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Annual Report 2021



Silex

Forward looking statements and risk factors

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About Silex Systems Limited

(ASX: SLX) (OTCQX: SILXY)

Silex Systems Limited ABN 69 003 372 067 (Silex) is a research and development 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 uranium market conditions and therefore remains subject to associated risks.

Silex is also in the early stages of pursuing additional commercial applications of the SILEX technology, including the production of 'Zero-Spin Silicon' for the emerging technology of silicon-based quantum computing. The 'Zero-Spin Silicon' project remains dependent on the outcomes of the project and the viability of silicon quantum computing and is therefore subject to various risks. The commercial future of the SILEX technology is therefore uncertain and any plans for commercial deployment are speculative.

Additionally, Silex has an interest in a unique semiconductor technology known as 'cREO®' through its ownership of subsidiary Translucent Inc. The cREO® technology developed by Translucent has been acquired by IQE Plc based in the UK. IQE is progressing the cREO® technology towards commercial deployment for 5G mobile handset filter applications. The outcome of IQE's commercialisation program is also 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, 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; the results of the SILEX uranium enrichment engineering development program; the market demand for natural uranium and enriched uranium; the outcome of the project for the production of 'Zero-Spin Silicon' for the emerging technology of silicon-based quantum computing; the potential development of, or competition from alternative technologies; the potential for third party claims against the Company's ownership of Intellectual Property; the potential impact of prevailing laws or government regulations or policies in the USA, Australia or elsewhere; results from IQE's commercialisation program and the market demand for cREO® products; actions taken by the Company's commercialisation partners that could adversely affect the technology development programs; and the outcomes of various strategies and projects undertaken by the Company.

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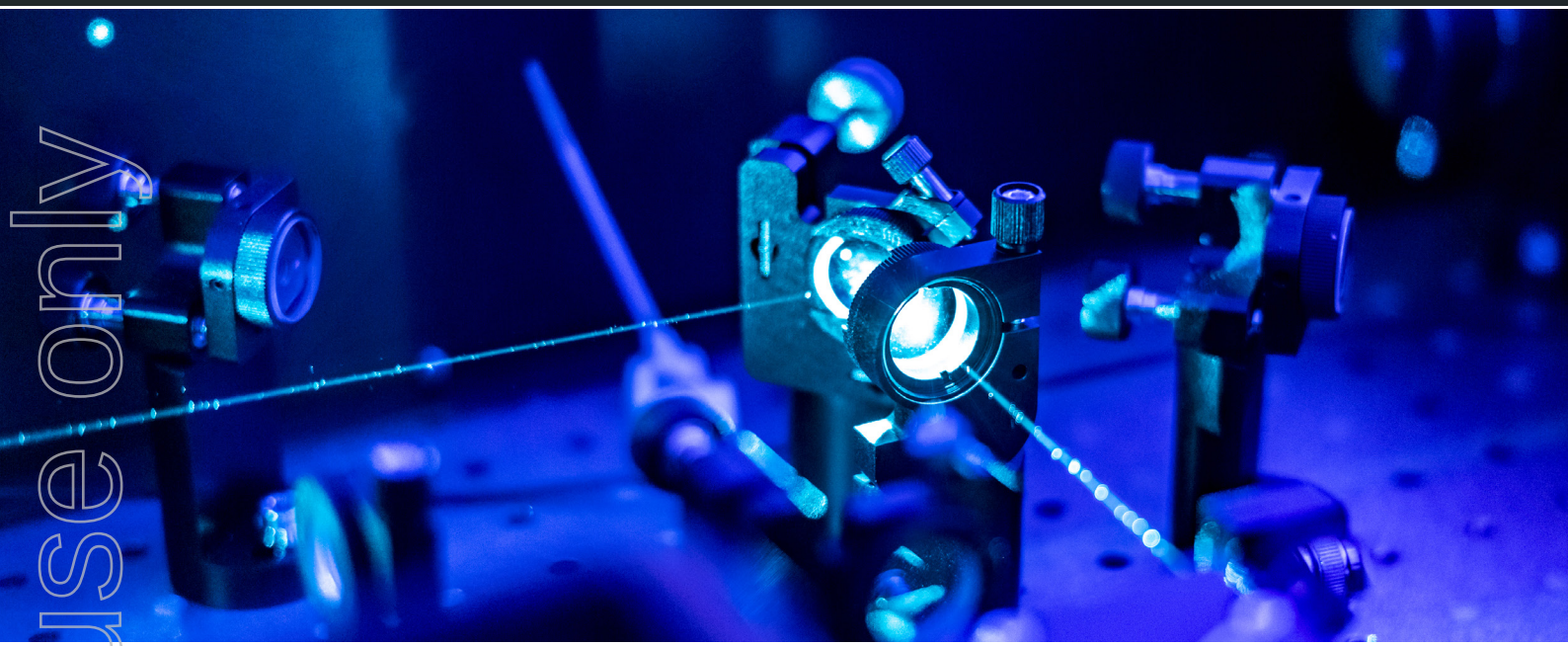
Chair's Report



