issues with the unique ability to produce all three grades of nuclear fuel required for current and future nuclear plants at the planned PLEF Production Plant:

- (i) natural grade uranium (U<sub>nat</sub>), in the form of already converted uranium (UF<sub>6</sub>);
- (ii) LEU/LEU+; and
- (iii) HALEU.

The first opportunity, to produce natural uranium (in the form of UF<sub>6</sub>), is the original Paducah uranium production project which GLE has been planning for several years. The second and third opportunities, which could also be located at Paducah, would involve the addition of more SILEX technology uranium enrichment production modules (without further development of the technology).

### Strategic Engagement with Industry and Government Organisations

Execution of GLE's business strategy includes active engagement with industry and government organisations, aimed at developing areas of collaboration and support which will help expedite and de-risk GLE's commercialisation of the SILEX technology and the potential commencement of the PLEF.

In April 2023, a non-binding Letter of Intent (LOI) between GLE and Dominion Energy Services Inc. was executed for the purpose of developing areas of mutual interest and potential cooperation in the nuclear fuel supply chain. This follows similar LOIs signed with Constellation Energy Generation and Duke Energy in mid-2022. The LOIs identify a number of key areas of potential cooperation, including supporting the acceleration of GLE's deployment of the SILEX laser enrichment technology in the US and additional activities related to the planned PLEF. The LOIs reflect the broader support of the US nuclear industry to establish greater diversification in the supply of nuclear fuel.

GLE remains heavily engaged in the industry and with government organisations and continues to explore opportunities to partner with various stakeholders to seek support for its commercialisation plans. Opportunities for GLE to participate in the various US government programs currently being considered by US Congress, also remain under review.

### **Commercialisation Timelines\***

Following the decision in February 2023 to accelerate activities in the commercial-scale pilot demonstration project for the SILEX uranium enrichment technology, the aim is to now complete the commercial-scale pilot (i.e., TRL-6) demonstration of the SILEX technology as early as mid-2024. The acceleration also preserves the option of commencing commercial operations at the planned PLEF as early as 2028, up to three years earlier than originally planned and to address the 'Triple Opportunity' that has emerged in the global nuclear fuel supply chain. In July 2023, GLE executed a lease for a new facility in Wilmington that provides significant new space for the planned growth in the GLE team for the construction of in-house manufacturing capability to support GLE's engineering operations and for the expected increase in commercial activities. The continued acceleration remains dependent on a range of factors including technology demonstration outcomes, continued favourable market conditions and factors, and the level of support available from various government and industry initiatives.

The diagram below shows the original baseline and accelerated timelines for commercialisation activities:

### **Baseline - GLE Commercialisation Timeline:**



- <sup>1</sup>Timelines subject to technology demonstration outcomes, market conditions, licensing, commercial support and other factors.
- <sup>2</sup> Includes achievement of Technology Readiness Level 6 (TRL-6) as defined by DOE Technology Readiness Assessment Guide (G 413.3-4A).
- <sup>3</sup> PLEF: Paducah Laser Enrichment Facility.
- <sup>4</sup> Engineering, Procurement and Construction (EPC) of commercial plant.
- <sup>5</sup> Potential acceleration remains subject to due diligence assessment and may vary according to differing scenarios.

The PLEF project opportunities are underpinned by the 2016 agreement between GLE and the DOE, which through the acquisition of over 200,000 metric tonnes of depleted tails owned by the DOE, provides the feedstock for the production of natural grade uranium hexafluoride (UF<sub>6</sub>) over three decades. The output of this proposed plant would be sold into the global uranium market at an expected production rate equivalent to a uranium mine producing an annual output of up to 5 million pounds of uranium oxide, which would rank in the top 10 of today's uranium mines by production volume. Preliminary analysis by Silex of PLEF UF<sub>6</sub> Production indicates it could rank equal to a 'Tier 1' uranium project based on current estimates of the long-life and low cost of production.

### SILEX Technology Commercialisation and License Agreement with GLE

The Technology Commercialisation and License Agreement between Silex and GLE is an exclusive worldwide license for exploitation of the SILEX technology for uranium enrichment. The License Agreement is independent of Silex's 51% equity interest in GLE and related commercial benefits flowing from that equity interest. The License Agreement includes royalty revenues and milestone payments to Silex as follows:

- Perpetual royalty of a minimum of 7% on GLE's enrichment SWU revenues from use of the SILEX technology
- US\$20 million in milestone payments payable to Silex triggered by commercial development milestones.

A US\$15 million milestone payment was also received by Silex in July 2013. This was triggered by the successful completion of the Test Loop Phase 1 Program Milestone: Technology Demonstration and Validation. This milestone involved the demonstration of efficient enrichment with the SILEX laser technology at the prototype level. The receipt of potential additional milestone payments and royalties and the associated timing remains uncertain.

The joint owners of GLE continue to take a considered approach to the SILEX technology commercialisation program in line with current market conditions and opportunities. Ultimately, the future of the technology and likelihood of success in the remaining commercialisation program is dependent on the continued growth in the global markets for natural and enriched uranium. Commercialisation of the SILEX uranium enrichment technology therefore remains subject to these and other risks.

### Quantum Silicon for Quantum Computing Processor Chips - Overview and Future Prospects

A variant of the SILEX laser isotope separation (LIS) technology has been developed and demonstrated for the commercial production of high-purity 'Zero-Spin Silicon' (ZS-Si), a critical enabling material for the emerging silicon quantum computing industry. Efficient production of gram quantities of ZS-Si (in the form of halo-silane) with enrichment of silicon-28 up to ~99.998% purity was demonstrated in FY2023. Additionally, a path to production scalability was also verified.

A new 3.5-year Quantum Silicon Production Project was announced on 17 August 2023 and is being undertaken in conjunction with partners Silicon Quantum Computing Pty Ltd (SQC) and UNSW Sydney (UNSW). The new Project's objective is to establish the first Quantum Silicon Production Plant, and develop the skills and capability to manufacture commercial products based on ZS-Si in multiple product forms at commercial scale.

The new Project was awarded \$5.1m in funding from the Defence Trailblazer: Concept to Sovereign Capability Program, a strategic partnership between the University of Adelaide and UNSW supported by the Department of Education through the Trailblazer Universities Program. The Project has a total budget of ~\$16m with Silex currently resolving other avenues of financial support for the Project.

If successful, the Quantum Silicon Production Project will establish an end-to-end manufacturing facility at the Company's Lucas Heights technology centre. It is anticipated that the first production module will produce between 5kg to 10kg annually of ZS-Si (in the form of halo-silane), which will then be converted to Quantum Silicon (Q-Si) product forms required by potential customers in the global silicon-based quantum computing industry. The Production Plant will also include significant additional equipment for conversion of ZS-Si into two different product forms that are compatible with quantum chip fabrication technologies utilised by manufacturers, namely:

- (i) Quantum Silane gas used in chemical vapour deposition (CVD) based processes utilised for quantum chip fabrication
- (ii) Quantum Silicon solid used in atomic and molecular beam epitaxy (ABE / MBE) based processes utilised for quantum chip fabrication.

A key benefit of the SILEX laser isotope separation technology is its modular nature, allowing the possibility for the Production Plant to be scaled up with additional modules, based on market demand and other factors.

The Quantum Silicon Production Project will focus on achieving four key outcomes:

- (1) Scaling of ZS-Si production capability to commercial-scale output (i.e., TRL-7, 8 & 9)
- (2) Scaled production of gaseous ZS-Si product in the form of Quantum Silane
- (3) Production of solid ZS-Si product in the form of Quantum Polysilicon and/or Quantum Monosilicon
- (4) Development of a customer base and commercial arrangements for global sales of Q-Si in commercial product forms.

Quantum computers are expected to be thousands of times more powerful than the most advanced of today's conventional computers, opening new frontiers and opportunities in many industries, including medicine, artificial intelligence, cybersecurity and global financial systems. Many countries around the world are investing heavily in the development of quantum computing technology, with governments and key corporates (such as Intel, IBM, Google, Microsoft, Amazon and others) vying for leadership in this emerging strategic industry.

In parallel with the design and construction of the initial commercial module of the Quantum Silicon Production Plant a full economic assessment of the Quantum Silicon business case will be completed. The Quantum Silicon Project remains dependent on the outcomes of the latest development Project and the viability of silicon quantum computing and has inherent risk.

### Medical Isotope Separation Technology (MIST) Project - Overview and Future Prospects

In February 2023, the Company announced the MIST opportunity and the commencement of the MIST Project. The MIST Project is initially focused on the potential to economically produce enriched Ytterbium (Yb-176), which is the precursor isotope required for Lutetium (Lu-177) production. Lu-177 is proving to be a breakthrough development for the diagnosis and treatment of aggressive metastatic cancers and is currently facing global supply disruption due to the supply of enriched Yb-176 previously being almost entirely sourced from Russia.

The 3-year MIST Project has the aim of verifying capability for enrichment of Yb-176 in a commercially scalable process. Silex is currently undertaking Stage 1 of the Project, the proof-of-concept assessment, at the Company's Lucas Heights facility, to investigate a viable process for the production of high purity Yb-176. Stage 1 is due for completion at the end of CY2023. The proof-of-concept program involves lab-scale verification of the MIST process in custom-built test equipment.

Assuming viable economic enrichment of Yb-176 can be demonstrated in the MIST Project, the potential to partner with the global pharmaceutical industry will be explored.

The MIST Project has the potential to provide a technology platform for application to other high-value medical isotopes. However, the MIST Project is dependent on the outcomes of the proof-of-concept project and is therefore subject to various risks. The commercial future of the SILEX technology in application to medical isotopes separation is uncertain and any plans for commercial deployment are speculative.

### 5. Significant changes in state of affairs

On 23 February 2023, GLE's owners agreed to a plan and budget for CY2023 that accelerates activities in the commercial-scale pilot demonstration project for the SILEX uranium enrichment technology, with the aim of completing the commercial-scale pilot demonstration (i.e., TRL-6) of the SILEX technology as early as mid-2024. The CY2023 plan and budget involves bringing forward activities with an approximate doubling of GLE's project expenditures compared to CY2022.

On 27 February 2023, Silex successfully completed an equity raise by way of a placement and Share Purchase Plan, to raise \$114.7m, net of transaction costs. 29,746,098 new fully paid ordinary shares were issued. The new shares were issued at a price of \$4.05 per share.

27

### 6. Matters subsequent to the end of the financial year

On 28 July 2023, Global Laser Enrichment LLC (GLE) entered into a lease for a new facility in Wilmington, NC that provides significant new space for the planned growth in the GLE team for the construction of in-house manufacturing capability to support GLE's engineering operations and for the expected increase in commercial activities. 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.

A new 3.5-year Quantum Silicon Production Project was announced on 17 August 2023 and is being undertaken in conjunction with partners Silicon Quantum Computing Pty Ltd (SQC) and UNSW Sydney (UNSW). The new Project was awarded \$5.1m in funding from the Defence Trailblazer: Concept to Sovereign Capability Program, a strategic partnership between the University of Adelaide and UNSW supported by the Department of Education through the Trailblazer Universities Program. The Project has a total budget of ~\$16m with Silex currently resolving other avenues of financial support for the Project.

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 this Directors' Report.

### 7. Information on Directors

The following information is current as at the date of this report:

Mr Craig Roy MBA, MSc, FAICD.  Chair - Independent non-executive director		
Experience and expertise	Independent non-executive director and Chair since January 2019. Former Deputy CEO of the CSIRO. Extensive experience as a company director and is currently a Non-executive Director of Sydney Water and Chair of the Australian Research Data Commons.	
Other current listed company directorships	None	
Former listed company directorships in last 3 years	None	
Special responsibilities	Chair of the Board Member of Audit Committee Chair of People & Remuneration Committee Chair of Global Laser Enrichment Holdings LLC	
Interests in shares, options and rights	Number of ordinary shares	259,507
	Number of options	Nil
	Number of rights	Nil

Dr Michael Goldsworthy BSc (Hons), MSc, PhD, FAIP, GAICD.  Chief Executive Officer/Managing Director			
Experience and expertise	CEO/MD for thirty one years. Founder of the Company and co-inventor of the SILEX laser isotope separation technology. Dr Goldsworthy has been the driving force behind the commercialisation program for the SILEX technology.		
Other current listed company directorships	None		
Former listed company directorships in last 3 years	None		
Special responsibilities	Chief Executive Officer / Managing Director Director of Global Laser Enrichment Holdings LLC		
Interests in shares, options and rights	Number of ordinary shares	6,247,305	
	Number of options	900,000	
	Number of rights	487,500	

Mr Christopher Wilks BCom, FAICD.  Non-executive director		
Experience and expertise	Non-executive director since 1988. Finance director and CFO of Sonic Healthcare Limited. Various directorships of public companies held over the years.	
Other current listed company directorships	Executive director of Sonic Healthcare Limited since 1993)	e 1989 (Finance director
Former listed company directorships in last 3 years	None	
Special responsibilities	Chair of Audit Committee Member of People & Remuneration Committee	
Interests in shares, options and rights	Number of ordinary shares	2,833,716
	Number of options	Nil
	Number of rights	Nil

Ms Helen Cook LLM, LLB (Hons), BA. Independent non-executive director		
Experience and expertise	Independent non-executive director since and international nuclear law specialist. F practice dedicated to the global civil nucl	Principal of GNE Advisory Pty Ltd, a law
Other current listed company directorships	None	
Former listed company directorships in last 3 years	None	
Special responsibilities	Member of Audit Committee  Member of People & Remuneration Com	nmittee
Interests in shares, options and rights	Number of ordinary shares	12,000
	Number of options	Nil
	Number of rights	Nil

### 8. Meetings

The number of directors' meetings held during the financial year and the number of meetings attended by each director are set out in the following table:

		Directors' Meetings	Aud	dit Committee Meetings		emuneration ee Meetings
Director's name	Number Held	Number Attended	Number Held	Number Attended	Number Held	Number Attended
Mr C A Roy	16	16	3	3	2	2
Dr M P Goldsworthy	16	16	<b>A</b>	<b>A</b>	<b>A</b>	<b>A</b>
Ms H G Cook	16	16	3	3	2	2
Mr C D Wilks	16	16	3	3	2	2

lacktriangle Not a member of the relevant committee at the time the scheduled meetings were held.

### 9. Remuneration Report

### Message from the Chair of the People & Remuneration Committee

On behalf of the People & Remuneration Committee and the Board, I am pleased to present to you the FY2023 Remuneration Report. The Report provides an overview of remuneration strategy, policy and framework, and executive Key Management Personnel (KMP) remuneration. The Committee regularly evaluates the Company's remuneration strategy and objectives and makes recommendations to the Board, which include focused performance measures for executive KMP. Our remuneration strategy has the following objectives:

- attract, motivate and retain highly qualified and specialised personnel;
- alignment of remuneration outcomes with the successful delivery of the Company's strategy;
- align the interests of our directors and executive KMP with Silex's shareholders and other stakeholders; and
- ensure competitive, reasonable and transparent renumeration outcomes with appropriate standards of governance.

FY2023 was a strong year for Silex, with our executive KMP leading our efforts to execute on our strategic priorities. This included the acceleration of the CY2023 commercial-scale pilot demonstration project for the SILEX uranium enrichment technology in conjunction with GLE, in response to evolving nuclear fuel market conditions, and the successful completion of the ZS-Si Project, resulting in the production of initial quantities of ZS-Si at the highest purity of ~99.998% and identifying a path to production scalability.

During the year, we also successfully completed an equity raise by way of a placement and Share Purchase Plan, raising \$114.7m net of transaction costs, to accelerate the commercialisation of the SILEX laser enrichment technology and pursue strategic market opportunities in nuclear fuel production, silicon-based quantum computing and with our newly commenced Medical Isotope Separation Technology (MIST) Project.

As disclosed in last year's Remuneration Report, being cognizant of a 12 and 6-year base remuneration freeze for our CEO/MD and CFO/Company Secretary respectively, and following careful consideration of performance, market data and conditions, the Board approved an increase to fixed remuneration of 8.7% for our CEO/MD and 7.1% for our CFO/Company Secretary from 1 July 2022. In addition, and as a reflection of the substantially increased activities and additional governance responsibilities of the Company and GLE and following consideration of market data, an increase of \$20,000 per annum was resolved to be paid to the Chair from 1 July 2022. All other Board and Committee fees remained unchanged for FY2023.

As detailed in the Remuneration Report, a significant proportion of the compensation for our CEO/MD and CFO/Company Secretary is at-risk, equity-based and is intrinsically linked to performance. Multi-year, equity-based incentives for our CEO/MD (as approved by shareholders at the 2021 AGM) and for our CFO/Company Secretary are also in place with clear performance objectives that are intended to align their interests with those of our shareholders and to drive positive outcomes in the longer term. Details of the remuneration outcomes for FY2023, reflecting the achievements during the year are provided in this report.

The Committee and the Board believe equity-based compensation is important to motivate employees to align their interests with those of our shareholders. Our Employee Incentive Plan (EIP), is an important component of our remuneration structure to drive performance, incentivise retention and to also attract the best possible candidates for our Company. We are pleased that our team have welcomed the opportunity to receive equity-based compensation and participate in our EIP.

We believe that our remuneration programs are appropriately set and align our team's interests with the long-term success of the Company and our shareholders. We also believe our remuneration practices reflect strong governance, are aligned to market and incorporate best practice recommendations to ensure our decisions are appropriate in relation to the Company's performance and to enable adjustment of our remuneration structure and practices as required.

We invite you to review the full Remuneration Report and we look forward to answering any questions you may have at our AGM in October 2023.

**Craig Roy** 

Chair, People & Remuneration Committee

The directors present the Remuneration Report for the year ended 30 June 2023, outlining key aspects of our remuneration policy and framework, and remuneration awarded for the Company's non-executive directors, executive directors and other executive Key Management Personnel (KMP).

The report contains the following sections:

- (a) Directors and KMP disclosed in this report
- (b) Remuneration governance
- (c) Linking remuneration structure to Company performance
- (d) Elements of executive KMP remuneration
- (e) Link between FY2023 remuneration and performance
- (f) Contractual arrangements with executive KMPs
- (g) Non-executive directors' remuneration arrangements
- (h) Directors' and KMP remuneration
- (i) Performance-based remuneration granted and forfeited during the year
- (j) Terms and conditions of the equity-based payment arrangements
- (k) Reconciliation of options, rights and ordinary shares held by executive KMP
- (I) Voting at the Company's 2022 Annual General Meeting

### a) Directors and KMP disclosed in this report

The 2023 Remuneration Report has been prepared in accordance with the requirements of section 300A of the *Corporations Act 2001* and accounting standard requirements and applies to KMP of the Company. KMP are defined as those persons who have authority and responsibility for planning, directing and controlling the activities of the Company. The KMP covered in this report are as follows:

Name	Position	
Non-executive and executive directors		
Mr C A Roy	Chair and Non-executive director	
Dr M P Goldsworthy	CEO/Managing Director - Executive director	
Ms H G Cook (from 14 October 2021)	Non-executive director	
Mr C D Wilks	Non-executive director	
Former Non-executive director		
Ms M K Holzberger (until 14 October 2021)	Non-executive director	
Other executive KMP		
Ms J E Russell	CFO/Company Secretary	

### b) Remuneration governance

### **Board oversight**

The Silex Board is ultimately responsible for ensuring that the Company's remuneration structure is fit for purpose and aligned with the long-term interests of shareholders. The Board and its advisors are independent of Management when making decisions affecting employee remuneration.