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Dear Fellow Shareholders,

On behalf of the Silex Board, it is my pleasure to present our 2021 Annual Report for Silex Systems Limited. The year ended 30 June 2021 has been a pivotal year for the Company with the acquisition of our SILEX uranium technology licensee, Global Laser Enrichment (GLE) in January 2021, and since that time refining GLE's commercialisation strategy. The GLE acquisition was an important factor in Silex being able to secure a unique and important position in the global uranium and nuclear fuel industry through our purchase of a 51% interest in GLE, with global uranium and nuclear fuel supplier Cameco Corporation increasing its interest from 24% to 49%. On behalf of the Board, I would like to thank Cameco for their vision, commitment and support for GLE and their partnership with Silex.

The SILEX uranium enrichment commercialisation program is underpinned by the agreement between GLE and the US Department of Energy for the proposed Paducah, Kentucky uranium production project. This large, multi-decade project could enable the SILEX technology becoming the 'go to' technology for the production of nuclear fuel for today's conventional nuclear power reactors and for the next generation Small Modular Reactors currently under development.

Through the commercialisation of the SILEX technology, your company is building a strong position of commercial leverage in several globally relevant growth markets including in the uranium and nuclear fuel industry and the emerging quantum computing industry. We are also currently assessing potential applications in the field of medical radioisotopes. We have executed on a number of important strategic priorities that uniquely position the Company to seize opportunities across these key targets industries in the coming years. Our goal is to deliver long-term value to you, our shareholders, and to do this with an acute focus on risk management and prudent governance.

During the year, the Company has made significant progress in the silicon enrichment project being conducted at our Lucas Heights facility. Enriched silicon, in the form of Zero-Spin Silicon (ZS-Si), is a key enabling material for silicon-based quantum computing. We are currently about half way through the three-year project commenced in late 2019, in collaboration with world-leading quantum computing partners, Silicon Quantum Computing Pty Ltd (SQC) and UNSW Sydney. The aim of the project is to establish the technology and production capability to produce high purity ZS-Si using a variant of the SILEX laser isotope separation technology. The project is supported by $1.8 million of funding from SQC and a $3 million Federal Government funding grant from the Cooperative Research Centre Projects (CRC-P). We would also like to thank SQC and UNSW Sydney for their expertise, commitment and support of this potentially ground-breaking project.

We continue to be encouraged by the disclosures by UK-based IQE Plc with respect to the commercialisation of our cREO® technology purchased by IQE in 2018. IQE reports good progress with its proprietary IQepiMo™ 5G filter device technology built on the cREO® platform, which is currently

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undergoing testing with IQE's partners and customers. Our agreement with IQE includes a minimum 3% royalty on revenues derived from use of the cREO® technology. The Company received the second minimum annual royalty payment from IQE due under this agreement in early 2021.

"Through the commercialisation of the SILEX technology, your company is building a strong position of commercial leverage in several globally relevant growth markets including in the uranium and nuclear fuel industry and the emerging quantum computing industry"

Corporate Governance

I am pleased to continue to lead a diverse and high-quality Board with significant experience in technology commercialisation, depth of knowledge in the nuclear industry and commitment to strong governance principles. The Silex Board currently comprises three non-executive directors from a range of professions and backgrounds together with our founder and CEO/Managing Director. The Board periodically reviews its performance and make-up to ensure it is serving the needs of the Company, our shareholders and other stakeholders. Our governance processes are also reviewed annually with a keen focus on continual improvement and best practice.