### People & Remuneration Committee structure

The Peopleå & Remuneration Committee is a committee of the Board comprised of a majority of independent non-executive directors. The Chair of the Committee is also an independent non-executive director. Its role is to make recommendations to the Board regarding the Company's remuneration policies and practices, including those applicable to the Company's KMP. Members of the People & Remuneration Committee as at the 30 June 2023 were as follows:

Committee members	Mr C A Roy   Chair Ms H G Cook Mr C D Wilks		
Committee secretary	Ms J E Russell		
Number of meetings in FY2023	2		
Other individuals who regularly attended meetings	Dr M P Goldsworthy   CEO/MD		

The role of the People & Remuneration Committee is to:

- Review and recommend to the Board appropriate remuneration policies and practices that are competitive and reasonable for the Company, and that will attract and retain key talent;
- To make specific recommendations in relation to KMP compensation and senior executives, as well as the general application to all employees;
- Determine and recommend remuneration levels of the CEO/MD and CFO/Company Secretary for Board approval;
- Manage the incentive plans which apply to executive KMP and senior executives, including key performance indicators and performance hurdles; and
- Review and make recommendations to the Board regarding the remuneration of non-executive directors.

The role and responsibilities of the People & Remuneration Committee are set out in the People & Remuneration Committee Charter, which is available on the Company's website at: https://www.silex.com.au/corporate/corporate-governance/.

The Company did not engage remuneration consultants during FY2023. The Company accesses market data and industry remuneration surveys and reports on a regular basis.

### c) Linking remuneration structure to Company performance

### Remuneration strategy, policy and framework

In determining executive KMP remuneration, the Board's policy is based on the principle of aligning remuneration outcomes with the successful delivery of strategy whilst ensuring our remuneration practices are designed to attract, motivate and retain highly qualified and specialised personnel. High regard for contemporary market practice, good governance and alignment to changing business circumstances is maintained at all times. The Company aims to reward executive KMP with a level and mix of remuneration commensurate with their position and responsibilities within the Company that is competitive within the market.

Remuneration for executive KMP is reviewed annually and considers market data, insights into remuneration trends, the performance of the Company and the individual, and the broader economic and operating environment.

Following a review of the Company's executive KMP incentive programs during FY2021, a multi-year incentive program was developed, involving the issue of Short-term Incentives (STIs), Long-term Incentives (LTIs) and an Extended LTI using a variety of equity-based awards and therefore aligned with the creation of shareholder value over the long-term. These equity-based incentives for our CEO/MD were approved by shareholders at the 2021 AGM.

The executive KMP remuneration framework comprises of two components:

- Total fixed remuneration; and
- At-risk incentives.

35

### Remuneration structure

_		Performance	<u> </u>		
Total Fixed Remuneration (TFR)	Provide competitive market salary, including superannuation and non-monetary benefits	<b>Metrics</b> Nil	Structure  Base remuneration	Positioned at median market rate and with reference to role experience	
STI*	Reward for in-year performance, retention via 2-year escrow period applied to any equity incentive award	Performance may be linked to financial metrics such as cash flow management and to non-financial measures, such as commercial deliverables, and other specific	CEO: FY2023 - 75,000 Performance Rights**  (Nb. FY2022 to FY2025 - award of 75,000 Performance Rights per annum. Underlying performance criteria to be set by the Board at the commencement of each financial year).	Potential value: \$197,981	
		operational and strategic deliverables for the Company.	A one-off gross cash performance payment of \$75,000 was awarded to the CEO for FY2023 in recognition of company achievements, sustained efforts and performance.	Value: \$75,000	
			CFO: FY2023 - 70,000 Performance Rights	Potential value: \$183,043	
			(Nb. FY2022 to FY2024 - award of 70,000 Performance Rights per annum. Underlying performance criteria to be set by the Board at the commencement of each financial year).		
			A one-off gross cash performance payment bonus of \$60,000 was awarded to the CFO for FY2023 in recognition of company achievements, sustained efforts and performance.	Value: \$60,000	
LTI*	Alignment to long- term shareholder value, retention via 2-year escrow period applied to any equity incentive award.	Performance linked to contribution to the creation of shareholder value over the longer term.	CEO: FY2023 - 150,000 Options  (Nb. 750,000 options** granted 14 October 2021***, representing 150,000 options per annum for FY2021 through to and including FY2025).	Potential value: \$577,470 Expensed over FY2021 to FY2027.	
			CFO: FY2023 - 100,000 Options  (Nb. 300,000 options granted 26 July 2021***, representing 100,000 options per annum for FY2022 through to and including FY2024).	Potential value: \$139,390 Expensed over FY2022 to FY2026.	

SILEX ANNUAL REPORT 2023

Element	Purpose	Performance Metrics	Structure	Value
Extended LTI*	Alignment to long- term shareholder value, retention via 2-year escrow period applied to any equity incentive award.	Performance linked to scale-up of the unique SILEX uranium enrichment technology by 31 December 2025.	CEO: 412,500 Performance Rights** (to cover 5.5 performance years commencing 1 July 2020 and ending 31 December 2025).	Potential value: \$466,950 Expensed over FY2021 to FY2026.
		Performance linked to long-term shareholder value, retention.	CFO: 300,000 Performance Rights (to cover 5 performance years commencing 1 July 2021 and ending 30 June 2026).	Potential value: \$239,550 Expensed over FY2022 to FY2026.

<sup>\*</sup>At all times the Board has the discretion to make a final determination based on Company performance or other factors. Incentive awards may be clawed back or cancelled if the relevant executive acts fraudulently or dishonestly or breaches their obligations to the Company.

<sup>\*\*</sup>Approved by shareholders at the 2021 AGM.

<sup>\*\*\*</sup>Option exercise price of \$0.94, based on the 10-trading day VWAP preceding 25 June 2021.

TFR is comprised of base salary and superannuation. TFR is reviewed annually, or on promotion. It is benchmarked against market data for comparable roles in companies in a similar industry and with similar market capitalisation. The Committee aims to position executives at or near the median, with flexibility to take into account capability, experience, and value to the organisation and performance of the individual. Being cognizant of a 12 and 6-year base remuneration freeze for our CEO/MD and CFO/Company Secretary respectively and following careful consideration of performance, market data and conditions, an increase of 8.7% for our CEO/MD and 7.1% for our CFO/Company Secretary from 1 July 2022 was approved.

At-risk incentives are equity-based and structured to drive performance over the longer-term. A multi-year equity-based incentive program is currently in place, involving the issue of Short-term Incentives (STIs), Long-term Incentives (LTIs) and Extended LTIs for the CEO/MD and CFO/Company Secretary. Annual STIs and LTIs have been set through to FY2024 for the CFO and to FY2025 for the CEO, in order to drive performance and talent retention. STIs have a 12-month performance period and the underlying performance objectives are set annually. LTIs are assessed over a 3-year period and are designed to promote long-term stability in share price appreciation.

The CEO's Extended LTI has performance criteria specifically tailored to outcomes relating to the scale-up of the unique SILEX uranium enrichment technology and will be assessed over a performance period ending 31 December 2025. Achievement of the CEO's Extended LTI will be subject to independent Board verification. The Extended LTI for the CFO has performance criteria tailored to growth in long-term shareholder value and will be assessed over a performance period ending 30 June 2026.

### Assessing performance and claw-back of remuneration

The People & Remuneration Committee is responsible for assessing performance against KPIs and determining the incentive awards to be paid to all senior management. To assist in this assessment, the Committee receives detailed reports on performance from Management which are based on independently verifiable data such as financial measures, market information and data from independently run surveys. At all times, the Board has the discretion to make a final determination.

In the unlikely event of serious misconduct or a material misstatement in the Company's financial statements the Board can cancel or defer performance-based remuneration and may also claw back performance-based remuneration paid in previous financial years.

### d) Elements of executive KMP remuneration

The executive KMP remuneration for FY2022 comprised the following elements:

	CEO/MD	CFO/Company Secretary
Total Fixed Re	emuneration (TFR)	
Composition	Base salary and superannuation	Base salary and superannuation
Assessment	Based on responsibilities, performance and market data	Based on responsibilities, performance and market data
At risk	No	No
Short-Term In	centives	
Composition	An equity-based STI may be granted annually at the discretion of the Board. As per shareholder approval at the 2021 AGM, the current STI comprises an annual grant of 75,000 Performance Rights through to FY2025.	An equity-based STI may be granted annually at the discretion of the Board. The STI is intended to comprise an annual grant of 70,000 Performance Rights through to FY2024.
Opportunity	75,000 Performance Rights	70,000 Performance Rights
Assessment	KPIs were stretch targets and focussed on delivering priorities associated with increasing shareholder value, including delivery of strategic and commercial performance measures associated with both Silex and GLE, and various technology milestones for the Company's projects.  Assessment: 90.25% of the performance rights will vest subject to completion of an underlying service-condition ending 31 July 2023. 67,688 shares are pending for issue to the CEO. The shares to be issued are subject to a 2-year trading restriction from the date of issue.	KPIs were stretch targets and focussed on delivering priorities associated with increasing shareholder value, including delivery of strategic, commercial and operational performance measures associated with both Silex and GLE.  Assessment: 94% of the performance rights will vest subject to completion of an underlying service-condition ending 31 July 2023. 65,800 shares are pending for issue to the CFO. The shares to be issued will be subject to a 2-year trading restriction from the date of issue.
One-off Cash STI	A one-off gross cash performance payment of \$75,000 was awarded in recognition of company achievements, sustained efforts and performance, and general strong Company performance across the Company's technology commercialisation projects.	A one-off gross cash performance payment of \$60,000 was awarded in recognition of company achievements, sustained efforts and performance, and general strong Company performance across the Company's technology commercialisation projects.
Board discretion	The Board has discretion to adjust remuneration outcomes up or down to prevent any inappropriate reward outcomes, including reducing (down to zero, if appropriate) any STI award.	The Board has discretion to adjust remuneration outcomes up or down to prevent any inappropriate reward outcomes, including reducing (down to zero, if appropriate) any STI award.
Long-Term Inc	centives	
Composition	As per shareholder approval at the 2021 AGM, an equity-based LTI to cover five performance years (i.e., FY2021 through to and including FY2025) was granted. The multi-year incentive, equivalent to an annual grant of 150,000 options, was granted on 14 October 2021 for the five years ending 30 June 2025.	An equity-based LTI to cover three performance years has been granted (i.e., FY2022 through to and including FY2024). The multi-year incentive, equivalent to an annual grant of 100,000 options, was granted on 26 July 2021 for three years ending 30 June 2024.
Opportunity	Issue of 750,000 options (i.e., 150,000 options attributable to each year from FY2021 to FY2025).	Issue of 300,000 options (i.e., 100,000 options attributable to each year from FY2022 to FY2024).

39

	CEO/MD	CFO/Company Secretary
Assessment	The equity-based LTI have vesting periods that end from 25 June 2024 to 30 June 2027. In the event the options are eligible to be exercised, any resulting allotment of Silex Systems Limited shares will be subject to a further escrow period of 2 years.	The equity-based LTI have vesting periods that end from 30 June 2024 to 30 June 2026. In the event the options are eligible to be exercised, any resulting allotment of Silex Systems Limited shares will be subject to a further escrow period of 2 years.
Exercise price	In accordance with shareholder approval, the options' exercise price is \$0.94. This exercise price was determined based on the volume weighted average price at which the Company's shares were traded on the Australian Stock Exchange for the 10-trading days preceding 25 June 2021.	The options' exercise price of \$0.94 was determined based on the volume weighted average price at which the Company's shares are traded on the Australian Stock Exchange for the 10-trading days preceding the 25 June 2021.
Forfeiture and termination	Options will lapse if vesting conditions are not met. Options will be forfeited on cessation of employment unless the Board determines otherwise.	Options will lapse if vesting conditions are not met. Options will be forfeited on cessation of employment unless the Board determines otherwise.
Board discretion	The Board has discretion to adjust remuneration outcomes up or down to prevent any inappropriate reward outcomes, including reducing (down to zero, if appropriate) any LTI award.	The Board has discretion to adjust remuneration outcomes up or down to prevent any inappropriate reward outcomes, including reducing (down to zero, if appropriate) any LTI award.
Extended Long	g-Term Incentive	
Composition	As per shareholder approval at the 2021 AGM, the equity-based Extended LTI is a multi-year incentive equivalent to 412,500 Performance Rights for a 5.5 year performance period ending 31 December 2025.	An equity-based Extended LTI is a multi-year incentive equivalent to 300,000 Performance Rights for a 5-year performance period ending 30 June 2026.
Opportunity	Issue of 412,500 Performance Rights	Issue of 300,000 Performance Rights
Assessment	The performance period of the Extended LTI commenced on 1 July 2020 and ends 31 December 2025. The performance criteria are linked to specifically tailored outcomes relating to the scale-up of the unique SILEX uranium enrichment technology and will be assessed over a performance period ending 31 December 2025. Achievement will be subject to independent Board verification and the Extended LTI may be subject to early-vesting. In the event the performance and vesting criteria are achieved, any resulting allotment of Silex Systems Limited shares will be subject to a further escrow period of 2 years.	The performance period of the Extended LTI commenced on 1 July 2021 and ends 30 June 2026. The Extended LTI is subject to service-based and performance-based criteria linked to increased shareholder value. In the event the performance and vesting criteria are achieved, any resulting allotment of Silex Systems Limited shares will be subject to a further escrow period of 2 years.  Assessment: With respect to performance-based and service-based criteria for the 2-year period ending 30 June 2023, it was assessed that 75,000 performance rights have vested. 75,000 shares are pending for issue to the CFO. The shares to be issued are subject to a 2-year trading restriction from the date of issue.
Forfeiture and termination	Performance Rights will lapse if performance conditions are not met. Rights will be forfeited on cessation of employment unless the Board determines otherwise.	Performance Rights will lapse if performance conditions are not met. Rights will be forfeited on cessation of employment unless the Board determines otherwise.
Board discretion	The Board has discretion to adjust remuneration outcomes up or down to prevent any inappropriate reward outcomes, including reducing (down to zero, if appropriate) any Extended LTI award.	The Board has discretion to adjust remuneration outcomes up or down to prevent any inappropriate reward outcomes, including reducing (down to zero, if appropriate) any Extended LTI award.

### e) Link between FY2022 remuneration and performance

### FY2023 performance and impact on remuneration

The Company's performance in FY2023 remained strong with execution of our various strategic priorities, including the acceleration of the CY2023 commercial-scale pilot demonstration project for the SILEX uranium enrichment technology in conjunction with GLE, in response to evolving nuclear fuel market conditions, and the successful completion of the ZS-Si Project with the production of initial quantities of ZS-Si at the highest purity of ~99.998%, and identifying a path to production scalability from the SILEX pilot demonstration facility. This performance and the execution of the various opportunities presented to the Company was reflected in the appreciation of the Silex share price during FY2023. For further information on the Company's performance during the year, refer to the Operating and Financial Review in Section 4 of this Directors' Report.

As a result of these positive achievements, the Board assessed the CEO/MD at 90.25% achievement and the CFO/Company Secretary at 94% achievement of the FY2023 STI (via performance rights - subject to completion of the service-condition ending 31 July 2023) and the award of a cash performance payment of \$75,000 and \$60,000 to the CEO/MD and CFO/Company Secretary respectively. In addition, the Board's implementation of multi-year equity-based incentives for the Company's executive KMP is intended to retain KMP and to provide longer term benefits if key service and performance conditions are met together with sustained appreciation in shareholder value.

#### Statutory performance indicators

We aim to align executive KMP remuneration to our strategic and business objectives and the creation of shareholder wealth. The below table shows measures of the Company's financial performance over the last five years as required by the *Corporations Act 2001*. However, as a pre-revenue company, the below measures are generally not the measures used in determining the variable amounts of remuneration to be awarded to KMPs. As a consequence, there is only a partial correlation between the statutory key performance measures and the variable remuneration awarded.

Year ended 30 June	EPS Cents	Total STI awards to KMP (\$)	Share price at 30 June (\$)
2019	(3.0)	60,000	0.40
2020	(4.5)	61,600	0.78
2021	(4.0)	62,935	0.90
2022	(4.8)	228,601	2.10
2023	(8.1)	466,751	3.94

41

### f) Contractual arrangements with executive KMPs

Component	CEO/MD	CFO/Company Secretary
Total Fixed Remuneration	\$600,000	\$325,000
Contract duration	Ongoing Common Law Contract	Ongoing Common Law Contract
Notice by the individual or Company	6 months	6 months
Termination of employment (without cause)	Partial payment for pro-rata STI, if applicable, may be at Board discretion.	Partial payment for pro-rata STI, if applicable, may be at Board discretion.
	Unvested LTI and Extended LTI may remain on foot subject to achievement of the performance criteria at the original date of testing.	Unvested LTI and Extended LTI may remain on foot subject to achievement of the performance criteria at the original date of testing.
	Payment of Long Service Leave accrued prior to 31 December 2014 at pre-1 January 2015 TFR of \$800,000. Long Service Leave accrued after 1 January 2015 will be payable as per statutory requirements.	
Termination of employment (with cause) or by the individual	STI is not awarded and all unvested LTI and Extended LTI will lapse. Vested and unexercised LTI may be exercised following termination at Board discretion.	STI is not awarded, and all unvested LTI and Extended LTI will lapse. Vested and unexercised LTI may be exercised following termination at Board discretion.

### g) Non-executive directors' remuneration arrangements

Non-executive directors receive a directors' fee and a fee for chairing or participating on Board committees. They do not receive performance-based pay or retirement allowances. The fees are exclusive of superannuation and are reviewed annually taking into account comparable roles and market data. Following a review of directors' fees in FY2022, an annual fee increase of \$20,000 was resolved to be paid to the Chair with effect from 1 July 2022. This was in recognition of the substantial increase in sustained activities and additional governance responsibilities of the Company and GLE. Other Board and Committee fees for FY2023 were unchanged since the last Remuneration Report.

Directors' fees are reviewed annually by the Board. The current base fees were reviewed in late FY2023 taking into account a range of factors including, market data for similar sized companies and the complexity of our operations. It was resolved that base directors' fees be increased with effect from 1 July 2023. Refer to the table below.

Additional fees may be payable to non-executive directors should they undertake specific consulting projects for the Company in the areas of their expertise. No additional fees were paid for additional services and consulting rendered during FY2023.

The maximum annual aggregate directors' fee pool limit is \$750,000 and was approved by shareholders at the 2011 AGM.

All non-executive directors enter into a written agreement with the Company in the form of a letter appointment:

	From 1 July 2023	Year ended 30 June 2023
Base fees		
Chair	140,000	120,000
Other Non-executive directors	90,000	80,000
Committee fees		
Audit Committee - Chair	10,000	10,000
Audit Committee - Member	8,000	8,000
People & Remuneration Committee - Chair	10,000	10,000
People & Remuneration Committee - Member	8,000	8,000
Other		
Global Laser Enrichment Holdings LLC - Chair*	20,000	40,000
Global Laser Enrichment Holdings LLC - Director**	10,000	-

<sup>\*</sup> Payable from 1 January 2021 for the 3 years ending 31 December 2023. Payable 50% in cash and 50% via the issue of Silex shares, as approved by shareholders at the 2021 AGM.

<sup>\*\*</sup> Fee of \$20,000 p.a. payable from 1 January 2024, in cash.

### h) Directors' and KMP remuneration

The table below has been prepared in accordance with the requirements of the *Corporations Act 2001* and relevant accounting standards in Australia. This table details the remuneration for the Company's KMP for the current and previous financial year.

				Fixed rer	nuneration	Vai	riable remui	neration		
Name	Year	Cash salary and fees <sup>1</sup> \$	Non - monetary benefits - shares <sup>2</sup>	Annual and long service leave <sup>3</sup> \$	Post- employment benefits \$	Perf. Payments (cash)¹ \$	Perf. Rights (deferred shares) <sup>4</sup> \$	Options \$	Total \$	Perf. Related %
Executive director	rs									
Dr M P Goldsworthy	<b>2023</b> 2022	<b>572,516</b> 524,406	-	<b>8,057</b> 21,952	<b>27,484</b> 27,468	<b>75,000</b> 60,000	<b>257,728</b> 151,037	<b>156,646</b> 156,754	<b>1,097,431</b> 941,617	<b>45%</b> 39%
Non-executive dir	ectors									
Mr C A Roy	<b>2023</b> 2022	<b>174,590</b> 154,242	<b>37,606</b> 46,408	-	- -	-	- -	-	<b>212,196</b> 200,650	-
Ms H G Cook	2023	96,000	-	-	10,080	-	-	-	106,080	-
(from 14/10/2021)	2022	68,571	-	-	6,857	-	-	-	75,428	
Mr C D Wilks	2023	98,000	-	-	10,290	-	-	-	108,290	-
	2022	97,429	-	-	9,743	-	-	-	107,172	-
Former directors										
Ms M K Holzberger	2023	-	-	-	-	-	-	-	-	-
(until 14/10/2021)	2022	28,389	-	-	2,839	-	-	-	31,228	-
Other key manage	ement p	oersonnel a	nd group e	executives	3					
Ms J E Russell	2023	324,716	-	(2,275)	25,284	60,000	237,507	81,378	726,610	52%
	2022	299,406	-	10,838	27,468	50,000	122,784	86,325	596,821	43%
Total executive	2023	897,232	-	5,782	52,768	135,000	495,235	238,024	1,824,041	
directors and other KMP	2022	823,812	-	32,790	54,936	110,000	273,821	243,079	1,538,438	
Total NED	2023	368,590	37,606	-	20,370	-	-	-	426,566	
remuneration	2022	348,631	46,408	-	19,439	-	-	-	414,478	
Total KMP	2023	1,265,822	37,606	5,782	73,138	135,000	495,235	238,024	2,250,607	
remuneration	2022	1,172,443	46,408	32,790	74,375	110,000	273,821	243,079	1,952,916	

<sup>&</sup>lt;sup>1</sup> Short-term benefits as per Corporations Regulations 2M 3.03(1) Item 6.

<sup>&</sup>lt;sup>2.</sup> The Company commenced payment of directors' fees for the role of Chair of Global Laser Enrichment Holdings LLC to Mr C A Roy from 1 January 2021. Refer to section g) for further details.

<sup>&</sup>lt;sup>3.</sup> Other long-term benefits as per Corporations Regulations 2M 3.03(1) Item 8. The amounts disclosed in this column represent the increase/ (decrease) in the associated provisions.

<sup>&</sup>lt;sup>4</sup> Equity-settled share-based payments as per Corporations Regulations 2M.3.03(1) Item 11. With regard to the group's executives, this includes STI (via Performance Rights), LTI (via Options) and Extended LTI (via Performance Rights).

### i) Performance-based remuneration granted and forfeited during the year

A summary of the performance-based remuneration granted and forfeited to executive KMP during FY2023:

	STI (Rights)				STI (Cash)		LTI (Options)		Extended LTI (Rights)		(Rights)
Name	Total opportunity \$	Awarded*	Forfeited %	Total opportunity \$	Awarded %	Forfeited %	Value granted \$	Value exercised	Value granted \$	Awarded**	Forfeited %
Dr M P Goldsworthy	197,981	90.25%	9.75%	75,000	100%	0%	-	-	-	-	-
Ms J E Russell	183,043	94.00%	6.00%	60,000	100%	0%	-	336,000	-	25.00%	-

<sup>\*</sup> STI (Rights) Awards subject to completion of service-based condition ending 31 July 2023.

### j) Terms and conditions of the equity-based payment arrangements

### STI - Performance Rights

Commencing FY2021, an annual STI in the form of Performance Rights is to be granted to executive KMP. The rights vest at the end of a 12-month performance period subject to the achievement of individually tailored KPIs. Each right that vests is converted into one ordinary share. The rights carry no dividend or voting rights.

The fair value of the rights is determined based on the market price of the Company's shares at the grant date or for those rights which are subject to a market condition, with reference to a Monte Carlo simulation taking into account the volatility of the Company's shares and other factors.

Grant Date	Vesting date	Value per right grant date	Performance achieved %	Vested %*
26/07/2021	31/07/2022	\$0.791	94%	94%
26/07/2021	31/07/2022	\$0.510	100%	100%
14/10/2021	31/07/2022	\$1.132	94%	94%
14/10/2021	31/07/2022	\$0.721	100%	100%
30/08/2022	31/07/2023	\$1.770	100%*	-
30/08/2022	31/07/2023	\$2.764	91%*	-

<sup>\*</sup> Award subject to completion of service-based condition ending 31 July 2023.

<sup>\*\*</sup> For the CFO/Company Secretary, the Extended LTI comprises 300,000 Performance Rights to cover 5 performance years commencing 1 July 2021 and ending 30 June 2026. The Award for FY2023 of 75,000 rights is with respect to the 2-year performance and service period ending 30 June 2023. Shares are pending for issue. The Extended LTI was granted on 21 June 2022. The value at grant date is calculated in accordance with AASB 2 Share-based Payment.

### LTI - Options

The number of options over ordinary shares in the Company provided as remuneration to executive KMP is shown below. The options carry no dividend or voting rights. The options are subject to a service-based condition which must be satisfied for the options to vest.

When exercisable, each option is convertible into one ordinary share of Silex Systems Limited. The exercise price of options is based on the volume weighted average price at which the Company's shares are traded on the Australian Stock Exchange for the 10-trading days before the options are granted or for the 10-trading days preceding a Board resolution to grant options. Details of options vested during the year are shown below.

The terms and conditions of each grant of options affecting remuneration in the current or a future reporting period are as follows:

Grant date	Vesting date	Expiry date	Exercise price	Value per option at grant date	Performance achieved %	Vested %
01/04/2020	01/04/2023	31/03/2025	\$0.21	\$0.1458	100%	100%
23/11/2020	30/06/2023	22/11/2025	\$0.57	\$0.3056	100%	100%
24/03/2021	24/03/2024	23/03/2026	\$1.20	\$0.6709	TBD	TBD
26/07/2021	30/06/2024	28/10/2026	\$0.94	\$0.4321	TBD	TBD
26/07/2021	30/06/2025	30/06/2027	\$0.94	\$0.4714	TBD	TBD
26/07/2021	30/06/2026	30/06/2028	\$0.94	\$0.4904	TBD	TBD
14/10/2021	25/06/2024	28/10/2026	\$0.94	\$0.7249	TBD	TBD
14/10/2021	30/06/2024	28/10/2026	\$0.94	\$0.7249	TBD	TBD
14/10/2021	30/06/2025	28/10/2027	\$0.94	\$0.7727	TBD	TBD
14/10/2021	30/06/2026	28/10/2028	\$0.94	\$0.7965	TBD	TBD
14/10/2021	30/06/2027	28/10/2029	\$0.94	\$0.8308	TBD	TBD

### **Extended LTI - Performance Rights**

Extended LTIs in the form of Performance Rights have been granted to executive KMP. The rights vest at the end of multi-year performance periods subject to the achievement of individually tailored objectives. Each right that vests is converted into one ordinary share. The rights carry no dividend or voting rights.

The fair value of the rights is determined based on the market price of the Company's shares at the grant date or for those rights which are subject to a market condition, with reference to a Monte Carlo simulation taking into account the volatility of the Company's shares and other factors.

Grant date	Vesting date	Value per right grant date	Performance achieved	Vested %
14/10/2021	No later than 31/12/2025	\$1.132	TBD	TBD
21/06/2022	30/06/2023	\$0.742	100%	100%
21/06/2022	30/06/2024	\$0.808	TBD	TBD
21/06/2022	30/06/2025	\$0.809	TBD	TBD
21/06/2022	30/06/2026	\$0.835	TBD	TBD

### k) Reconciliation of options, rights and ordinary shares held by executive KMP

### Options held by KMP

The table below shows a reconciliation of options held by each executive KMP from the beginning to the end of FY2023

				Vested			Balance at e	nd of year
Name and grant date	Balance at the start of the year	Granted as compensation	Number	%	Exercised	Other changes	Vested and exercisable	Unvested
Dr M P Goldsworthy								
23/11/2020	150,000	-	150,000	100%	-	-	150,000	-
14/10/2021	750,000	-	-	-	-	-	-	750,000

Ms J E Russell							
01/04/2020	100,000	- 100,000	100%	100,000	-	-	-
24/03/2021	200,000		-	-	-	-	200,000
26/07/2021	300,000		-	-	-	-	300,000

### Rights held by KMP

The table below shows a reconciliation of rights held by each KMP from the beginning to the end of FY2023.

			,	Vested	Fo	rfeited	
Name and grant date	Balance at the start of the year	Granted as compensation	Number	%	Number	%	Balance at end of year (Unvested)
Dr M P Goldsworthy							
14/10/2021	412,500	-	-	-	-	-	412,500
14/10/2021	75,000	-	71,250	95%	3,750	5%	-
30/08/2022*	-	75,000	-	-	_	-	75,000

Ms J E Russell							
25/10/2021	70,000	-	66,500	95%	3,500	5%	-
21/06/2022**	-	300,000	75,000	25%	-	-	225,000
30/08/2022***	-	70,000	-	-	-	-	70,000

<sup>\* 90.25%</sup> of the performance rights will vest subject to completion of an underlying service-condition on 31 July 2023.

<sup>\*\* 75,000</sup> rights vested with respect to the 2-year performance and service period ending 30 June 2023. Shares are pending for issue.

<sup>\*\*\* 94.00%</sup> of the performance rights will vest subject to completion of an underlying service-condition on 31 July 2023.

### Shares held by KMP

The below table shows the number of ordinary shares in the Company that were held during the financial year by KMP of the Company, including by entities related to them:

Name Directors of Silex System	Balance at the start of the year ms Limited	Received during the year on the exercise of options	Received on vesting of rights to shares	Other changes during the year	Balance at the end of the year
Mr C A Roy	259,507	-	-	-	259,507
Dr M P Goldsworthy	6,176,055	-	71,250	-	6,247,305
Ms H G Cook	12,000	-	-	-	12,000
Mr C D Wilks	2,833,716	-	-	-	2,833,716

Other executive KMP					
Ms J E Russell	161,666	100,000	66,500	(17,000)	311,166

### **Securities Trading Policy**

The Silex Securities Trading Policy applies to all staff including KMP. It prohibits staff from buying or selling Silex securities at times when they are in possession of inside information. In addition, staff are only permitted to trade in Silex securities during certain open periods. The Silex Securities Trading Policy is available on the Company's website at <a href="https://www.silex.com.au/corporate/corporate-governance/">https://www.silex.com.au/corporate/corporate-governance/</a>.

### I) Voting at the Company's 2022 Annual General Meeting

Silex Systems Limited received more than 99% of "yes" votes on its Remuneration Report for the 2022 financial year.

### 10. Shares under option

Unissued ordinary shares of Silex Systems Limited under option at the date of this report are as follows:

Date options granted*	Expiry date	Issue price of shares	Number under option
21/05/2019	20/05/2024	\$0.35	120,000
01/04/2020	31/03/2025	\$0.21	227,000
23/11/2020	22/11/2025	\$0.57	150,000
24/03/2021	23/03/2026	\$1.20	1,000,000
26/07/2021	Various	\$0.94	300,000
14/10/2021	Various	\$0.94	750,000
18/03/2022	17/03/2027	\$1.19	600,000
25/08/2022	25/08/2025	\$3.19	50,000
17/04/2023	16/04/2028	\$3.77	650,000

<sup>\*</sup> The options granted include issues to eligible employees in accordance with the Silex Systems Limited Employee Incentive Plan and includes options granted as remuneration to KMP.

No option holder has any right under the options to participate in any other share issue of the Company or any other entity. No options were granted since the end of the financial year.

### 11. Company Secretary

Ms J E Russell BBus, CA, MBA (Exec), GAICD was appointed to the position of Company Secretary in 2010. Before joining Silex, Ms Russell held a senior finance position in the Construction industry in the Middle East and prior to that worked as a Senior Associate with a Chartered Accounting Practice.

### 12. Indemnification and insurance of directors

The Company has entered into Deeds to indemnify the directors and executive officers of the Company against all liabilities to persons (other than the Company or related body corporate) which arise out of the performance of their normal duties as directors or executive officers unless the liability relates to conduct involving lack of good faith. The Company has agreed to indemnify the directors and executive officers against all costs and expenses incurred in defending an action that falls within the scope of the indemnity.

The Directors' & Officers' Liability Insurance provides cover against all costs and expenses involved in defending legal actions and any resulting payments arising from a liability to persons (other than the Company) incurred in their position as a director or executive officer unless the conduct involves a wilful breach of duty or an improper use of inside information or position to gain advantage. The insurance policy does not allow specific disclosure of the nature of the liabilities insured against or the premium paid under the policy.

### 13. Environmental regulation

Silex seeks to be compliant with all environmental laws and regulations relevant to its operations. The Company monitors compliance on a regular basis. The Audit Committee has oversight of environmental risks and compliance.

The Company is subject to the environmental and health and safety regulations applicable to tenants of the Lucas Heights Science and Technology Centre. The Company is also bound by the rules and regulations set out in the *Australian Radiation Protection and Nuclear Safety Act, 1998*, and is a licensee under the Act.

To the best of the Directors' knowledge, all environmental and health and safety regulatory requirements have been met and there have been no claims made, prosecutions commenced or fines incurred during the financial year.

### 14. Non-audit services

Details of the amounts paid or payable to the auditor (PricewaterhouseCoopers Australia) for audit and non-audit services during the year are disclosed in note 20 Remuneration of auditors.

The Company may decide to employ the auditor on assignments additional to their statutory audit duties where the auditor's expertise and experience with the Company and/or the consolidated entity are important.

The Board of Directors, in accordance with advice provided by the Audit Committee, is satisfied that the provision of non-audit services is compatible with the general standard of independence for auditors imposed by the *Corporation Act 2001*. The directors are satisfied that the provision of non-audit services by the auditor did not compromise the auditor independence requirements of the *Corporation Act 2001* for the following reasons:

- all non-audit services have been reviewed by the audit committee to ensure they do not impact the impartiality and objectivity of the auditor, and
- none of the services undermine the general principles relating to auditor independence as set out in APES 110 Code of Ethics for Professional Accountants.

### 15. Auditors' independence declaration

A copy of the auditors' independence declaration as required under section 307C of the *Corporations Act 200*1 is set out on page 51.

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

Dr M P Goldsworthy

CEO/MD

Sydney, 23 August 2023

**Mr C A Roy** Chair



### Auditor's Independence Declaration

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As lead auditor for the audit of Silex Systems Limited for the year ended 30 June 2023, I declare that to the best of my knowledge and belief, there have been:

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

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

Aishwarya Chandran Partner

Sydney 23 August 2023 PricewaterhouseCoopers

PricewaterhouseCoopers, ABN 52 780 433 757

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Liability limited by a scheme approved under Professional Standards Legislation.

### **Corporate Governance Statement**

30 June 2023

Silex Systems Limited (the Company) and the Board are committed to achieving and demonstrating the highest standards of corporate governance. The Company has reviewed its corporate governance practices against the Corporate Governance Principles and Recommendations (4th Edition) published by the ASX Corporate Governance Council.

The 2023 Corporate Governance Statement reflects the corporate governance practices in place throughout the 2023 financial year. The 2023 Corporate Governance Statement was approved by the Board and lodged with the ASX Appendix 4G on 23 August 2023. A description of the Company's current corporate governance practices is set out in the Company's Corporate Governance Statement which can be viewed at www.silex.com.au/Corporate-Governance.



## **Contents**

### **Consolidated financial statements**

	Consolidated statement of comprehensive income	56
	Consolidated balance sheet	57
	Consolidated statement of changes in equity	58
	Consolidated statement of cash flows	59
No	tes to the consolidated financial statements	60
Dir	ectors' declaration	103
Inc	lependent Auditor's Report to the Members	104

This financial report covers the consolidated entity consisting of Silex Systems Limited and its subsidiaries. The financial report is presented in the Australian currency.

Silex Systems Limited is a company limited by its shares, incorporated and domiciled in Australia. Its registered office and principal place of business is:

Silex Systems Limited
Building 64
Lucas Heights Science & Technology Centre
New Illawarra Road
Lucas Heights NSW 2234
Australia

The financial report was authorised for issue by the Directors on 23 August 2023. The Directors have the power to amend and reissue the financial report.