I will be standing for re-election at this year's AGM, with the support of my fellow Directors, and I never take for granted your support as we strive to build further shareholder value.

The Year Ahead

With the GLE acquisition complete, Silex and Cameco are focused on finalising the transition of GLE under the new joint venture ownership. We have made some key C-suite appointments, Mr Stephen Long as GLE's Chief Executive Officer, and Mr James Dobchuk as GLE's Chief Commercial Officer and President, and we will support them in delivering real value for GLE. We also look forward to progressing the ZS-Si project towards completion of Stage 2 of the project around the end of 2021, and moving into Stage 3 in 2022, which will focus on the construction of a commercial pilot production facility. Additionally, we will continue our assessment of potential value accretive applications of the SILEX technology in the field of medical radioisotopes. We believe we are well positioned to capitalise on these exciting opportunities and build momentum in our commercialisation programs over the coming years.

The COVID-19 pandemic continues to create significant challenges around the world and particularly for our team in the Sydney area. Despite the uncertainties we face, we intend to continue with our operations to the fullest extent possible, with extreme caution and heightened concern for the safety and wellbeing of our team. Our team are outstanding and world class in many ways, and we thank them for their continued energy and expertise as they strive to bring Silex's vision to fruition.

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
26 August 2021



CEO's Report

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Dear Fellow Shareholders,

FY2021 was a seminal year for Silex with the Company achieving significant advances in the commercialisation of its SILEX laser enrichment technology. The most important event during the year was the successful completion of the acquisition of our interest in SILEX uranium enrichment technology licensee Global Laser Enrichment LLC (GLE) in January 2021. The completion resulted in Silex acquiring a 51% interest in GLE, and Cameco Corporation increasing its interest from 24% to 49%. This acquisition is fundamental to the execution of our strategy, to take a leading role in the SILEX uranium enrichment technology commercialisation program through to GLE's Paducah 'Tier 1' Uranium production project.

We also made significant progress during the year on commercialising our unique SILEX laser enrichment technology for silicon enrichment for silicon-based quantum computing with our Zero-Spin Silicon (ZS-Si) project.

In summary, our key achievements for the year included:

- Successful completion of the GLE acquisition;
- Together with Cameco, resetting the technology commercialisation plan for GLE and advancing the technology development project;
- Recruitment of a Chief Executive Officer and Chief Commercial Officer for GLE;
- Advancing our ZS-Si project with the achievement of two key milestones; and
- Building the SILEX technology teams in Australia and GLE's team in the US.

SILEX Uranium Production Opportunity

During the past year, there has been increasing attention globally on nuclear power as it represents the only economic source of zero-emissions, stable base load electricity. The ambitious climate commitments being made by countries and companies around the world confirms that zero-carbon nuclear energy is on an upward trajectory. With significant growth forecasted in nuclear power generation around the world and the ever-increasing awareness of the adverse effects of climate change, we remain encouraged by the opportunities emerging for the SILEX technology and GLE in the global nuclear fuel industry.

The SILEX technology is being developed in collaboration with GLE for the production of natural grade uranium through GLE's flagship Paducah, Kentucky uranium project, with additional opportunities evolving for the production of Low Enriched Uranium (LEU) for conventional reactor fuel and High Assay LEU (HALEU) for the emerging advanced reactor and small modular reactor (SMR) technologies.

The Paducah uranium project involves the establishment of the proposed Paducah Laser Enrichment Facility (PLEF) to commercially deploy the SILEX technology in the US. The project is underpinned by the existing agreement between GLE and the US Department of Energy for the purchase of significant stockpiles of depleted uranium tails, sufficient for the production of around 5 million pounds of natural grade uranium per year for 30 years.