All announcements, financial reports and other information are available on our website: www.silex.com.au



# SILEX SYSTEMS LIMITED & ITS SUBSIDIARIES

ABN 69 003 372 067

SILEX ANNUAL REPORT 2023

## **Consolidated income statement**

30 June 2023

	Notes	2023 \$	2022 \$
Revenue from contracts with customers	3	6,838,804	4,217,102
Interest revenue	3	2,396,620	177,652
Revenue from continuing operations		9,235,424	4,394,754
OII .	4	0.000.404	0.017.750
Other income	4	2,828,484	2,817,759
Research and development materials		(2,783,000)	(1,238,917)
Finance costs	5	(50,632)	(20,123)
Depreciation and amortisation expense	5	(382,104)	(441,495)
Employee benefits expense		(7,612,483)	(5,840,343)
Consultants and professional fees		(1,015,091)	(604,905)
Printing, postage, freight, stationery and communications		(54,305)	(62,072)
Property outgoings		(79,419)	(66,609)
Net foreign exchange losses		(447,701)	-
Net impairment (losses) / gains		(33,892)	13,554
Share of net loss of associates and joint ventures accounted for using the			
equity method	15(b)	(16,147,128)	(7,952,325)
Other expenses from continuing activities		(819,445)	(463,700)
(Loss) before income tax expense		(17,361,292)	(9,464,422)
Income tax expense	6	-	-
Net (loss) from continuing operations		(17,361,292)	(9,464,422)
Net (loss) for the year		(17,361,292)	(9,464,422)
Net (loss) is attributable to:		/4= 004 005\	(0.404.455)
Owners of Silex Systems Limited		(17,361,292)	(9,464,422)

		Cents	Cents				
Earnings per share (loss) from continuing operations attributable to the ordinary equity holders of the company							
Basic earnings per share	21	(8.1)	(4.8)				
Diluted earnings per share	21	(8.1)	(4.8)				
Earnings per share (loss) attributable to the ordinary equit	y holders of the compa	any					
Basic earnings per share	21	(8.1)	(4.8)				
Diluted earnings per share	21	(8.1)	(4.8)				

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

## Consolidated statement of comprehensive income

	Notes	2023 \$	2024 \$
Net (loss) for the year		(17,361,292)	(9,464,422)
Other comprehensive income			
Items that may be reclassified to profit or loss:			
Exchange differences on translation of foreign operations		378,837	622,006
Items that will not be reclassified to profit or loss:			
Changes in the fair value of equity investments at fair value through other			
comprehensive income	7(e)	(1,473,684)	(2,319,217)
Other comprehensive income for the year, net of tax		(1,094,847)	(1,697,211)
Total comprehensive income for the year		(18,456,139)	(11,161,633)
Attributable to:			
Owners of Silex Systems Limited		(18,456,139)	(11,161,633)
Total comprehensive income for the year		(18,456,139)	(11,161,633)

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

## Consolidated balance sheet

30 June 2023

	Notes	30 June 2023 \$	30 June 2022 \$
Assets			
Current assets			
Cash and cash equivalents	7(a)	2,859,572	5,036,333
Other financial assets at amortised cost - term deposits	7(b)	135,200,000	37,500,000
Trade and other receivables	7(c)	5,964,296	2,817,239
Other current assets	7(d)	827,096	332,219
Financial assets at fair value through other comprehensive income	7(e)	2,676,381	3,997,980
Total current assets		147,527,345	49,683,771
Non-current assets			
Investments accounted for using the equity method	15(b)	3,630,471	3,121,797
Right-of-use assets	9(a)	755,489	990,489
Property, plant and equipment	7(f)	286,239	320,802
Total non-current assets		4,672,199	4,433,088
Total assets		152,199,544	54,116,859
Liabilities			
Current liabilities			
Trade and other payables	8(a)	1,813,167	1,717,766
Lease liabilities	9(a)	233,011	200,191
Provisions	8(b)	834,206	799,592
Total current liabilities		2,880,384	2,717,549
Non-current liabilities			
Lease liabilities	9(a)	539,127	782,311
Provisions	8(b)	90,841	70,845
Total non-current liabilities		629,968	853,156
Total liabilities		3,510,352	3,570,705
Net assets		148,689,192	50,546,154
Equity			
Contributed equity	10(a)	386,753,717	271,543,434
Reserves	10(b)	11,337,320	11,043,273
Accumulated losses	10(c)	(249,401,845)	(232,040,553)
	(-)	( -,,	( - , - : - , - 30)

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

## Consolidated statement of changes in equity

30 June 2023

	Attributable to owners of Silex Systems Limited				
	Contributed equity \$	Reserves \$	Accumulated losses	Total \$	
Balance at 30 June 2021	232,645,003	12,002,259	(222,576,131)	22,071,131	
Net (loss) for the year	-	-	(9,464,422)	(9,464,422)	
Other comprehensive income	-	(1,697,211)	-	(1,697,211)	
Total comprehensive income for the year	-	(1,697,211)	(9,464,422)	(11,161,633)	
Transactions with owners in t	heir capacity as owners				
Contributions of equity net of transaction costs	38,614,990	-	-	38,614,990	
Share-based payments - value of services	-	1,021,666	-	1,021,666	
Transfer from share-based payments reserve	283,441	(283,441)	-	-	
	38,898,431	738,225	-	39,636,656	
Balance at 30 June 2022	271,543,434	11,043,273	(232,040,553)	50,546,154	
Net (loss) for the year	-	-	(17,361,292)	(17,361,292)	
Other comprehensive income	-	(1,094,847)	-	(1,094,847)	
Total comprehensive income for the year	-	(1,094,847)	(17,361,292)	(18,456,139)	
Transactions with owners in t	heir capacity as owners				
Contributions of equity net of transaction costs	114,779,236	-	-	114,779,236	
Share-based payments - value of services	-	1,819,941	-	1,819,941	
Transfer from share-based payments reserve	431,047	(431,047)	-	-	
	115,210,283	1,388,894	-	116,599,177	
Balance at 30 June 2023	386,753,717	11,337,320	(249,401,845)	148,689,192	

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

## Consolidated statement of cash flows

30 June 2023

	Notes	2023 \$	2022 \$
Cash flows from operating activities			
Receipts from customers and government grants (inclusive of GST)		8,247,014	6,813,725
Payments to suppliers and employees (inclusive of GST)		(11,288,581)	(6,452,730)
Interest received		751,328	71,767
Interest paid		(50,632)	(20,123)
Net cash (outflows)/inflows from operating activities	11(a)	(2,340,871)	412,639
Cook flows from investing askinting	_		
Cash flows from investing activities		(16 601 004)	(10, 100, 000)
Payment for investments accounted for using the equity method  Payments for financial assets at amortised cost - term deposits		(16,601,924)	(10,139,080) (43,800,000)
Proceeds from other financial assets at amortised cost - term deposits		(131,003,993)	,
Payments for property, plant and equipment	o e	33,303,993 (94,071)	14,000,000 (125,362)
Net cash (outflows) from investing activities		(114,395,995)	(40,064,442)
Net Cash (outnows) from investing activities		(114,595,995)	(40,004,442)
Cash flows from financing activities			
Proceeds from issue of shares, net of transaction costs	10(a)	114,779,236	38,502,173
Repayment of principal elements of leases		(228,834)	(304,721)
Net cash inflows from financing activities		114,550,402	38,197,452
Net (decrease) in cash and cash equivalents		(2,186,464)	(1,454,351)
Cash and cash equivalents at the beginning of the financial year		5,036,333	6,402,798
Effects of exchange rate changes on cash		9,703	87,886
Cash and cash equivalents at end of year*		2,859,572	5,036,333
Non-cash financing and investing activities	11(b)		
*Term deposits excluded from Cash and cash equivalents		135,200,000	37,500,000

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

30 June 2023

Note	Contents	Page
1	Significant changes in the current reporting period	61
How numb	pers are calculated	
2	Segment information	61
3	Revenue from continuing operations	63
4	Other income	64
5	Expenses	65
6	Income tax expense	66
7	Assets	67
8	Liabilities	71
9	Leases	73
10	Equity	75
11	Cash flow information	78
Risk		
12	Critical accounting estimates and judgements	79
13	Financial risk management	79
14	Climate Change	83
Group stru	cture	
15	Interests in other entities	83
Additional	notes to the financial statements	
16	Commitments for expenditure and guarantees	85
17	Events occurring after reporting date	86
18	Related party transactions	86
19	Share-based payments	87
20	Remuneration of auditors	92
21	Earnings per share	92
22	Parent entity financial information	94
23	Summary of significant accounting policies	95

SILEX ANNUAL REPORT 2023

30 June 2023

### Note 1 Significant changes in the current reporting period

On 23 February 2023, GLE's owners agreed to a plan and budget for CY2023 that accelerates activities in the commercial-scale pilot demonstration project for the SILEX uranium enrichment technology, with the aim of completing the commercial-scale pilot demonstration (i.e., TRL-6) of the SILEX technology as early as mid-2024. The CY2023 plan and budget involves bringing forward activities with an approximate doubling of GLE's project expenditures compared to CY2022.

On 27 February 2023, Silex successfully completed an equity raise by way of a placement and Share Purchase Plan, to raise \$114.7m, net of transaction costs. 29,746,098 new fully paid ordinary shares were issued. The new shares were issued at a price of \$4.05 per share.

### **Note 2 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 Management and the Board of Directors

The segment information provided to Management and the Board of Directors for the reportable segments for the year ended 30 June 2023 is as follows:

2023	Silex Systems \$	Translucent \$	Silex USA \$	Total \$
Total segment revenue	6,158,978	1,953,028	-	8,112,006
Inter-segment revenue	(38,357)	(1,234,845)	-	(1,273,202)
Revenue from external customers	6,120,621	718,183	-	6,838,804
Interest revenue	2,396,620	-	-	2,396,620
Revenue from continuing operations	8,517,241	718,183	-	9,235,424
Segment result	(1,876,145)	712,370	(16,197,517)	(17,361,292)
Other profit and loss disclosures				
Depreciation and amortisation	382,104	-	-	382,104
Interest expense	50,632	-	-	50,632
Income tax expense	-	-	-	-
Share of net loss of joint venture using the equity method	-	-	16,147,128	16,147,128
Total segment assets	143,305,162	5,043,047	3,851,335	152,199,544
Total assets include:				
Additions to non-current assets (other than deferred tax and investments in joint ventures)	112,541	-	-	112,541
Amount invested in joint ventures accounted for using the equity method	-	-	16,601,924	16,601,924
Total segment liabilities	3,495,406	14,946	-	3,510,352

30 June 2023

2022	Silex Systems	Translucent	Silex USA	Total
	\$	\$	\$	\$
Total segment revenue	4,258,382	1,029,025	-	5,287,407
Inter-segment revenue	(41,280)	(1,029,025)	-	(1,070,305)
Revenue from external customers	4,217,102	-	-	4,217,102
Interest revenue	177,652	-	-	177,652
Revenue from continuing operations	4,394,754	-	-	4,394,754
Segment result	(1,812,697)	26,387	(7,678,112)	(9,464,422)
Other profit and loss disclosures				
Depreciation and amortisation	441,495	-	-	441,495
Interest expense	20,123	-	-	20,123
Income tax expense	-	-	-	-
Share of net loss of joint venture using the equity method	-	-	7,952,325	7,952,325
Total segment assets	46,623,708	4,258,888	3,234,263	54,116,859
Total assets include:				
Additions to non-current assets (other than deferred tax and investments in joint ventures)	1,196,615	-	-	1,196,615
Amount invested in joint ventures accounted for using the equity method	-	-	10,139,080	10,139,080
Total segment liabilities	3,559,673	11,032	-	3,570,705

### c) Other segment information

### (i) Segment revenue

Sales between Silex entities are carried out at arm's length and are eliminated on consolidation.

Silex is domiciled in Australia. Segment revenues are allocated based on the country in which the customer is located. The amount of the Company's revenue from external customers in the United States is \$6,120,621. (2022: \$4,217,102) and the total segment revenue from external customers in Wales, United Kingdom is \$718,183 (2022: \$nil).

Translucent and Silex USA are domiciled in the United States.

30 June 2023

### (ii) Segment result

The Board of Directors assess the performance of the operating segments based on results that excludes exchange gains and losses on intercompany loans which eliminate on consolidation. A reconciliation of the segment result to Net (loss) from continuing operations is provided as follows:

	2023 \$	2022 \$
Segment result	(17,361,292)	(9,464,422)
Net (loss) before income tax from continuing operations	(17,361,292)	(9,464,422)

### (iii) Segment assets

Assets which eliminate on consolidation such as investments in controlled entities and intercompany receivables are excluded from segment assets. Segment assets agree to the consolidated balance sheet for both periods.

The total of non-current assets located in Australia is \$1,041,728 (2022: \$1,311,291) and the total of these non-current assets located in the United States is \$3,630,471 (2022: \$3,121,797).

### (iv) Segment liabilities

Reportable segment liabilities exclude intercompany loans, income tax payable and deferred tax liabilities. Segment liabilities agree to the consolidated balance sheet for both periods.

### Note 3 Revenue from continuing operations

	2023 \$	2022 \$
Recoverable project costs	6,120,621	4,217,102
Royalty -revenue - sale of cREO® technology	718,183	-
	6,838,804	4,217,102
Interest revenue	2,396,620	177,652
	9,235,424	4,394,754

Revenue is measured at the fair value of the consideration received or receivable.

### a) Revenue is recognised for the major business activities as follows:

### (i) Recoverable project costs

Project costs recoverable from GLE for the Company's costs incurred for the SILEX uranium enrichment development program is recorded as Revenue when the related costs are incurred. Revenues of \$6,120,621 (2022: \$4,217,102) were derived from GLE for Recoverable project costs on the uranium enrichment project. GLE is based in the United States. Revenue recognised in advance is recognised as accrued income. Revenue is recognised at a point in time.

30 June 2023

### (ii) Royalty revenue - sale of intellectual property - cREO® technology - accounting policy and significant judgements

Variable consideration from the sale of Translucent's cREO® technology is required to be estimated in accordance with AASB 15 Revenue from Contracts with Customers. In accordance with the 2015 Option, License and Assignment Agreement between the Company and IQE Plc and sale of the cREO® technology in 2018, IQE is required to make minimum royalty payments for the 6 years ending 31 December 2024. The fourth annual payment of US\$500,000, which was with respect to CY2022, was recognised in the year ended 30 June 2023. The Company has not accrued the fifth minimum annual royalty payment (US\$500,000) which is payable with respect to CY2023 during the year ended 30 June 2023. Royalty revenue of \$718,183 was recognised during the year (2022: \$nil). IQE Plc is based in Wales, United Kingdom. The variable consideration in the form of royalties relating to the sale of the cREO® technology is calculated using the most likely amount method. The revenue is currently recognised at a point in time and estimated at each reporting date.

### (iii) Interest revenue

Interest revenue is recognised on a time proportion basis using the effective interest method. Interest revenue was derived from the investment of the Company's cash reserves in Australia.

### **Note 4 Other Income**

	<b>2023</b> \$	2022 \$
Research and development tax incentive	2,338,667	1,512,324
Cooperative Research Centres Project (CRC-P) Grant	249,360	423,336
Foreign currency exchange gains (net)	-	591,972
Other income - project subsidy	240,457	290,127
	2,828,484	2,817,759

Government grants relating to the Research and development tax incentive are recognised when there is reasonable assurance that the grant will be received and the amount can be reliably calculated.

#### (i) Research and development tax incentive

Research and development tax incentive income of \$2,338,667 (2022: \$1,512,234) was recognised as Other income by the Company during the year. There are no unfulfilled conditions or other contingencies attaching to the incentive.

### (ii) Cooperative Research Centres Project (CRC-P) Grant

CRC-P Grant income of \$249,360 (2022: \$423,336) was recognised during the year. The Company has met the conditions of the grant.

30 June 2023

### Note 5 Expenses

	2023 \$	2022 \$
Net (loss) from continuing operations before income tax includes the following exper	nses:	
Depreciation of plant and equipment - refer note 7(f)	128,634	141,124
Depreciation on right-of-use assets - refer note 9(b)	253,470	300,371
Total depreciation and amortisation	382,104	441,495
Finance costs		
Interest and finance charges paid/payable	50,632	20,123
Finance costs expensed	50,632	20,123
Defined contribution superannuation expense	332,228	269,124
Foreign exchange losses (net)	447,101	-

65 SILEX ANNUAL REPORT 2023

30 June 2023

### Note 6 Income tax expense

This note provides an analysis of the Company's income tax expense and explains why a deferred tax asset has not been recognised by the Company.

	2023 \$	2022 \$
(a) Numerical reconciliation of income tax expense to prima facie tax payable		
(Loss) before income tax expense	(17,361,292)	(9,464,422)
Income tax calculated @ 25.0%	(4,340,323)	(2,366,106)
Tax effect of amounts which are not deductible (taxable) in calculating taxable income:		
Share-based payments	464,387	269,519
Research and development tax incentive	739,471	472,494
Sundry items	2,500	2,000
	(3,133,965)	(1,622,093)
Net deferred tax asset not recognised	2,901,688	1,507,317
Differences in overseas tax rates	232,277	114,776
Income tax expense	-	-

	2023 \$	2022 \$
(b) Tax losses		
Unused tax losses for which no deferred tax asset has been recognised	210,911,358	190,776,276
Potential tax benefit at tax rate	50,205,724	45,513,665

A deferred tax asset has not been recognised as the consolidated entity has a history of tax losses.

The benefit of a deferred tax asset will only be obtained if:

- (i) the consolidated entity derives future assessable income of a nature and of an amount sufficient to enable the benefit from the deductions for the losses to be realised;
- (ii) the consolidated entity continues to comply with the conditions for deductibility imposed by tax legislation; and
- (iii) no changes in tax legislation adversely affect the consolidated entity in realising the benefit from the deductions for the losses.

30 June 2023

### Note 7 Assets

This note provides information about the Company's assets.

Note 7(a) Current assets - Cash and cash equivalents	2023 \$	2022 \$
Cash at bank	2,859,572	5,036,333

Cash and cash equivalents include deposits held at call with financial institutions, other short term, highly liquid investments with original maturities of three months or less that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value, and bank overdrafts.

Additional information on the Company's exposure to interest rate risk is discussed in note 13.

Note 7(b) Current assets - Other financial assets at amortised cost - Term deposits	2023 \$	2022 \$
Bank deposits	135,200,000	37,500,000

Other financial assets at amortised cost are assets held to collect the contractual cash flows and the contractual terms give rise to cash flows that are solely payments of principal and interest. Other financial assets at amortised cost are included in current assets as all have maturities less than 12 months from the end of the reporting period.

The bank deposits at 30 June 2023 earn interest at between 3.7% and 5.5% (2022: between 0.3% and 1.85%).

Note 7(c) Trade and other receivables	30 June 2023 \$	30 June 2022 \$
Trade receivables from contracts with customers	1,062,237	425,755
Accrued income - other	4,872,300	2,144,404
Derivative financial instruments - forward exchange contracts	-	158,603
Other receivables	63,651	88,477
Loss allowance	(33,892)	-
	5,964,296	2,817,239

### (i) Accrued income - other

Accrued income includes accrued research and development tax incentive, accrued project subsidy income and accrued interest.

### (ii) Impairment of receivables

Information about the impairment of receivables can be found in note 13(c).

### (iii) Foreign exchange and interest rate risk

Information concerning the Company's exposure to foreign currency in relation to trade and other receivables is provided in note 13.

### (iv) Fair value and credit risk

Due to the short-term nature of these receivables, their carrying value is assumed to approximate their fair value. Refer to note 13 for information on credit risk.

30 June 2023

	2023	2022
Note 7(d) Current assets - Other current assets	\$	\$
Prepayments	827,096	332,219

Note 7(e) Current assets - Financial assets at fair value through other comprehensive income	2023 \$	2022 \$
Level 1*		
Listed securities		
Equity securities - shares in IQE Plc	2,676,381	3,997,980

<sup>\*</sup> Level 1: The fair value of financial instruments traded in active markets (such as publicly traded derivatives and equity securities) is based on quoted market prices at the end of the reporting period. The quoted market price used for financial assets held by the Company is the current bid price.

### (i) Classification and measurement of financial assets at fair value through other comprehensive income

The Company irrevocably elected to value its shares in IQE at 30 June 2019 as financial assets at fair value through other comprehensive income. This election was made so that large movements in the value of the shares do not significantly impact the consolidated income statement. The shares are classified as Level 1 in the fair value hierarchy.

There were no dividends received during the current or prior years.

For an analysis of the sensitivity of financial assets at fair value through other comprehensive income to foreign exchange rate and price risk, refer to note 13(b).

### (ii) Amounts recognised in Other comprehensive income

During the year, the following (losses) were recognised in Other comprehensive income:

	2023 \$	2022 \$
(Losses) recognised in Other comprehensive income (refer note 10(b))	(1,473,684)	(2,319,217)

30 June 2023

Note 7(f) Non-current assets - Property, plant and equipment	Plant & equipment \$	Motor vehicles \$	Total \$
At 30 June 2021			
Cost	1,330,804	54,535	1,385,339
Accumulated depreciation	(1,004,696)	(44,079)	(1,048,775)
Net book amount	326,108	10,456	336,564
Year ended 30 June 2022			
Opening net book amount	326,108	10,456	336,564
Additions	125,362	-	125,362
Disposals	-	-	-
Depreciation charge	(138,190)	(2,934)	(141,124)
Closing net book value	313,280	7,522	320,802
At 30 June 2022			
Cost	1,456,166	58,087	1,514,253
Accumulated depreciation	(1,142,886)	(50,565)	(1,193,451)
Net book amount	313,280	7,522	320,802
Year ended 30 June 2023			
Opening net book amount	313,280	7,522	320,802
Additions	94,071	-	94,071
Disposals	-	-	-
Depreciation charge	(125,700)	(2,934)	(128,634)
Closing net book value	281,651	4,588	286,239
At 30 June 2023			
Cost	1,550,237	59,737	1,609,974
Accumulated depreciation	(1,268,586)	(55,149)	(1,323,735)
Net book amount	281,651	4,588	286,239

Subsequent costs are included in the asset's carrying amount or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Company and the cost of the item can be measured reliably. All other repairs and maintenance are charged to the consolidated income statement during the financial period in which they are incurred.

Depreciation is calculated using the straight-line method to allocate their cost or revalued amounts of the assets, net of their residual values, over their estimated useful lives, as follows:

- Plant and Machinery 1 10 years
- Motor Vehicles 3 7 years

30 June 2023

The asset's residual value and useful live are reviewed, and adjusted if appropriate, at each balance sheet date.

An asset's carrying amount is written down immediately to its recoverable amount if the asset's carrying amount is greater than its estimated recoverable amount (refer note 23(h)).

Gains and losses on disposals are determined by comparing proceeds with carrying amount. These are included in the income statement. When revalued assets are sold, it is Company policy to transfer the amounts included in other reserves in respect of those assets to retained earnings.

Note 7(g) Deferred tax assets	2023 \$	2022 \$
The balance comprises temporary differences attributable to:		
Amounts recognised in profit or loss		
Provision for employee entitlements, warranties, restructuring and decommissioning	231,262	217,609
Payables and other provisions	1,621,015	575,827
Financial assets at fair value through other comprehensive income	479,144	127,960
Lease liabilities	193,035	245,626
Deferred grant income	-	4,696
Credit losses	7,965	-
Tax losses	50,205,724	45,513,665
	52,738,145	46,685,383
Set-off deferred tax liabilities pursuant to set-off provisions	(4,602,668)	(3,512,344)
Net deferred tax assets not recognised*	(48,135,477)	(43,173,039)
Net deferred tax assets	-	-

<sup>\*</sup> A deferred tax asset has not been recognised as the consolidated entity has a history of tax losses.

30 June 2023

#### **Note 8 Liabilities**

This note provides information about the Company's liabilities.

Note 8(a) Trade and other payables	2023 \$	<b>2022</b> \$
Trade creditors	502,891	479,548
Unearned income	900,000	918,785
Derivative financial instruments - forward exchange contracts	8,589	-
Other payables	401,687	319,433
	1,813,167	1,717,766

These amounts represent liabilities for goods and services provided to the Company prior to the end of the financial year which are unpaid. The amounts are unsecured. Trade creditors are usually paid within 45 days of recognition. Trade creditors, derivative financial instruments and other payables are presented as current liabilities unless payment is not due within 12 months from the reporting date.

#### (i) Amounts not expected to be settled within the next 12 months

Other payables include accruals for annual leave. The entire annual leave obligation is presented as current, since the Company does not have an unconditional right to defer settlement. However, based on past experience, the Company does not expect all employees to take the full amount of accrued annual leave or require payment within the next 12 months. The following amounts reflect leave that is not to be expected to be taken or paid within the next 12 months:

	2023 \$	2022 \$
Current annual leave obligations expected to be settled after 12 months	36,232	41,341

### (ii) Risk exposure

Information about the Company's exposure to foreign exchange risk is provided in note 13.

Note 8(b) Provisions	Current \$	2023 Non-current \$	Total \$	Current	2022 Non-current \$	Total \$
Employee benefits - long service leave	688,125	50,841	738,966	653,511	30,845	684,356
Warranty provision	146,081	-	146,081	146,081	-	146,081
Make good provision	-	40,000	40,000	-	40,000	40,000
	834,206	90,841	925,047	799,592	70,845	870,437

30 June 2023

#### (i) Amounts not expected to be settled within the next 12 months

The current provision for long service leave includes all unconditional entitlements where employees have completed the required period of service and also those where employees are entitled to pro-rata payments in certain circumstances. The entire amount is presented as current, since the Company does not have an unconditional right to defer settlement. However, based on past experience, the Company does not expect all employees to take the full amount of accrued long service leave or require payment within the next 12 months. The following amounts reflect leave that is not to be expected to be taken or paid within the next 12 months.

	2023 \$	2022 \$
Current long service leave obligations expected to be settled after 12 months	634,144	622,040

Movements in each class of provision during the financial year, other than long service leave, are set out below:

	Warranty \$
Carrying amount at start of the year	146,081
Carrying amount at end of the year	146,081

Provision is made for the estimated warranty claims in respect of solar panels that were previously sold by the Company. The claims may be settled in the next financial year and this may be extended into future years.

	Make good \$
Carrying amount at start of the year	40,000
Carrying amount at end of the year	40,000

The Company is required to restore its leased premises under the terms of the lease contracts. A provision has been recognised for the present value of the estimated expenditure required to meet these obligations.

Note 8(c) Non-current liabilities - Deferred tax liabilities	2023 \$	2022 \$
The balance comprising temporary differences attributable to:		
Foreign currency cash balances and loans	3,778,347	3,092,455
Depreciation and amortisation	48,590	34,282
Right-of-use assets	188,872	247,622
Accrued income	586,859	137,985
	4,602,668	3,512,344
Set off deferred tax liabilities pursuant to set-off provisions	(4,602,668)	(3,512,344)
Net deferred tax liabilities	-	-

30 June 2023

#### **Note 9 Leases**

This note provides information for leases where the Company is a lessee.

### Note 9(a) Amounts recognised in the consolidated balance sheet

The consolidated balance sheet shows the following amounts relating to leases:

	2023 \$	2022 \$
Right-of-use assets		
Buildings	755,489	988,848
Equipment	-	1,641
	755,489	990,489
Lease liabilities		
Current	233,011	200,191
Non-current Non-current	539,127	782,311
	772,138	982,502

Additions to the right-of-use assets during the current year were \$18,470 (2022: \$1,248,819).

### Note 9(b) Amounts recognised in the consolidated income statementt

The consolidated income statement shows the following amounts related to leases:

	2023 \$	2022 \$
Depreciation charge on right-of-use assets		
Buildings	251,829	297,911
Equipment	1,641	2,460
	253,470	300,371
Interest expense (included in finance costs)	50,632	20,123

The total cash outflow for leases during the current year was \$279,466 (2022: \$324,844).

30 June 2023

### Note 9(c) The Company's leasing activities and how these are accounted for

The Company leases buildings and equipment. Rental contracts are generally for fixed periods of 1 year to 5 years but may have extension options. Leases are recognised as a right-of-use asset and a corresponding liability at the date at which the leased asset is available for use by the Company.

Assets and liabilities arising from a lease are initially measured on a present value basis. Lease liabilities include the net present value of the following lease payments:

- fixed payments less any lease incentive receivable;
- variable lease payments that are based on an index or rate, initially measured using the index or rate as at the commencement date;
- amounts expected to be payable by the Company under residual value guarantees;
- the exercise price of a purchase option if the Company is reasonably certain to exercise that option; and
- payments of penalties for terminating the lease, if the lease term reflects the Company exercising that option.

Lease payments to be made under reasonably certain extension options are also included in the measurement of the liability.

The lease payments are discounted using the interest rate implicit in the lease. If that rate cannot be readily determined, the lessee's incremental borrowing rate is used, being the rate that the individual lessee would have to pay to borrow the funds necessary to obtain an asset of similar value to the right-of-use asset in a similar economic environment with similar terms, security and conditions.

Lease payments are allocated between principal and finance cost. The finance costs are charged to profit or loss over the lease period so as to produce a constant periodic rate of interest on the remaining balance of the liability for each period.

Right-of-use assets are measured at cost comprising the following:

- the amount of the initial measurement of lease liability;
- any lease payments made before the commencement date less any lease incentives received; and
- any initial direct costs.

Right-of-use assets are generally depreciated over the shorter of the asset's useful life and the lease term on a straight-line basis. If the Company is reasonably certain to exercise a purchase option, the right-of-use asset is depreciated over the underlying asset's useful life.

30 June 2023

### Note 10 Equity

The note provides information about the Company's equity.

### Note 10(a) Contributed equity

	Parent entity			Parent entity
	2023 Shares	2022 Shares	2023 \$	2022 \$
(i) Share capital				
Ordinary shares				
Fully paid	235,423,937	204,974,961	386,753,717	271,543,434

(ii) Movements	in ordinary share capital		
Date	Details	Number of shares	Total \$
30 June 2021	Balance	172,767,339	232,645,003
1 September 2021	Issue of shares - performance rights	381,940	213,928
1 October 2021	Issue of shares - capital raise	25,972,391	32,984,937
29 October 2021	Issue of shares - share purchase plan	5,343,812	7,000,001
8 November 2021	Issue of shares - other*	84,507	112,817
Various	Issue of shares - options exercise	424,972	148,740
Various	Transfer from share-based payments reserve - options	-	69,513
		204,974,961	273,174,939
Less: Transaction co	osts arising on share issues	-	(1,631,505)
30 June 2022	Balance	204,974,961	271,543,434
26 August 2022	Issue of shares - performance rights	331,897	376,884
7 March 2023	Issue of shares - capital raise	29,629,630	120,000,021
21 April 2023	Issue of shares - share purchase plan	116,468	471,608
Various	Issue of shares - options exercise	370,981	78,490
Various	Transfer from share-based payments reserve - options	-	54,163
		235,423,937	392,524,600
Less: Transaction co	osts arising on share issues	-	(5,770,883)
30 June 2023	Balance	235,423,937	386,753,717

<sup>\*</sup> As per shareholder approval granted at the 2021 AGM, 84,507 shares issued in lieu of cash Director's fees for the 3-years ending 31 December 2023.

30 June 2023

#### (iii) Ordinary shares

Ordinary shares are classified as equity. Ordinary shares entitle the holder to participate in dividends and the proceeds on winding up of the Company in proportion to the number of and amounts paid on the shares held. On a show of hands every holder of ordinary shares present at a meeting in person or by proxy, is entitled to one vote, and upon a poll each share is entitled to one vote.

Incremental costs directly attributable to the issue of new shares or options are shown in equity as a deduction, net of tax, from the proceeds. Incremental costs directly attributable to the issue of new shares or options, or for the acquisition of a business, are not included in the cost of the acquisition as part of the purchase consideration.

In order to maintain or adjust the capital structure, the Company may issue new shares.

#### (iv) Options

Information relating to the Silex Systems Limited Employee Incentive Plan, including details of options issued, exercised and lapsed during the financial year and options outstanding at the end of the financial year, is set out in note 19(b).

#### (v) Performance Rights

Information relating to the Silex Systems Limited Employee Incentive Plan, including details of Performance Rights issued, vested/forfeited and lapsed during the financial year and rights outstanding at the end of the financial year, is set out in note 19(c).

#### (vi) Capital risk management

The Company's objectives when managing capital are to safeguard their ability to continue as a going concern and to maintain an optimal capital structure to reduce the cost of capital.

30 June 2023

### Note 10(b) Reserves

	2023 \$	2022 \$
Foreign currency translation reserve	338,748	(40,089)
Revaluation - Fair value through other comprehensive income	(3,237,250)	(1,763,566)
Transactions with non-controlling interests	(2,906,913)	(2,906,913)
Share-based payments reserve	17,142,735	15,753,841
	11,337,320	11,043,273

#### Movements in reserves:

	2023 \$	2022 \$
Foreign currency translation reserve		
Balance at the beginning of the financial year	(40,089)	(662,095)
Net exchange differences on translation of foreign controlled entity	378,837	622,006
Balance at the end of the financial year	338,748	(40,089)

Revaluation - Fair value through other comprehensive income	2023 \$	2022 \$
Balance at the beginning of the financial year	(1,763,566)	555,651
Differences on revaluation	(1,473,684)	(2,319,217)
Balance at the end of the financial year	(3,237,250)	(1,763,566)

	2023 \$	2022 \$
Transactions with non-controlling interests		
Balance at the beginning of the financial year	(2,906,913)	(2,906,913)
Balance at the end of the financial year	(2,906,913)	(2,906,913)

Share-based payments reserve	<b>2023</b> \$	2022 \$
Balance at the beginning of the financial year	15,753,841	15,015,616
Share-based payment expense	1,819,941	1,021,666
Transfer to share capital	(431,047)	(283,441)
Balance at the end of the financial year	17,142,735	15,753,841

#### Nature and purpose of reserves:

### a) Foreign currency translation reserve

Exchange differences arising on translation of the foreign controlled entity are taken to the foreign currency translation reserve, as described in note 23(c). The reserve is recognised in profit and loss when the net investment is disposed of.

30 June 2023

#### (vii) Revaluation - Fair value through other comprehensive income

Changes in the fair value of investments that are classified as fair value through other comprehensive income are recognised in Other comprehensive income and accumulated in a separate reserve within equity. Amounts are not reclassified to profit or loss when the associated assets are sold or impaired.

#### (viii) Transactions with non-controlling interests

This reserve is used to record the differences described in note 23(b) which may arise as a result of transactions with non-controlling interests that do not result in a loss of control.

#### (ix) Share-based payments reserve

The Share-based payments reserve is used to recognise:

The grant date fair value of options issued to employees and consultants but, not exercised;

The grant date fair value of deferred shares (i.e., performance rights) granted to employees but, not yet vested; and

The grant date fair value of shares to be issued.

### Note 10(c) Accumulated losses

	2023 \$	2022 \$
Accumulated losses at the beginning of the financial year	(232,040,553)	(222,576,131)
Net (loss) attributable to members of Silex Systems Limited	(17,361,292)	(9,464,422)
Accumulated losses at the end of the financial year	(249,401,845)	(232,040,553)

#### Note 11 Cash flow information

<ul> <li>a) Reconciliation of net (loss) after income tax to net cash (outflows)</li> <li>/ inflows from operating activities</li> </ul>	2023 \$	2022 \$
Net (loss) after income tax	(17,361,292)	(9,464,422)
Depreciation and amortisation	382,104	441,495
Non cash benefits expense - share-based payments	1,857,547	1,078,074
Net exchange differences	125,565	54,318
Share of net losses of joint ventures	16,147,128	7,952,325
(Increase) in prepayments and other current assets	(494,877)	(116,476)
(Increase) in trade and other debtors	(419,161)	(107,464)
(Increase) in accrued income - other	(2,727,896)	(81,123)
Increase in trade and other creditors	95,401	593,999
Increase in provisions	54,610	61,913
Net cash (outflows) / inflows from operating activities	(2,340,871)	412,639

#### b) Non-cash investing and financing activities

Details regarding Non-cash investing and financing activities are disclosed in other notes. The acquisition of right-of-use assets is detailed in note 9 and options and rights issued under the Silex Systems Limited Employee Incentive Plan in note 19.

30 June 2023

### Note 12 Critical accounting estimates and judgments

Estimates and judgements are continually evaluated and are based on historical experience and other factors, including expectations of future events that may have a financial impact on the entity and that are believed to be reasonable under the circumstances.

The Company makes estimates and assumptions concerning the future. The resulting accounting estimates will, by definition, seldom equal the related actual results.

The area involving significant estimates or judgements is the recognition of variable consideration (in the form of revenue royalties) from the sale of the cREO® technology (note 3).

### Note 13 Financial risk management

The Company's activities expose it to a variety of financial risks; market risk (including foreign exchange risk, interest rate risk and price risk), credit risk and liquidity risk. The Company's overall risk management program focuses on the unpredictability of financial markets and seeks to minimise potential adverse effects on the financial performance of the Company. The Company uses different methods to measure different types of risk to which it is exposed. These methods include sensitivity analysis in the case of interest rate and foreign exchange risk.

Risk management is carried out by senior management under policies approved by the Board of Directors. Senior management identifies, evaluates and manages financial risks. The Board provides principles for overall risk management, as well as policies covering specific areas, such as foreign exchange risk, interest rate risk and credit risk and investing excess liquidity.

#### a) 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 fair valued by comparing the contracted rate to the current market rate for a contract with the same remaining period to maturity. Any changes in fair values are taken to the income statement immediately.

The Company's policy is to hedge a proportion of its anticipated cash flows in USD. At year end, the Company held US\$4,100,000 forward exchange contracts with contractual dates up to December 2023 (2022: US\$1,650,000 of forward exchange up to October 2022) to purchase USD as part of its strategy to minimise the financial effects of foreign currency fluctuations. The Board monitors the Company's hedging strategy on a continuing basis. The fair value of derivative contracts outstanding at year end totals \$8,589 and is recorded in Trade and other payables (2022: \$158,603 in Trade and other receivables).

#### b) Market risk

#### (i) Foreign exchange risk

The Company operates internationally and is exposed to foreign exchange risk arising from currency exposures, primarily with respect to the USD.

Foreign exchange risk arises when future commercial transactions and recognised assets and liabilities are denominated in a currency that is not the Company's functional currency. The risk is measured using sensitivity analysis and cash flow forecasting.

The Company's exposure to USD foreign currency risk at the reporting date, expressed in Australian dollars, was as follows:

79

30 June 2023

	2023 AUD	2022 AUD
Cash and cash equivalents	512,686	923,236
Trade and other receivables	916,734	846,755
Forward exchange contracts - buy foreign currency	6,184,469	2,235,731

#### Profit or loss is sensitive to the value of the AUD compared to the USD.

	Impact on post-tax profit		Impact on other components of equit	
	2023 \$	2022 \$	2023 \$	2022 \$
AUD/USD - increase by 15%	(991,996)	(543,173)	(991,996)	(543,173)
AUD/USD - decrease by 15%	1,342,112	734,881	1,342,112	734,881

The Company also owns shares in IQE Plc, a UK based company, resulting from the 2015 Option, License and Assignment Agreement. IQE's shares are listed on the London Stock Exchange (GBP currency) (AIM: IQE). The impact of an increase or decrease in the AUD/GBP would not impact post-tax profits as it is accounted for in Other comprehensive income. The impact of a 15% increase in the AUD/GBP would decrease other components of equity by \$349,093 (2022: \$521,476) and a 15% decrease in the AUD/GBP would increase other components of equity by \$472,303 (2022: \$705,526).

#### (ii) Cash flow and fair value interest rate risk

As the Company has interest-bearing assets, the Company's income and operating cash flows are influenced by changes in market interest rates. Company policy is to maintain the majority of cash and cash equivalents at fixed rates by the use of term deposits.

The Company manages its cash flow interest rate risk by having a spread of maturity dates with different institutions.

As at the reporting date, the Company had the following variable interest rate cash and cash equivalents:

		30 June 2023		30 June 2022
	Weighted average interest rate %	Balance \$	Weighted average interest rate %	Balance \$
Cash and cash equivalents	4.39%	1,175,722	0.61%	4,680,495

Profit or loss is sensitive to higher / lower interest income from cash and cash equivalents as a result of changes in interest rates.