Preliminary analysis by Silex of the Paducah project indicates it could rank equivalent to a 'Tier 1' uranium resource based on estimates of the long-life and low cost of production. GLE and Silex are actively assessing other commercial opportunities, including additional capacity at the PLEF to produce LEU for conventional nuclear plants and HALEU for SMR's.

Our focus since completion of the GLE acquisition has been on the building of the GLE and Silex teams to complete the pilot commercial demonstration program and on securing a new executive team for GLE. We have recently announced two key leadership appointments for GLE: Stephen Long as Chief Executive Officer and James Dobchuk as Chief Commercial Officer and President. Both gentlemen are seasoned executives and bring a wealth of nuclear industry experience to GLE. They are very well placed to lead GLE through its commercialisation phase.

SILEX Zero-Spin Silicon Opportunity

A variant of the SILEX technology has been proven capable of producing enriched silicon in the form of Zero-Spin Silicon (ZS-Si), a key enabling material for the emerging silicon quantum computing industry. Our ZS-Si project being conducted with project partners Silicon Quantum Computing (SQC) and UNSW Sydney aims to scale-up to pilot commercial production by the end of CY2022. Successful completion of the project will provide Silex with the opportunity to produce and sell small commercial quantities of ZS-Si using the pilot facility with sufficiently high purity starting from CY2023, and to establish the manufacturing technology and capability to scale-up production as silicon-based quantum computing gains traction globally during the next decade.

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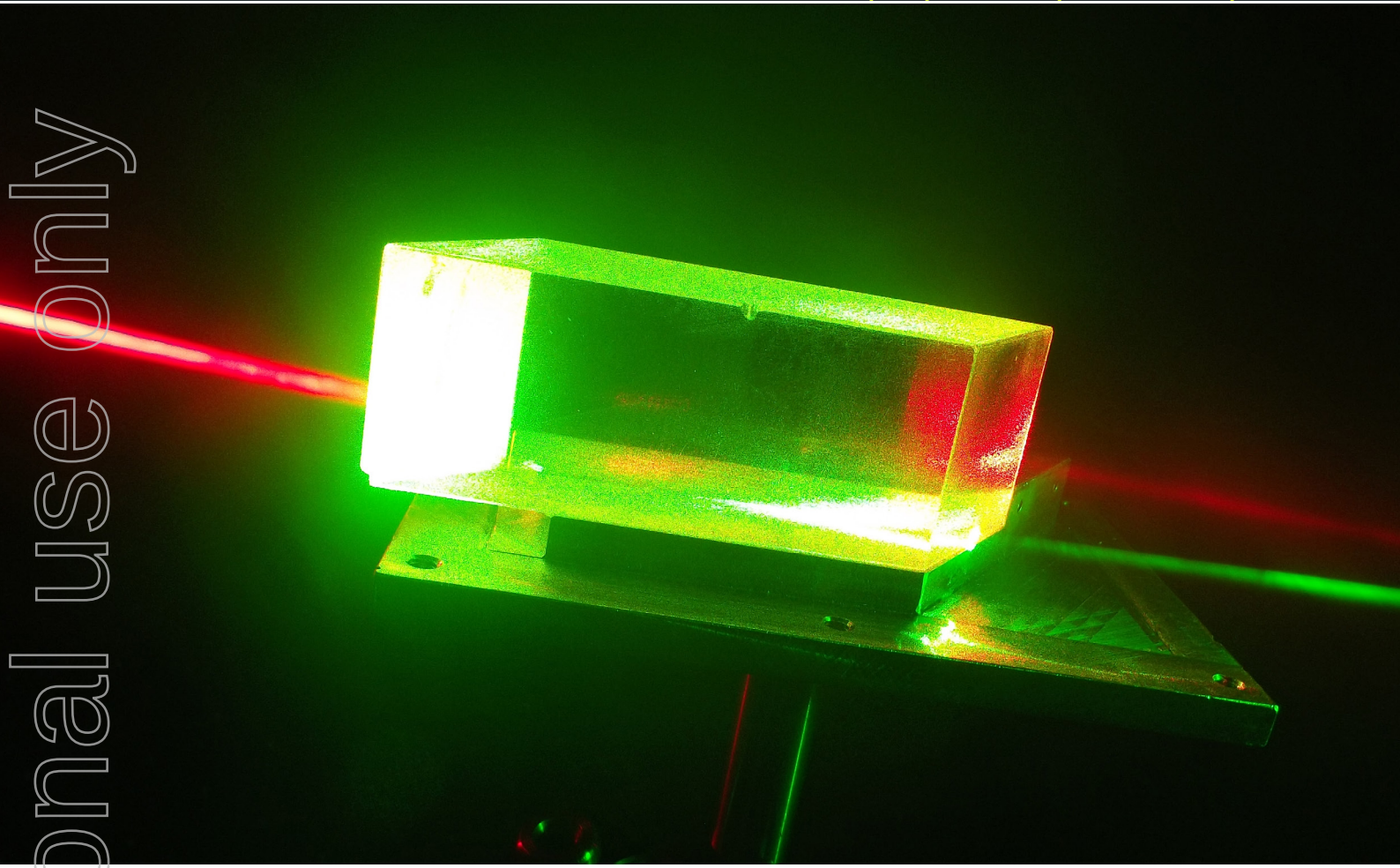

Significant progress was achieved during the year in the execution of our ZS-Si commercialisation project with the completion of two important milestones. In January 2021, we announced the completion of a key milestone to validate commercial synthesis of feed material for the ZS-Si laser enrichment process. We also announced the completion of the construction of a scaled-up prototype processing facility in May 2021, the third milestone in the ZS-Si project since its commencement in December 2019. The facility is in the process of being deployed to demonstrate the scalability and efficiency of our laser isotope separation (LIS) technology for potential commercial production of high-purity ZS-Si.

These milestones demonstrate significant progress in the second stage of the project involving design, construction and operation of scaled-up prototype equipment for ZS-Si. The completion of the prototype processing facility represents the first time the technology has been scaled-up outside the original uranium enrichment project. Stage 2 of the project is due for completion by the end of CY2021.

Current methods for production of enriched silicon are limited and costly with only a few kilograms produced annually, mostly using gas centrifuge technology. Should the ZS-Si project be successful, it could potentially enable Australia to establish itself as a world-leader in ZS-Si production. If the market for ZS-Si evolves, this could create a new value-added export market. Importantly, Silex will retain ownership of the ZS-Si production technology and related Intellectual Property developed through the project.

"The most important event during the year was the successful completion of the acquisition of our interest in SILEX uranium enrichment technology licensee Global Laser Enrichment LLC (GLE) in January 2021."

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cREO® Advanced Semiconductor Opportunity

In 2018, IQE Plc (AIM: IQE) purchased the cREO® technology from Silex. IQE has been responsible for the cREO® commercialisation program for a number of years. IQE's purchase of the technology includes a perpetual royalty of at least 3% on IQE's revenues derived from use of the cREO® technology, with minimum annual royalties currently being paid to Silex annually.

During the year, IQE announced the successful development and key demonstration of a new high frequency (RF) filter product (called IQepiMo™) which is built on the cREO® technology platform. IQE have stated that this new product can help eliminate technical issues related to the demands that 5G technology places on electronic components, including RF filters, which are key to managing high frequency signals in 5G devices such as mobile handsets. IQE announced in February 2021 that data from customer and partner device trials indicated significant improvement in the performance of its 5G filter device, compared to conventional filter technology, when tested at the top end of the frequency range used in current 5G applications. Additional trials of the new RF filter product are continuing with IQE's partners.

Prioritising Health and Safety

Core to our operations and values, is the prioritisation of the health and safety of our team. Throughout FY2021, we continued to focus on the health, safety and wellbeing of our team members across all sites and we reported no lost time injuries or reportable incidents. Although full-time operations were maintained at the Company's Lucas Heights facility for most of FY2021, consideration of the continuing impact of the COVID-19 pandemic and efforts to safely minimise disruptions to the Company's activities is ongoing. Above all else, the health, safety and wellbeing of our people is paramount.

I take this opportunity to thank you, our shareholders for your ongoing support. I would also like to thank the Silex and GLE teams for their dedication and tireless efforts, and to our Board for their continued support of the Company's strategy. I am very pleased with the progress we have made over the year in both our uranium and silicon projects, and look forward to providing a further update at the Annual General Meeting in October.