	Impact on post-tax profit Impact on other componen		components of equity	
	2023 \$	2022 \$	2023 \$	2022 \$
Interest rates - increase by 1.00%	88,832	4,269	88,832	4,269
Interest rates - decrease by 1.00%	(88,832)	(4,269)	(88,832)	(4,269)

#### (iii) Price risk

The Company's exposure to equity securities price risk arises from the Company's shares in IQE Plc, which are classified in the consolidated balance sheet as financial assets at fair value through other comprehensive income.

SILEX ANNUAL REPORT 2023

30 June 2023

The impact of an increase or decrease in the IQE share price would not impact post-tax profits as it is accounted for in Other comprehensive income. The impact of a 10% increase in IQE's share price would increase other components of equity by \$267,638 (2022: \$399,798) and a 10% decrease in IQE's share price would reduce other components of equity by \$267,638 (2022: \$399,798). The impact of a 20% increase in IQE's share price would increase other components of equity by \$535,276 (2022: \$799,596) and a 20% decrease in IQE's share price would reduce other components of equity by \$535,276 (2022: \$799,596).

#### c) Credit risk

Credit risk arises from cash and cash equivalents, term deposits, contract assets and receivables. The Company has a concentration of credit risk with its main receipts coming from GLE for Recoverable project costs, banks (interest income), government (Research and development tax incentive and CRC-P grant) and IQE Plc (in relation to the sale of the cREO® technology).

The Company has policies in place to ensure that transactions are with entities with an appropriate credit history. For banks and financial institutions, only independently rated parties with a minimum rating as approved by the Board are accepted. Cash transactions are limited to high credit quality financial institutions. The Company has policies that limit the amount of credit exposure to any one financial institution. As the Company holds a 51% interest in GLE, the credit risk is mitigated.

The credit quality of customers, banks and governments can be assessed by reference to external credit ratings (if available). If they are independently rated, these ratings are used. Otherwise, if there is no independent rating, the Company assesses the credit quality by taking into account the financial position, past experience and other factors.

#### Impairment of financial assets

While cash and cash equivalents are subject to the impairment requirements of AASB 9, the identified impairment loss was immaterial. All of the Company's term deposits (disclosed under AASB 9 as Other financial assets at amortised cost) are considered to have low credit risk given the credit ratings of the bank where the deposits are held. The Company has reviewed the credit ratings and corporate default rates of the various banks by credit rating agencies. Applying the expected credit loss model, the identified impairment loss was immaterial at 30 June 2023 (and at 30 June 2022).

	2023 \$	2022 \$
Cash and cash equivalents and other financial assets at amortised cost - term	deposits	
ANZ Banking Group Limited	45,375,722	27,281,264
Westpac Banking Corporation	42,000,000	-
National Australia Bank	49,000,000	5,500,000
Bendigo and Adelaide Bank Limited	-	2,000,000
Bank of Queensland	-	7,500,000
Bank of America	1,683,850	255,069
	138,059,572	42,536,333

Trade and other receivables are also subject to the expected credit loss model. Trade receivables includes \$677,840 (2022: \$nil) for royalties from the sale of the Company's cREO® technology. Impairment losses for accrued interest revenue and accrued Research and development tax incentive were immaterial at 30 June 2023 (and at 30 June 2022), after reviewing the credit ratings of the various banks (interest) and the Federal Government (Research and development tax incentive).

30 June 2023

#### d) Liquidity risk

Prudent liquidity risk management implies maintaining sufficient cash and marketable securities, the availability of funding through an adequate amount of committed credit facilities and the ability to close out market positions. The Company manages liquidity by continuously monitoring forecast and actual cash flows and matching the maturity profiles of financial assets and liabilities.

#### Financing arrangements

The Company had access to the following undrawn borrowing facilities at the reporting date:

	2023 \$	2022 \$
Floating rate		
Expiring within one year (documentary credit facility and visa facility)	200,000	200,000
	200,000	200,000

The borrowing facilities are a documentary credit facility and visa facility that may be drawn at any time and is subject to annual review.

#### Maturities of financial liabilities

The tables below analyses the Company's financial liabilities into relevant maturity groupings based on the remaining period at the reporting date to the contractual maturity date. The amounts disclosed in the tables are the contractual undiscounted cash flows.

At 30 June 2023	Less than 6 months \$	6-12 months \$	Between 1 and 2 years \$	Between 2 and 5 years \$	Over 5 years \$	Total contractual cash flows \$	Carrying Amounts (assets)/ liabilities \$
Non-derivatives							
Non-interest bearing	524,891	-	-	-	-	524,891	524,891
Lease liabilities	117,449	140,939	288,925	296,148	-	843,461	772,138
Total non-derivatives	642,340	140,939	288,925	296,148	-	1,368,352	1,297,029

At 30 June 2022	Less than 6 months	6-12 months \$	Between 1 and 2 years \$	Between 2 and 5 years \$	Over 5 years \$	Total contractual cash flows \$	Carrying Amounts (assets)/ liabilities \$
Non-derivatives							
Non-interest bearing	607,541	-	-	-	-	607,541	607,541
Lease liabilities	114,434	135,472	276,780	574,490	-	1,101,176	982,502
Total non-derivatives	721,975	135,472	276,780	574,490	-	1,708,717	1,590,043

### e) Fair value estimation

The fair value of financial assets and financial liabilities must be estimated for recognition and measurement or for disclosure purposes. The carrying value less impairment provision of trade receivables and payables are assumed to approximate their fair values due to their short-term nature. The fair value of financial liabilities for disclosure purposes is estimated by discounting the future contractual values at the current market interest rates that is available to the Company for similar instruments.

30 June 2023

### Note 14 Climate Change

In preparing these consolidated financial statements the group has considered the impact of climate change risks on the assets and liabilities recognised and presented within the consolidated financial statements. There is no material impact on the value of assets and liabilities at 30 June 2023 as a result of climate change risks. The Company is continuing to develop its assessment of the impact of climate change in line with emerging industry and regulatory guidance.

#### Note 15 Interests in other entities

#### a) Subsidiaries

The consolidated financial statements incorporate the assets, liabilities and results of the following subsidiaries in accordance with the accounting policy described in note 23(b).

Name of entity	Place of business/country of incorporation	Class of shares	<b>2023</b> %	<b>2022</b> %
Translucent Inc	US	Ordinary	100%	100%
		Total	100%	100%
Silex USA LLC	US	Interest	100%	100%
		Total	100%	100%

#### b) Interests in joint ventures

Set out below are details of the Global Laser Enrichment Holdings LLC (GLE Holdco) joint venture as at 30 June 2023, which is material to the Company:

	Place of business/country of incorporation	% of ownership interest		Nature of relationship	Measurement method	Carr	ying amount
Name of entity		2023	2022			2023	2022
Global Laser Enrichment Holdings LLC	USA	51%	51%	Joint venture	Equity method	3,630,471	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 commercial-scale pilot plant demonstration of the technology utilising the Test Loop Facility in Wilmington, NC. Cameco Corporation indirectly owns the remaining 49% of GLE Holdco

#### (i) Significant judgement: existence of joint control

In accordance with the Amended and Restated Limited Liability Company Agreement of GLE Holdco, decisions of the Governing Board are based on the voting of percentage of interests held by the GLE Holdco Governing Board Members. Silex's Governing Board Members hold a 51% interest and the Cameco Governing Board Members hold a 49% interest. The affirmative vote of Governing Board members representing greater than 51% of the total percentage interests is required for an affirmative vote. Therefore, Silex has joint control of GLE Holdco with Cameco.

83 SILEX ANNUAL REPORT 2023

30 June 2023

#### (ii) Commitments and contingent liabilities in respect of the GLE Holdco joint venture

	2023 \$	2022 \$
Commitments - joint ventures		
Commitment to provide funding for joint venture's capital commitments, if called	9,986,850	6,512,588
Contingent liabilities - joint venture		
Share of joint venture's contingent liabilities	-	-

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.

### (iii) Summarised financial information for GLE Holdco joint venture

The tables below provide summarised financial information for the GLE Holdco joint venture. The information disclosed reflects the amounts presented in the financial statements of GLE Holdco and not Silex's share of those amounts. The information has been amended to reflect adjustments made by the Company when using the equity method, including fair value adjustments and modifications for differences in accounting policy.

Summarised balance sheet	2023 \$	2022 \$
Current assets		
Cash and cash equivalents	11,021,801	8,923,862
Other current assets	2,267,678	625,447
Total current assets	13,289,479	9,549,309
Non-current assets	7,010,303	7,186,774
Total assets	20,299,782	16,736,083
Current liabilities		
Financial liabilities (excluding trade payables)	953,423	855,117
Other current liabilities	4,561,577	2,271,850
Total current liabilities	5,515,000	3,126,967
Non-current liabilities		
Financial liabilities (excluding trade payables)	7,622,529	7,463,276
Other non-current liabilities	43,683	24,669
Total non-current liabilities	7,666,212	7,487,945
Total liabilities	13,181,212	10,614,912
Net assets	7,118,570	6,121,171

30 June 2023

Reconciliation to carrying amounts	<b>2023</b> \$	2022 \$
Opening net assets	6,121,171	1,796,576
Additional capital contributed	32,552,792	19,908,492
(Loss) for the period	(31,662,507)	(15,592,794)
Other comprehensive income	107,114	8,897
Closing net assets	7,118,570	6,121,171
Company's share in %	51%	51%
Company's share in \$	3,630,471	3,121,797
Carrying amount	3,630,471	3,121,797

	2023 \$	2022
Summarised statement of comprehensive income		
Revenue	-	-
Interest income	63,839	-
Depreciation and amortisation	(1,398,774)	(1,169,800)
Interest expense	(134,876)	(148,393)
Income tax expense	-	-
(Loss) from continuing operations	(31,662,507)	(15,592,794)
(Loss) for the period	(31,662,507)	(15,592,794)
Other comprehensive income	107,114	8,897
Total comprehensive income	(31,555,393)	(15,583,897)

#### c) Transactions with non-controlling interests

There were no transactions with non-controlling interests in the current year or in the prior year.

### Note 16 Commitments for expenditure and guarantees

The Company did not have any Capital expenditure contracted at the reporting date that was not recognised as a liability (2022: \$nil). The Company has not provided any guarantees as at 30 June 2023 (2022: \$nil).

85

30 June 2023

### Note 17 Events occurring after reporting date

On 28 July 2023, Global Laser Enrichment LLC (GLE) entered into a lease for a new facility in Wilmington, NC that provides significant new space for the planned growth in the GLE team, for the construction of in-house manufacturing capability to support GLE's engineering operations and for the expected increase in commercial activities. 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. Refer note 15(b)(ii) for further details.

A new 3.5 year Quantum Silicon Production Project was announced on 17 August 2023 and is being undertaken in conjunction with partners Silicon Quantum Computing Pty Ltd (SQC) and UNSW Sydney (UNSW). The new Project was awarded \$5.1m in funding from the Defence Trailblazer: Concept to Sovereign Capability Program, a strategic partnership between the University of Adelaide and UNSW supported by the Department of Education through the Trailblazer Universities Program. The Project has a total budget of ~\$16m with Silex currently resolving other avenues of financial support for the Project.

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 this report.

### Note 18 Related party transactions

#### a) Subsidiaries

Interests in subsidiaries are set out in note 15(a).

#### b) Key management personnel compensation

	2023 \$	2022 \$
Short-term employee benefits	1,400,822	1,282,443
Post-employment benefits	73,138	74,375
Long-term benefits	5,782	32,790
Share-based payments	770,865	563,308
	2,250,607	1,952,916

#### c) Transactions with other related parties

The following transactions occurred with related parties:

	2023 \$	2022 \$
Contributions to superannuation funds on behalf of employees	349,558	290,524

30 June 2023

### Note 19 Share-based payments

#### a) Silex Systems Limited Employee Incentive Plan

The Silex Systems Limited Employee Incentive Plan (the Plan) was established in May 2019 by a resolution of the Silex Board. Shareholder approval of the Plan was renewed at the 2022 Annual General Meeting. All full-time and part-time staff and executive directors of the consolidated entity are eligible to participate in the Plan. The Company established the Plan to encourage employees to share in the ownership of the Company and to promote the long-term success of the Company as a goal shared by all employees. In accordance with the Plan, an award of options, performance rights or exempt share awards may be granted.

Participation in the Plan is at the Board's discretion and no individual has a contractual right to participate in the Plan or to receive any guaranteed benefits.

#### b) Options

Under the Plan, options issued were granted for no consideration. The options granted to staff are for a five-year period and become exercisable after three years of the date of the grant. The options granted to executive KMP in the prior year are with respect to multi-year performance periods ending between 25 June 2024 and 30 June 2027 for the CEO/MD and between 30 June 2024 and 30 June 2026 for the CFO/Company Secretary. The options expire approximately two years following expiry of the various performance periods. The options lapse if the holder ceases to be an eligible employee other than by reason of death or permanent disablement, unless the Board determines otherwise in its absolute discretion. Options granted under the plan carry no dividend or voting rights.

When exercisable, each option is convertible into one ordinary share. The exercise price of options is based on the volume weighted average price at which the Company's shares are traded on the Australian Stock Exchange for the 10-trading days before the options are granted or for the 10-trading days preceding a Board resolution to grant options. Amounts received on the exercise of options are recognised as share capital. Set out below are summaries of options granted under the Plan including the options outstanding at the end of the year:

#### Consolidated and parent entity - 2023

Grant date	Expiry date	Exercise price (cents)	Balance at start of year (Number)	Issued during the year (Number)	Lapsed/ forfeited during the year (Number)	Exercised during the year (Number)	Balance at end of the year (Number)	Exercisable at the end of year (Number)
21/05/2019	20/05/2024	35	140,000	-	(15,831)	(4,169)	120,000	120,000
01/04/2020	31/03/2025	21	660,000	-	(66,188)	(366,812)	227,000	227,000
23/11/2020	22/11/2025	57	150,000	-	-	-	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	-
17/04/2023	16/04/2028	377	-	650,000	-	-	650,000	-
			3,600,000	650,000	(82,019)	(370,981)	3,797,000	497,000
Weighted aver	rage exercise p	rice	\$0.88	\$3.77	\$0.24	\$0.21	\$1.46	\$0.35

30 June 2023

#### Consolidated and parent entity - 2022

Grant date	Expiry date	Exercise price (cents)	Balance at start of year (Number)	Issued during the year (Number)	Lapsed/ forfeited during the year (Number)	Exercised during the year (Number)	Balance at end of the year (Number)	Exercisable at the end of year (Number)
21/05/2019	20/05/2024	35	500,000	-	(35,028)	(324,972)	140,000	140,000
02/12/2019	01/12/2024	35	100,000	-	-	(100,000)	-	-
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	-
			2,410,000	1,650,000	(35,028)	(424,972)	3,600,000	140,000
Weighted aver	age exercise prid	ce	\$0.68	\$1.03	\$0.35	\$0.35	\$0.88	\$0.35

The market price of shares under option at 30 June 2023 was \$3.94 (2022: \$2.10). The weighted average remaining contractual life of share options outstanding at the end of the period was 3.6 years (2022: 4.1 years).

### Fair value of options granted

The assessed fair value at grant date of options granted during the year ended 30 June 2023 was determined using a Binomial option pricing model that takes into account the exercise price, the term of the option, the impact of dilution, the share price at grant date and expected price volatility of the underlying share, the expected dividend yield and the risk-free interest rate for the term of the options.

Set out below is a summary of options granted under the Plan, together with the model inputs applied to assess the fair value of options at grant date:

Fair value (cents)	Grant date	Vesting date	Exercise Price (cents)	Expiry date	Share price at grant date (cents)	Expected volatility	Expected dividend yield	Risk-free interest rate	Days to expiration
192.85	17/04/2023	17/04/2026	377	16/04/2028	345	77%	-	3.20%	1,460
*148.49	17/04/2023	17/04/2026	377	16/04/2028	345	77%	-	3.20%	1,460

<sup>\*</sup> A discount of 23.0% for lack of marketability was applied to these options granted 17 April 2023, as these options have a 2-year restriction on trading from the date of exercise.

30 June 2023

The assessed fair value of options at grant date and the model inputs for options issued in the prior year included the following:

Fair value (cents)	Grant date	Vesting date	Exercise Price (cents)	Expiry date	Share price at grant date (cents)	Expected volatility	Expected dividend yield	Risk-free interest rate	Days to expiration
*43.21	26/07/2021	30/06/2024	94	28/10/2026	102	73%	-	0.49%	1,435
*47.14	26/07/2021	30/06/2025	94	30/06/2027	102	73%	-	0.64%	1,800
*49.04	26/07/2021	30/06/2026	94	30/06/2028	102	70%	-	0.75%	2,165
*72.49	14/10/2021	25/06/2024	94	28/10/2026	146	73%	-	0.79%	1,396
*72.49	14/10/2021	30/06/2024	94	28/10/2026	146	73%	-	0.79%	1,396
*77.27	14/10/2021	30/06/2025	94	28/10/2027	146	73%	-	1.01%	1,761
*79.65	14/10/2021	30/06/2026	94	28/10/2028	146	70%	-	1.16%	2,126
*83.08	14/10/2021	30/06/2027	94	28/10/2029	146	70%	-	1.30%	2,492
74.35	18/03/2022	18/03/2025	119	17/03/2027	130	74%	-	2.03%	1,460

<sup>\*</sup> A discount of 22.5% for lack of marketability was applied to these options granted 26 July 2021 and 14 October 2021, as these options have a 2-year restriction on trading from the date of exercise.

The expected price volatility is based on the historical volatility adjusted for any expected changes to future volatility due to publicly available information.

#### c) Performance Rights

The rights issued under the Plan were subject to performance-based and service-based vesting conditions. Rights convert into one ordinary share each on vesting at an exercise price of \$nil, subject to the satisfaction of vesting conditions. If an employee ceases to be employed by the Company during the vesting period, the rights will be forfeited, except in limited circumstances that are at the discretion of the Board.

Set out below is a summary of performance rights granted under the Plan:

#### Consolidated and parent entity - 2023

Grant date	Exercise Price	Balance at start of year (Number)	Issued during the year (Number)	Lapsed/ forfeited during the year (Number)	Exercised during the year (Number)	Balance at end of the year (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

30 June 2023

#### Consolidated and parent entity - 2022

Grant date	Exercise Price	Balance at start of year (Number)	Issued during the year (Number)	Lapsed/ forfeited during the year (Number)	Exercised during the year (Number)	Balance at end of the year (Number)
25/09/2020	Nil	390,000	-	(85,060)	(304,940)	-
23/11/2020	Nil	100,000	-	(23,000)	(77,000)	-
26/07/2021	Nil	-	70,000	-	-	70,000
14/10/2021	Nil	-	487,500	-	-	487,500
25/10/2021	Nil	-	250,000	-	-	250,000
		490,000	807,500	(108,060)	(381,940)	807,500

The model inputs for the rights granted during the year ended 30 June 2023 (with the 26 August 2022 issue listed first, the 30 August 2022 next and the 21 November 2022 issue last - unless advised otherwise) included the following, and for those rights that had market conditions, additional inputs were applied to the Monte Carlo simulation that used to value these rights:

- (i) Rights granted for no consideration
- (ii) Exercise price: \$nil
- (iii) Grant date: 26 August 2022, 30 August 2022 and 21 November 2022 (2022: 26 July 2021, 14 October 2021 and 25 October 2021)
- (iv) Vesting date: 31 July 2023 for all issues (2022: 31 July 2022, except for the CEO/MD's Extended LTI rights which have a vesting date of no later than 31 December 2025)
- (v) Share price at grant date: \$3.58, \$3.59 and \$3.13 (2022: \$1.02, \$1.46, and \$1.455)
- (vi) Expected dividend yield: nil for all issues in the current and prior year

The fair value of rights granted on 26 August 2022 was \$3.177 and the fair value of rights granted on 21 November 2022 was \$2.426. An 11.25% discount for lack of marketability was applied to the rights granted on 26 August 2022, as the rights have a 1-year restriction on trading following conversion of vested rights to ordinary shares. A 22.5% discount for lack of marketability was applied to the rights granted on 21 November 2022 as the rights have a 2-year restriction on trading following conversion of the vested rights to ordinary shares.

Some of the rights issued on 30 August 2022 had market conditions and a Monte Carlo simulation approach was used to value these rights. Additional inputs included: expected volatility of 80%; a risk-free rate of 1.55%; and a discount for lack of marketability of 23%. The fair value of rights granted on 30 August 2022 that have market conditions was \$1.77 and the fair value of rights granted on 30 August 2022 that do not have market conditions was \$2.764. The fair values were estimated taking the market price of the Company's shares on the grant date and noting that no dividends were expected to be received during the vesting period.

With regard to rights granted in the prior year, the fair value of rights granted on 26 July 2021 that do not have market conditions was \$0.791 and the fair value of rights granted on 26 July 2021 that have market conditions was \$0.51. The fair value of rights granted on 14 October 2021 that do not have market conditions was \$1.132 and the fair value of rights granted on 14 October 2021 that have market conditions was \$0.721. The fair value of rights granted on 25 October 2021 was \$1.291. The fair values were estimated taking the market price of the Company's shares on the grant date and noting that no dividends were expected to be received during the vesting period. A 22.5% discount for lack of marketability was applied to the rights granted on 26 July 2021 and 14 October 2021 as the rights have a 2-year restriction on trading following conversion of the vested rights to ordinary shares.

30 June 2023

An 11.25% discount for lack of marketability was applied to the rights granted on 25 October 2021 as the rights have a 1-year restriction on trading following conversion of the vested rights to ordinary shares.

With respect to the fair value of the 300,000 Extended LTI rights that were granted to the CFO/Company Secretary on 21 June 2022, a Monte Carlo simulation approach was used to value the rights. 300,000 rights with market conditions (i.e., 4 tranches of 75,000 rights with vesting dates of 30 June 2023, 30 June 2024, 30 June 2025 and 30 June 2026) were granted to the CFO/Company Secretary for no consideration and have an exercise price of \$nil. Additional inputs include: share price at grant date of \$1.865; expected volatility of 75%; and expected risk-free interest rates between 2.87% and 3.69%. A 22.5% discount for lack of marketability was applied. The fair value has been calculated at \$0.742, \$0.808, \$0.809 and \$0.835.

#### d) Shares granted to the Chair (as approved at the 2021 AGM)

The Silex Chair also serves as the Chair of the GLE Holdco Governing Board until 31 December 2023. In view of the additional work load and responsibility associated with the role of GLE Chair, it was resolved to pay additional directors' fees from 1 January 2021. As per shareholder approval granted at the 2021 AGM, 50% of the annual fees for the 3-year tenure have been paid via the issue of Silex shares. 84,507 shares at the 10-trading day volume weighted average price at which the Company's shares traded on the Australian Stock Exchange preceding 17 December 2020, being \$0.71, were issued on 8 November 2021. A proportion of the shares will vest annually in line with the completion of each year of service through to 31 December 2023. 28,169 shares vested on 31 December 2021 and a further 28,169 shares vested on 31 December 2022. The assessed fair value of the shares is based on the share price on 8 November 2021 of \$1.335.

#### e) Options issued to consultants

50,000 options were granted to a consultant on 25 August 2022. The assessed fair value at grant date of 182 cents was determined using a Binomial option pricing model. Inputs included: an exercise price of 319 cents; share price at grant date of 371 cents; volatility of 80%; a risk-free interest rate of 3.15%; and 730 days to expiration. 37,500 options were exercisable at 30 June 2023; however, no options were exercised during the year and therefore the balance of options as at 30 June 2023 was 50,000.

#### f) Expenses arising from share-based transactions

Total expenses arising from share-based payment transactions recognised during the period as part of remuneration expense were as follows:

	2023 \$	<b>2022</b> \$
Options granted and to be granted	732,986	519,067
Performance rights granted and to be granted	1,086,955	512,569
Shares granted in lieu of directors' fees	37,606	46,408
	1,857,547	1,078,044

30 June 2023

#### Note 20 Remuneration of auditors

During the year the following fees were paid or payable for services provided by PricewaterhouseCoopers Australia (PwC) as auditor of the parent entity, Silex Systems Limited, its related practices and non-audit firms:

	2023 \$	2022
(a) Auditors of the Company - PwC		
Audit and review of financial reports		
Company	124,000	96,300
Total remuneration for audit services	124,000	96,300
Other assurance services		
Audit of CRC-P Grant	32,400	-
Total remuneration for other assurance services	32,400	-
Total remuneration for audit and assurance services	156,400	96,300
(b) Other services		
Consulting services	277,578	-
Total services provided by PwC	433,978	96,300

### Note 21 Earnings per share

#### a) Basic earnings per share

	2023 Cents	2022 Cents
Total basic earnings per share attributable to the ordinary equity holders of the Company	(8.1)	(4.8)

Basic earnings per share is calculated by dividing the profit/(loss) attributable to equity holders of the Company, excluding any costs of servicing equity other than ordinary shares, by the weighted average number of ordinary shares outstanding during the financial year, adjusted for bonus elements in ordinary shares issued during the year.

#### b) Diluted earnings per share

	2023 Cents	2022 Cents
Total diluted earnings per share attributable to the ordinary equity holders of the Company	(8.1)	(4.8)

Diluted earnings per share adjusts the figures used in the determination of basic earnings per share to take into account the after-income tax effect of interest and other financing costs associated with dilutive potential ordinary shares, and the weighted average number of shares assumed to have been issued for no consideration in relation to dilutive potential ordinary shares.

30 June 2023

#### c) Reconciliation of earnings used in calculating earnings per share

	2023 \$	2022
Basic earnings per share		
(Loss) attributable to the ordinary equity holders of the Company used in calculating basic earnings per share	(17,361,292)	(9,464,422)
Diluted earnings per share		
(Loss) attributable to the ordinary equity holders of the Company used in calculating basic earnings per share	(17,361,292)	(9,464,422)

#### d) Weighted average number of shares used in the denominator

	2023 Number	2022 Number
Weighted average number of ordinary shares on issue used in the calculation of basic earnings per share:	214,689,478	196,045,799
Weighted average number of ordinary shares on issue used in the calculation of diluted earnings per share:	214,689,478	196,045,799

#### e) Information concerning the classification of securities

Options and performance rights granted in the current and prior years were not included in the calculation of diluted earnings per share as they are anti-dilutive for the year ended 30 June 2023. The options and performance rights could potentially dilute basic earnings per share in the future.

Further information about options and performance rights is included in note 19.

30 June 2023

### Note 22 Parent entity financial information

### a) Summary financial information

The individual financial statements for the parent entity show the following aggregate amounts:

	2023 \$	2022 \$
Balance Sheet		
Current assets	142,264,690	45,312,985
Total assets	143,307,488	46,625,394
Current liabilities	2,865,438	2,706,517
Total liabilities	3,495,406	3,559,673
Net assets	139,812,082	43,065,721

Shareholders' equity		
Issued capital	386,753,717	271,543,434
Reserves		
Share-based payments	16,947,861	15,558,967
Accumulated losses	(263,889,496)	(244,036,680)
Total equity	139,812,082	43,065,721
Net (loss) for the period	(19,852,816)	(10,033,715)
Total comprehensive income	(19,852,816)	(10,033,715)

The Net (loss) for the period above differs from the segment result disclosed in note 2 as the segment result excludes exchange gains and losses on intercompany loans (which eliminate on consolidation), write-downs of intercompany loans (which eliminate on consolidation) and impairment charges for investments in subsidiaries (which eliminate on consolidation).

### b) Guarantees entered into by the parent company

The parent has provided \$nil guarantees as at 30 June 2023 (2022: \$nil).

#### c) Contractual commitments for the acquisition of property, plant or equipment

As at 30 June 2023 (and 30 June 2022), the parent entity did not have any contractual commitments for the acquisition of property, plant or equipment.

#### d) Basis of preparation

This parent entity financial information has been prepared on the same basis as the consolidated financial statements except as set out below:

30 June 2023

#### Investments in subsidiaries, associates and joint venture entities

Investments in subsidiaries, associates and joint venture entities are accounted for at cost in the financial statements of Silex Systems Limited. Dividends received from associates are recognised in the parent entity's profit or loss, rather than being deducted from the carrying amount of these investments.

### Note 23 Summary of significant accounting policies

This note provides a list of the significant accounting policies adopted in the preparation of these consolidated financial statements to the extent that they have not already been disclosed in the other notes above. These policies have been consistently applied to all the years presented, unless otherwise stated. The financial statements are for the group consisting of Silex Systems Limited and its subsidiaries.

#### a) Basis of preparation

These general purpose financial statements have been prepared in accordance with Australian Accounting Standards and Interpretations issued by the Australian Accounting Standards Board and the *Corporations Act 2001*. Silex Systems Limited is a for-profit entity for the purposes of preparing the financial statements.

#### (i) Compliance with IFRS

The consolidated financial statements of the Silex Systems Limited group also comply with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB).

#### (ii) Historical cost convention

These financial statements have been prepared on a historical cost basis, except for Financial assets at fair value through other comprehensive income which are measured at fair value.

#### (iii) New standards and interpretations not yet adopted

Certain new accounting standards, amendments to accounting standards and interpretations have been published that are not mandatory for 30 June 2023 reporting periods and have not been adopted early by the Company. These standards, amendments or interpretations are not expected to have a material impact on the entity in the current or future reporting periods and on foreseeable future transactions.

#### b) Principles of consolidation and equity accounting

### (i) Subsidiaries

The consolidated financial statements incorporate the assets and liabilities of all subsidiaries of Silex Systems Limited (the parent entity) as at 30 June 2023 and the results of all subsidiaries for the year then ended. Silex Systems Limited and its subsidiaries together are referred to in this financial report as the Company, Silex, the consolidated entity or the group.

Subsidiaries are all those entities over which the Company has control, being the power to govern the financial and operating policies, generally accompanying a shareholding of more than one half of the voting rights. The existence and effect of potential voting rights that are currently exercisable or convertible are considered when assessing whether the Company controls another entity. Subsidiaries are fully consolidated from the date on which control is transferred to the Company. They are deconsolidated from the date that control ceases. The acquisition method of accounting is used to account for business combinations by the Company.

Intercompany transactions, balances and unrealised gains on transactions between group companies are eliminated. Unrealised losses are also eliminated unless the transaction provides evidence of the impairment of the asset transferred. Accounting policies of subsidiaries have been changed where necessary to ensure consistency with the policies adopted by the Company.

30 June 2023

Non-controlling interests in the results and equity of subsidiaries are shown separately in the consolidated income statement, consolidated statement of comprehensive income, consolidated statement of changes in equity and consolidated balance sheet respectively.

#### (ii) Joint arrangements

Under AASB 11 *Joint Arrangements* investments in joint arrangements are classified as either joint operations or joint ventures. The classification depends on the contractual rights and obligations of each investor, rather than the legal structure of the joint arrangement.

The Company's investment in GLE Holdco is a joint venture. Interests in joint ventures are accounted for using the equity method, after initially being recognised at cost in the consolidated balance sheet.

#### (iii) Equity method of accounting for joint ventures

Under the equity method of accounting, the investments are initially recognised at cost and adjusted thereafter to recognise the Company's share of the post-acquisition profits or losses of the investee in profit or loss, and the Company's share of movements in Other comprehensive income of the investee in Other comprehensive income. Dividends received or receivable from joint ventures are recognised as a reduction in the carrying amount of the investment.

Where the Company's share of losses in an equity-accounted investment equals or exceeds its interest in the entity, including any other unsecured long-term receivables, the Company does not recognise further losses, unless it has incurred obligations or made payments on behalf of the other entity.

Unrealised gains on transactions between the Company and its joint ventures are eliminated to the extent of the Company's interest in these entities. Unrealised losses are also eliminated unless the transaction provides evidence of an impairment of the asset transferred. Accounting policies of equity-accounted investees have been changed where necessary to ensure consistency with the policies adopted by the Company.

The carrying amount of equity-accounted investments is tested for impairment in accordance with the policy described in note 23(h).

#### (iv) Changes in ownership interests

The Company treats transactions with non-controlling interests that do not result in a loss of control, as transactions with equity owners of the Company. A change in ownership interest results in an adjustment between the carrying amounts of the controlling and non-controlling interests to reflect their relative interests in the subsidiary. Any difference between the amount of the adjustment to non-controlling interests and any consideration paid or received is recognised in a separate reserve within equity attributable to owners of Silex Systems Limited.

When the Company ceases to consolidate or equity account for an investment because of a loss of control, joint control or significant influence, any retained interest in the entity is remeasured to its fair value with the change in carrying amount recognised in profit or loss. This fair value becomes the initial carrying amount for the purposes of subsequently accounting for the retained interest as an associate, joint venture or financial asset. In addition, any amounts previously recognised in Other comprehensive income in respect of that entity are accounted for as if the Company had directly disposed of the related assets or liabilities. This may mean that amounts previously recognised in Other comprehensive income are reclassified to profit or loss.

If the ownership interest in a joint venture or an associate is reduced but joint control or significant influence is retained, only a proportionate share of the amounts previously recognised in Other comprehensive income are reclassified to profit or loss where appropriate.

30 June 2023

#### c) Foreign currency translation

#### (i) Functional and presentation currency

Items included in the financial statements of each of the Company's entities are measured using the currency of the primary economic environment in which the entity operates (the functional currency). The consolidated financial statements are presented in Australian dollars, which is Silex Systems Limited's functional and presentation currency.

#### (ii) Transactions and balances

Foreign currency transactions are translated into the functional currency using the exchange rates prevailing at the dates of the transactions. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at year end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognised in the consolidated income statement.

#### (iii) Group companies

The results and financial position of all the group entities (none of which has the currency of a hyperinflationary economy) that have a functional currency different from the presentation currency are translated into the presentation currency as follows:

- assets and liabilities for each balance sheet presented are translated at the closing rate at the date of that balance sheet;
- income and expenses for each income statement and statement of comprehensive income are translated
  at average exchange rates (unless this is not a reasonable approximation of the cumulative effect of the
  rates prevailing on the transaction dates, in which case income and expenses are translated at the dates
  of the transactions); and
- all resulting exchange differences are recognised in Other comprehensive income.

On consolidation, exchange differences arising from the translation of any net investment in foreign entities, and of borrowings, are recognised in Other comprehensive income. The Company's funding of its investment in its subsidiaries has been deemed part of its net investment. When a foreign operation is sold or borrowings forming part of the net investment are repaid, a pr oportionate share of such exchange differences are recognised in the consolidated income statement as part of the gain or loss on sale.

#### d) Revenue recognition

The accounting policies for the Company's revenue from contracts with customers are explained in note 3

#### e) Government grants and Research and development tax incentive income

Grants from the government are recognised at their fair value where there is a reasonable assurance that the grant will be received and the group will comply with all attached conditions. Note 4 provides further information on how the Company accounts for government grants. Research and development tax incentive income is based on eligible activities in the period.

30 June 2023

#### f) Income tax

The income tax expense or credit for the period is the tax payable on the current period's taxable income based on the applicable income tax rate for each jurisdiction adjusted by changes in deferred tax assets and liabilities attributable to temporary differences and to unused tax losses.

Deferred tax assets and liabilities are recognised for temporary differences at the tax rates expected to apply when the assets are recovered or liabilities are settled, based on those tax rates which are enacted for each jurisdiction. The relevant tax rates are applied to the cumulative amounts of deductible and taxable temporary differences to measure the deferred tax asset or liability. An exception is made for certain temporary differences arising from the initial recognition of an asset or a liability. No deferred tax asset or liability is recognised in relation to these temporary differences if they arose in a transaction, other than a business combination, that at the time of the transaction did not affect either accounting profit or taxable profit or loss.

Deferred tax assets are recognised for deductible temporary differences and unused tax losses only if it is probable that future taxable amounts will be available to utilise those temporary differences and losses.

Deferred tax liabilities and assets are not recognised for temporary differences between the carrying amount and tax bases of investments in controlled entities where the parent entity is able to control the timing of the reversal of the temporary differences and it is probable that the differences will not reverse in the foreseeable future.

Current and deferred tax balances attributable to amounts recognised directly in equity are also recognised directly in equity.

#### g) Leases

The Company's leasing policy is described in note 9(c).

#### h) Impairment of assets

Goodwill and intangible assets that have an indefinite useful life are not subject to amortisation and are tested annually for impairment, or more frequently if events or changes in circumstances indicate they might be impaired. Other assets are tested for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognised for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs to sell and value in use. For the purposes of assessing impairment, assets are grouped at the lowest levels for which there are separately identifiable cash flows (cash generating units). Non-financial assets other than goodwill that suffered an impairment are reviewed for possible reversal of the impairment at the end of each reporting period.

30 June 2023

#### i) Investments and other financial assets

#### (i) Classification

The Company classifies its financial assets in the following categories:

- those to be measured subsequently at fair value (either through Other comprehensive income (OCI) or through profit or loss); and
- those to be at amortised cost.

The classification depends on the Company's business model for managing the financial assets and the contractual terms of the cash flows.

For assets measured at fair value, gains and losses will either be recorded in profit or loss or OCI. For investments in equity instruments that are not held for trading, this will depend on whether the Company has made an irrevocable election at the time of initial recognition to account for the equity investment at fair value through other comprehensive income (FVOCI).

The Company reclassifies debt investments when and only when its business model for managing those assets changes.

#### (ii) Recognition and derecognition

Regular way purchases and sales of financial assets are recognised on trade date, being the date on which the Company commits to purchase or sell the asset. Financial assets are derecognised when the rights to receive cash flows from the financial assets have expired or have been transferred and the Company has transferred substantially all the risks and rewards of ownership.

#### (iii) Measurement

At initial recognition, the Company measures a financial asset at its fair value plus, in the case of a financial asset not at fair value through profit or loss (FVPL), transaction costs that are directly attributable to the acquisition of the financial asset. Transaction costs of financial assets at fair value through profit or loss are expensed in profit or loss.

#### **Debt instruments**

Subsequent measurement of debt instruments depends on the Company's business model for managing the asset and the cash flow characteristics of the asset. There are three measurement categories into which the Company classifies its debt instruments:

#### a) Amortised cost:

Assets that are held for collection of contractual cash flows where those cash flows represent solely payments of principal and interest are measured at amortised cost. Interest revenue from these financial assets is included in revenue using the effective interest rate method. Any gain or loss arising on derecognition is recognised directly in profit or loss and presented in other gains/(losses) together with foreign exchange gains and losses. Impairment losses are presented as separate line item in the statement of profit or loss.