Dr Michael Goldsworthy
CEO/Managing Director
26 August 2021



Technology Overview

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About Silex

Silex Systems Limited (Silex) is an Australian technology company focused on the commercialisation of our innovative SILEX laser enrichment technology for application to:



The SILEX laser isotope separation (LIS) technology was invented by Silex scientists Dr Michael Goldsworthy and Dr Horst Struve in the 1990's at its Lucas Heights facility south of Sydney, Australia.

Today, Silex is actively pursuing two applications of the SILEX LIS Technology:

- **Uranium Enrichment:** for the production of natural and enriched uranium
- **Silicon Enrichment:** for the emerging silicon quantum computing industry

Our ESG Commitment

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

At Silex, we have a well-defined Environmental, Social and Governance (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, 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 which can have a positive impact on the global environment. In particular, our SILEX technology is currently focused on:

i. improving efficiencies in nuclear fuel production for the generation of zero-emissions nuclear power and contributing to climate change mitigation efforts;

ii. developing novel isotopically engineered materials which 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 driven by unchecked human population growth.

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

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The SILEX Laser Uranium Enrichment Technology

The SILEX technology was invented by Silex scientists Dr Michael Goldsworthy and Dr Horst Struve in the 1990's 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.

From 2006 until 2020 the technology commercialisation project was managed by GLE as a subsidiary of GE-Hitachi Nuclear Energy (GEH) at its nuclear technology complex in Wilmington, North Carolina. In 2013, the project passed a major milestone with the successful demonstration of the technology at prototype scale in a Test Loop facility built by GLE – confirming the inherent efficiency of the laser-based SILEX technology. From 2014, GEH slowed the pace of development in response to the depressed nuclear fuel markets in the aftermath of Fukushima.

In December 2019, Silex announced the signing of a binding Purchase Agreement between Silex, Cameco Corporation (Cameco) and GEH for the purchase of GEH's 76% interest in GLE. Following receipt of US Government approvals, this agreement closed in January 2021, resulting in Silex acquiring a 51% majority interest in GLE, and Cameco increasing its interest from 24% to 49%.

Underpinning GLE's commercialisation of the SILEX technology, is the landmark 2016 agreement with the US Department of Energy for the purchase of over 200,000 metric tons of depleted uranium hexafluoride (UF_6), being tails material stockpiled from previous decades of enrichment operations at the DOE's gaseous diffusion facility in Paducah, which was shut down in 2013. This material will be the feedstock for GLE's Paducah Laser Enrichment Facility (PLEF) planned to be operational in the late 2020's.

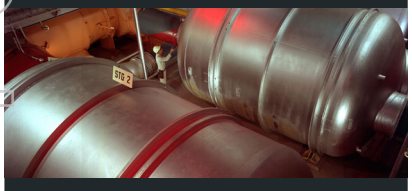
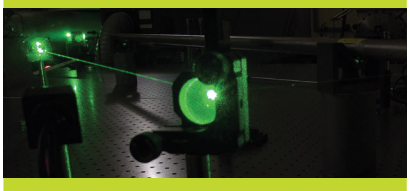
Uranium Enrichment

Naturally occurring uranium is dominated by two isotopes, U^{235} and U^{238}. Nuclear energy is produced by the splitting (or 'fission') of the U^{235} atoms. Natural uranium is made up of ~0.7% of the 'active' U^{235} isotope with the balance (~99.3%) made up of the U^{238} isotope. Uranium enrichment is the process of concentrating or enriching the U^{235} isotope up to approximately 5% 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 at an advanced stage of commercialisation today. It is able to effectively enrich uranium through highly selective laser excitation of the fluorinated form of uranium – the $^{235}UF_6$ isotopic molecule.

The two methods of uranium enrichment used to date are the now obsolete Gas Diffusion technique (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.