#### b) FVOCI:

Assets that are held for collection of contractual cash flows and for selling the financial assets, where the assets' cash flows represent solely payments of principal and interest, are measured at FVOCI. Movements in the carrying amount are taken through OCI, except for the recognition of impairment gains or losses, interest income and foreign exchange gains and losses which are recognised in profit or loss. When the financial asset is derecognised, the cumulative gain or loss previously recognised in OCI is reclassified from equity to profit or loss and recognised in other gains/(losses). Interest income from these financial assets is included in finance income using the effective interest rate method. Foreign exchange gains and losses are presented in other gains/(losses) and impairment expenses are presented as a separate line item in the statement of profit or loss.

30 June 2023

#### c) FVPL:

Assets that do not meet the criteria for amortised cost or FVOCI are measured at FVPL. A gain or loss on a debt investment that is subsequently measured at FVPL is recognised in profit or loss and presented net within other gains/(losses) in the period in which it arises.

#### **Equity instruments**

The Company subsequently measures all equity investments at fair value. Where the Company's Management has elected to present fair value gains and losses on equity investments in OCI, there is no subsequent reclassification of fair value gains and losses to profit or loss following the derecognition of the investment. Dividends from such investments is recognised in profit or loss as other income when the group's right to receive payments is established.

Changes in the fair value of financial assets at FVPL are recognised in other gains/(losses) in the statement of profit or loss as applicable. Impairment losses (and reversal of impairment losses) on equity investments measured at FVOCI are not reported separately from other changes in fair value.

#### (iv) Impairment

The Company assesses on a forward-looking basis, the expected credit losses associated with its debt instruments carried at amortised cost and FVOCI. The impairment methodology applied depends on whether there has been a significant increase in credit risk. Refer note 13(c) for further details.

#### j) Measurement and fair value estimation

The fair value of financial assets and financial liabilities must be estimated for recognition and measurement or for disclosure purposes. The fair value of financial instruments traded in active markets (such as publicly traded derivatives, and trading and available for sale securities) is based on quoted market prices at the balance sheet date.

The fair value of financial instruments that are not traded in an active market (for example, over the counter derivatives) is determined using valuation techniques. The Company uses a variety of methods and makes assumptions that are based on market conditions existing at each balance date. Quoted market prices or dealer quotes for similar instruments are used for long term debt instruments held. Other techniques, such as estimated discounted cash flows, are used to determine fair value for the remaining financial instruments. The fair value of forward exchange contracts is determined using forward exchange market rates at the balance sheet date.

The nominal value less estimated credit adjustments of trade receivables and payables are assumed to approximate their fair values. The fair value of financial liabilities for disclosure purposes is estimated by discounting the future contractual cash flows at the current market interest rate that is available to the Company for similar financial instruments.

#### k) Employee benefits

#### (i) Wages and salaries, annual leave and personal leave

Liabilities for wages and salaries, including non monetary benefits and annual leave are recognised in other payables in respect of employees' services up to the reporting date and are measured at the amounts expected to be paid when the liabilities are settled. Liabilities for non accumulating personal leave are recognised when the leave is taken and measured at the rates paid or payable.

#### (ii) Long service leave

The liability for long service leave is recognised in the provision for employee benefits and measured as the present value of expected future payments to be made in respect of services provided by employees up to the reporting date using the projected unit credit method. Consideration is given to expected future wage and salary levels, experience of employee departures and periods of service. Expected future payments are discounted using market yields at the reporting date on national government bonds with terms to maturity and currency that match, as closely as possible, the estimated future cash outflows.

30 June 2023

#### (iii) Retirement benefit obligations

Employees of the Company are entitled to benefits on retirement, disability or death from the Company's defined contribution retirement plans. The fund receives fixed contributions from the Company and the Company's legal or constructive obligation is limited to these contributions. Contributions to the defined contribution fund are recognised as an expense as they become payable.

#### (iv) Share-based payments

Share based compensation benefits have been provided to employees via the Silex Systems Limited Employee Incentive Plan (the Plan) which was established in May 2019. Information relating to the Plan is set out in note 19.

#### **Options**

The fair value of options granted under the Plan are recognised as an employee benefit expense with a corresponding increase in equity in the share-based payments reserve. The fair value is measured at grant date and recognised over the period during which the employees become unconditionally entitled to the options.

The fair value at grant date is determined using a Binomial option pricing model that takes into account the exercise price, the term of the option, the vesting and performance criteria, the impact of dilution, the non tradeable nature of the option, the share price at grant date and expected price volatility of the underlying share, the expected dividend yield and the risk free interest rate for the term of the option.

The fair value of the options granted excludes the impact of any non market vesting conditions. Non market vesting conditions are included in assumptions about the number of options that are expected to become exercisable. At each balance sheet date, the Company revises its estimate of the number of options that are expected to become exercisable. The employee benefit expense recognised each period takes into account the most recent estimate.

Upon the exercise of options, the relevant balance of the share based payments reserve is transferred to share capital.

#### **Performance Rights**

Performance Rights granted under the Plan are a right to acquire fully paid ordinary shares in the Company for \$nil consideration, subject to meeting certain pre-determined key performance indicators and vesting conditions. These may be used as a short-term or long-term incentive vehicle. For Performance Rights with non-market vesting conditions, the estimated number of rights that will vest are revised at the end of each reporting period and adjustments are recognised in profit or loss and the share-based payments reserve. For Performance Rights with market vesting conditions, the fair value at grant date is calculated using a Monte Carlo simulation and recognised in profit or loss. No adjustment is made for the estimated number of rights that will vest at each reporting date as this has already been factored into the grant date fair value of the rights.

The fair value is recognised over the relevant service period.

#### Shares in lieu of cash for Directors' Fees

Shares may be granted to directors in lieu of cash for services performed (subject to shareholder approval). The fair value of the shares is calculated on the grant date. The expense is recognised in the profit or loss over the service period to which the issue of shares relates to. The amount relating to future periods (unearned amount) is included in Trade and other receivables.

#### (v) Termination benefits

Termination benefits are payable when employment is terminated before the normal retirement date, or when an employee accepts voluntary redundancy in exchange for these benefits. The Company recognises termination benefits when it is demonstrably committed to either terminating the employment of current employees according to a detailed formal plan without possibility of withdrawal or to providing termination benefits as a result of an offer made to encourage voluntary redundancy.

101 SILEX ANNUAL REPORT 2023

30 June 2023

#### I) Goods and Services Tax (GST)

Revenues, expenses and assets are recognised net of the amount of associated GST, unless the GST incurred is not recoverable from the taxation authority. In this case it is recognised as part of the cost of acquisition of the asset or as part of the expense.

Receivables and payables are stated inclusive of the amount of GST receivable or payable. The net amount of GST receivable from, or payable to, the taxation authority is included with other receivables or payables in the consolidated balance sheet.

Cash flows are presented on a gross basis. The GST components of cash flows arising from investing or financing activities which are recoverable from, or payable to the taxation authority, are presented as operating cash flow.

#### m) Research and development costs

Expenditure on research activities, undertaken with the prospect of obtaining new scientific or technical knowledge and understanding, is recognised in the consolidated income statement as an expense when it is incurred.

Costs incurred on development projects relating to the design and testing of new or improved products are recognised as intangible assets when it is probable that the project will be a success considering its commercial and technical feasibility and its costs can be measured reliably. Other expenditure that does not meet these expenditure criteria are recognised as an expense as incurred. Given the stage of development of the Company's technologies, research and development costs are expensed as incurred.

#### n) Contributed equity

Ordinary shares are classified as equity. Incremental costs directly attributable to the issue of new shares or options are shown in equity as a deduction, net of tax, from the proceeds.

# **Directors' declaration**

30 June 2023

In the directors' opinion:

- a) the financial statements and notes set out on pages 53 to 102 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 30 June 2023 and of its performance for the financial year ended on that date; and
- b) there are reasonable grounds to believe that the Company will be able to pay its debts as and when they become due and payable.

Note 23(a) confirms that the financial statements also comply with International Financial Reporting Standards as issued by the International Accounting Standards Board.

The directors have been given the declarations by the Chief Executive Officer and Chief Financial Officer required by section 295A of the *Corporations Act 2001*.

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

Dr M P Goldsworthy

CEO/MD

Sydney, 23 August 2023

Mr C A Roy

Chair



### Independent auditor's report

To the members of Silex Systems Limited

#### Report on the audit of the financial report

#### **Our opinion**

In our opinion:

The accompanying financial report of Silex Systems Limited (the Company) and its controlled entities (together the Group) is in accordance with the *Corporations Act 2001*, including:

- (a) giving a true and fair view of the Group's financial position as at 30 June 2023 and of its financial performance for the year then ended
- (b) complying with Australian Accounting Standards and the Corporations Regulations 2001.

#### What we have audited

The Group financial report comprises:

- the consolidated balance sheet as at 30 June 2023
- the consolidated statement of comprehensive income for the year then ended
- the consolidated statement of changes in equity for the year then ended
- the consolidated statement of cash flows for the year then ended
- the consolidated income statement for the year then ended
- the notes to the consolidated financial statements, which include significant accounting policies and other explanatory information
- the directors' declaration.

#### **Basis for opinion**

We conducted our audit in accordance with Australian Auditing Standards. Our responsibilities under those standards are further described in the *Auditor's responsibilities for the audit of the financial report* section of our report.

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

#### Independence

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 our audit of the financial report in Australia. We have also fulfilled our other ethical responsibilities in accordance with the Code.

PricewaterhouseCoopers, ABN 52 780 433 757

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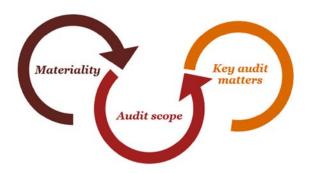
SILEX ANNUAL REPORT 2023



#### Our audit approach

An audit is designed to provide reasonable assurance about whether the financial report is free from material misstatement. Misstatements may arise due to fraud or error. They are considered material if individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial report.

We tailored the scope of our audit to ensure that we performed enough work to be able to give an opinion on the financial report as a whole, taking into account the geographic and management structure of the Group, its accounting processes and controls and the industry in which it operates.



#### Materiality

- For the purpose of our audit we used overall Group materiality of \$868,000, which represents approximately 5% of the Group's loss before tax.
- We applied this threshold, together with qualitative considerations, to determine the scope of our audit and the nature, timing and extent of our audit procedures and to evaluate the effect of misstatements on the financial report as a whole.
- We chose Group loss before tax because, in our view, it is the benchmark against which the performance of the Group is most commonly measured.
- We utilised a 5% threshold based on our professional judgement, noting it is within the range of commonly acceptable thresholds.

#### Audit scope

- Our audit focused on where the Group made subjective judgements; for example, significant accounting estimates involving assumptions and inherently uncertain future events.
- The Group's operational and financial processes are managed by a corporate function in Sydney, where all of our audit procedures are performed.

105 SILEX ANNUAL REPORT 2023



#### **Key audit matters**

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the financial report for the current period. The key audit matters were addressed in the context of our audit of the financial report as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. Further, any commentary on the outcomes of a particular audit procedure is made in that context. We communicated the key audit matters to the Audit Committee.

#### Key audit matter

# Recoverable project costs (Refer to note 3)

Costs incurred by Silex Systems Limited in relation to the Uranium Enrichment Project ("UEP") are recharged to Global Laser Enrichment LLC ("GLE").

We considered this matter a key audit matter due to the magnitude of the revenue, and the judgemental nature of determining which expenses can be recharged.

# Investment accounted for using the equity method

(Refer to note 15b(iii))

Silex Systems Limited holds a 51% equity interest in Global Laser Enrichment Holdings LLC (GLEH). The share of net loss of GLEH is recognised within the Group's Consolidated income statement and the carrying value of investment in GLEH is recognised within the Consolidated balance sheet.

We considered this matter a key audit matter due to the financial significance of GLEH to the Group's financial report.

#### How our audit addressed the key audit matter

Our audit procedures included:

- considering the Group's accounting policy in line with the Australian Accounting Standards
- developing an understanding, evaluating and testing the design and implementation of key controls over the revenue to receivables business process:
- for a sample of revenue transactions, obtaining source documents, evidencing cash receipts, assessing that the costs incurred were recognised in the right period and eligible to be recharged;
- evaluating the related financial statement disclosures for consistency with Australian Accounting Standards

#### Our audit procedures included:

- evidencing the loss incurred for GLEH to underlying financial records
- evidencing capital contributions to bank statements
- assessing the recoverability of the carrying value of the GLEH investment
- testing the mathematical accuracy of the Group's share in GLEH and the share of net loss recognised
- evaluating the related financial statement disclosures for consistency with Australian Accounting Standards



#### Other information

The directors are responsible for the other information. The other information comprises the information included in the annual report for the year ended 30 June 2023, but does not include the financial report and our auditor's report thereon.

Our opinion on the financial report does not cover the other information and accordingly we do not express any form of assurance conclusion thereon through our opinion on the financial report. We have issued a separate opinion on the remuneration report.

In connection with our audit of the financial report, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial report or our knowledge obtained in the audit, or otherwise appears to be materially misstated.

If, based on the work we have performed on the other information that we obtained prior to the date of this auditor's report, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

### Responsibilities of the directors for the financial report

The directors of the Company are responsible for the preparation of the 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 financial report that gives a true and fair view and is free from material misstatement, whether due to fraud or error.

In preparing the financial report, the directors are responsible for assessing the ability of the Group to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the Group or to cease operations, or have no realistic alternative but to do so.

#### Auditor's responsibilities for the audit of the financial report

Our objectives are to obtain reasonable assurance about whether the financial report as a whole is free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with the Australian Auditing Standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial report.

A further description of our responsibilities for the audit of the financial report is located at the Auditing and Assurance Standards Board website at:

https://www.auasb.gov.au/admin/file/content102/c3/ar1\_2020.pdf. This description forms part of our auditor's report.

107 SILEX ANNUAL REPORT 2023



#### Report on the remuneration report

#### Our opinion on the remuneration report

Pricovaterhouseloopen

We have audited the remuneration report included in pages 31 to 48 of the directors' report for the year ended 30 June 2023.

In our opinion, the remuneration report of Silex Systems Limited for the year ended 30 June 2023 complies with section 300A of the *Corporations Act 2001*.

### Responsibilities

The directors of the Company are responsible for the preparation and presentation of the remuneration report in accordance with section 300A of *the Corporations Act 2001*. Our responsibility is to express an opinion on the remuneration report, based on our audit conducted in accordance with Australian Auditing Standards.

PricewaterhouseCoopers

Aishwarya Chandran Partner Sydney 23 August 2023

# **Shareholder Information**

Information relating to shareholders as at 11 August 2023

#### a) Distribution of equity securities

	Class of equity security: Ordinary					
	Sha	Shares		Options		nce rights
Holding	No. of holders	% of shares	No. of holders	% of options	No. of holders	% of rights
1 - 1,000	2,831	0.57%	-	-	-	-
1,001 - 5,000	2,914	3.25%	-	-	-	-
5,001 - 10,000	938	3.06%	-	-	-	-
10,001 - 100,000	743	5.09%	22	32.93%	25	20.79%
100,001 and over	708	88.03%	9	67.07%	2	79.21%
Total number of holders	8,134	100.00%	31	100.00%	27	100.00%

There were 633 holders of less than a marketable parcel of ordinary shares.

### b) Names of twenty largest quoted equity security holders as at 11 August 2023

Name	Number of securities	Percentage held
Jardvan Pty Ltd	29,801,030	12.66%
HSBC Custody Nominees (Australia) Limited	22,414,510	9.52%
JP Morgan Nominees Australia Pty Limited	10,788,489	4.58%
McCusker Holdings Pty Ltd	8,000,000	3.40%
Citicorp Nominees Pty Limited	7,489,570	3.18%
Majenta Holdings Pty Ltd	5,703,923	2.42%
Hillboi Nominees Pty Ltd	4,100,281	1.74%
BNP Paribas Noms Pty Ltd <drp></drp>	3,604,103	1.53%
HSBC Custody Nominees (Australia) Limited <gsco a="" c="" customers=""></gsco>	3,185,997	1.35%
National Nominees Limited	3,180,836	1.35%
Throvena Pty Ltd	2,978,203	1.27%
Spar Nominees Pty Ltd	2,963,234	1.26%
Pure Gold Pty Ltd	2,520,000	1.07%
Mr Christopher David Wilks	2,405,070	1.02%
Hamlac Pty Ltd	2,125,937	0.90%
HSBC Custody Nominees (Australia) Limited <nt-comnwlth a="" c="" corp="" super=""></nt-comnwlth>	2,032,843	0.86%
Quintal Pty Ltd	2,002,952	0.85%
Sporran Lean Pty Ltd	1,807,000	0.77%
RD Super Pty Ltd	1,752,082	0.74%
BNP Paribas Nominees Pty Ltd <ib au="" drp="" noms="" retailclient=""></ib>	1,601,678	0.68%
	120,457,738	51.17%

#### c) Substantial holders

Name	Number of securities	Percentage held
Jardvan Pty Ltd	29,801,030	12.66%

109 SILEX ANNUAL REPORT 2023

# **Shareholder Information**

Information relating to shareholders as at 11 August 2023

### d) Voting rights

The voting rights attaching to each class of equity securities are set out below:

- Ordinary shares: On a show of hands every member present at a meeting in person or by proxy shall have one vote and upon a poll each share shall have one vote.
- Options: No voting rights.
- Performance rights: No voting rights.

### e) Securities subject to voluntary escrow as at 11 August 2023

As at 11 August 2023, shares subject to voluntary escrow were as follows:

Number of shares	Escrow period ends
194,147	25/08/2023
118,666	31/08/2023
28,169	31/12/2023
100,000	22/05/2024
100,000	06/06/2024
137,750	25/08/2024

### f) Unquoted equity securities as at 11 August 2023

	Number on issue	Number of holders
Options issued under the Silex Systems Limited Employee Incentive Plan	3,797,000	30
Performance rights issued under the Silex Systems Limited Employee Incentive Plan	1,082,500	27
Options issued to Hyde Park Partners	50,000	1

# Company directory

#### **Directors**

Mr C A Roy | Chair Dr M P Goldsworthy | CEO/MD Ms H G Cook Mr C D Wilks

#### **Audit Committee**

Mr C D Wilks | Chair Ms H G Cook Mr C A Roy

# People & Remuneration Committee

Mr C A Roy | Chair Ms H G Cook Mr C D Wilks

### **Company Secretary**

Ms J E Russell

# Registered Office and Principal Place of Business

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**E** investor.relations@silex.com.au

www.silex.com.au

### **Share Registry**

Computershare Registry Services Pty Limited

Level 5, 115 Grenfell Street, Adelaide, South Australia 5000, Australia

GPO Box 1903 Adelaide South Australia 5001, Australia

#### **Enquiries:**

Within Australia: 1300 556 161 Outside Australia: +61 8 8236 2300

web.queries@computershare.com.au

W www.computershare.com.au

### **Stock Exchange**

Listed on the Australian Stock Exchange, Ticker: SLX

Listed on the OTCQX International, Ticker: SILXY

#### **Auditors**

PricewaterhouseCoopers

#### Solicitors

Dentons Australia Limited

#### **Bankers**

Australia and New Zealand Banking Group Limited

### American Depository Receipts (ADR) Information

Silex Systems Limited's ADRs may be purchased on the US OTCQX market.

Details are as follows:

Ratio: 1 ADR = 5 ordinary shares

Symbol: SILXY

CUSIP: 827046 10 3 9414F102

Exchange: OTCQX Country: Australia