Uranium Enrichment Technology

1ST GENERATION TECHNOLOGY	2ND GENERATION TECHNOLOGY	3RD GENERATION TECHNOLOGY
GASEOUS DIFFUSION	CENTRIFUGE	LASER EXCITATION
		
ß = 1.004	ß ~ 1.25	ß ~ 2 - 20[1]
High cost	Lower cost	Most cost effective
Obsolete	Current technology	In commercialisation phase

1. ß is the process efficiency (Classified number)

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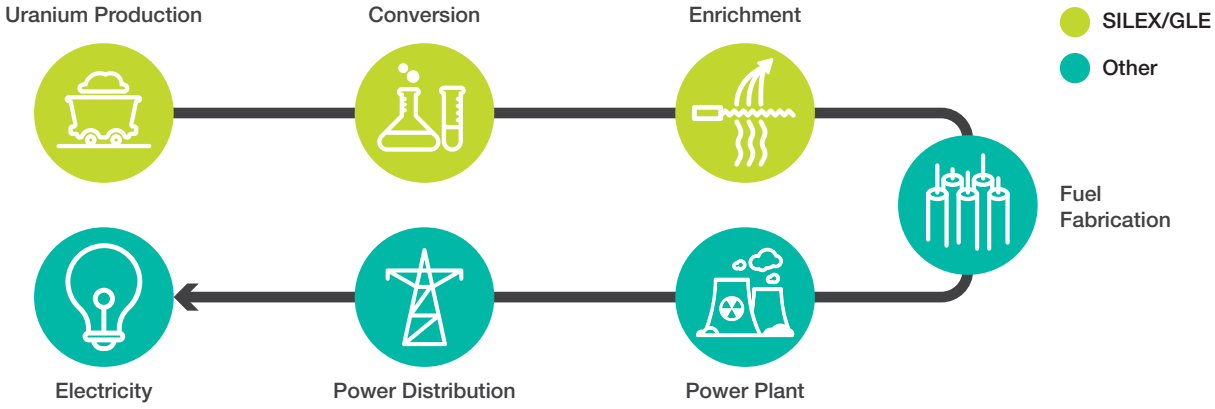
Uranium production and enrichment are the two largest value drivers of the current nuclear fuel cycle, accounting for up to 70% of the value of a fuel bundle.

Furthermore, as the tails feedstock for the PLEF plant is already in the form of UF_6, the value of the second step for fuel production – conversion – is also captured by the Paducah project.

Nuclear Fuel Cycle



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 commercially valuable isotopes of several other elements). It has a number of advantages over other uranium enrichment processes including:

- Inherently higher efficiency resulting in lower enrichment costs;
- Smaller environmental footprint than centrifuge and diffusion plants;
- Greater flexibility in producing advanced fuels for next generation SMR's; and
- Anticipated to have the lowest enrichment plant capital costs.

Nuclear Fuel Production

The SILEX technology, could potentially become a major contributor to nuclear fuel production for the world's current and future nuclear reactor fleet, through the production of uranium in three different forms:

U_{nat}

Natural Grade Uranium (U_{nat})

via enrichment of DOE inventories of depleted tails in the Paducah commercial project to produce uranium at natural U^{235} assay (~0.7%)

LEU

Low Enriched Uranium (LEU)

for use as fuel in today's conventional nuclear power reactors (includes U^{235} assays between 3% to 5%)

HALEU

High Assay LEU (HALEU)

customised fuel for next generation SMR's currently under development (includes U^{235} assays up to 19.9%)

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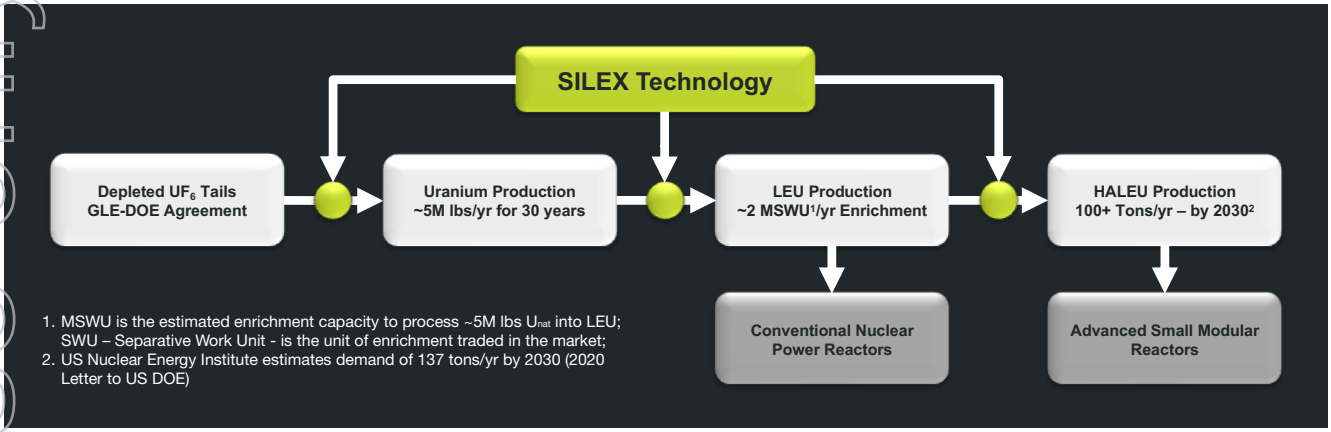
Paducah Opportunity Value Chain – 'Full Service" Nuclear Fuel Materials Model



The SILEX Uranium Enrichment Commercialisation Vehicle: Global Laser Enrichment LLC (GLE)

In January 2021, the acquisition of SILEX technology licensee GLE, was successfully completed, resulting in Silex acquiring a 51% interest in GLE, and Cameco Corporation, one of the world's leading uranium and nuclear fuel suppliers, increasing its interest from 24% to 49%. Completion of the acquisition followed the receipt of US Government approval of the transaction.

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 full-scale demonstration of the SILEX uranium technology utilising a pilot plant, 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 their interest to 75% (subject to US Government approvals).

This option can be exercised by Cameco from two years from completion of the transaction (i.e., from January 2023) up until 30 months after the technology is satisfactorily demonstrated at full commercial pilot scale (anticipated to be in the mid-2020's).

Paducah Laser Enrichment Facility (PLEF) Project

The path to market for GLE and the SILEX uranium enrichment technology is focused on the Paducah Laser Enrichment Facility (PLEF) project which has the potential to produce around 5 million pounds of uranium annually for 30 years. Preliminary analysis of the Paducah opportunity indicates the project may be equivalent to a 'Tier 1' uranium project based on the low cost of production and longevity of the project.

The PLEF uranium project is underpinned by an agreement between GLE and the US Department of Energy for the purchase of over 200,000 metric tons of depleted UF_6 tails, which will be enriched using the SILEX uranium enrichment technology to produce natural grade uranium for sale into the global uranium market, and then potentially further enriched to produce nuclear fuel for zero-emissions electricity generation. The PLEF facility is planned to be operational in the late 2020's, depending on market conditions, financing and licensing prerequisites.

The SILEX Technology License Agreement

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 includes royalty revenues and milestone payments to Silex as follows (and is independent of Silex's 51% equity interest in GLE and any commercial benefits flowing from that interest):

- **Perpetual royalty of a minimum of 7%:** payable to Silex on GLE's enrichment SWU[1] revenues from use of the SILEX technology
- **US$20 million in Milestone Payments:** payable to Silex triggered by commercial development milestones

1. SWU – Separative Work Unit is the unit of enrichment traded in the market

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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.

Nuclear power outlook and market update

At the UN's 2015 Convention on Climate Change (COP21), held in Paris, there were pledges made by participating countries to limit global warming to well below 2 degrees and aiming for 1.5 degrees. The pledges are what is now commonly referred to as the Paris Agreement. Under the Paris Agreement, countries committed to bring forward national plans setting out how much they would reduce their emissions and agreed that every five years they would come back with an updated plan that would reflect their highest possible ambition at that time. There will again be a number of important decisions and details to be agreed between the participating countries at COP26, to be held in Glasgow in November 2021.

In response, there are many countries which have prioritised government policy initiatives relating to tackling climate change and ensuring energy security, stating that nuclear power should form a meaningful part of their energy mix in the future.

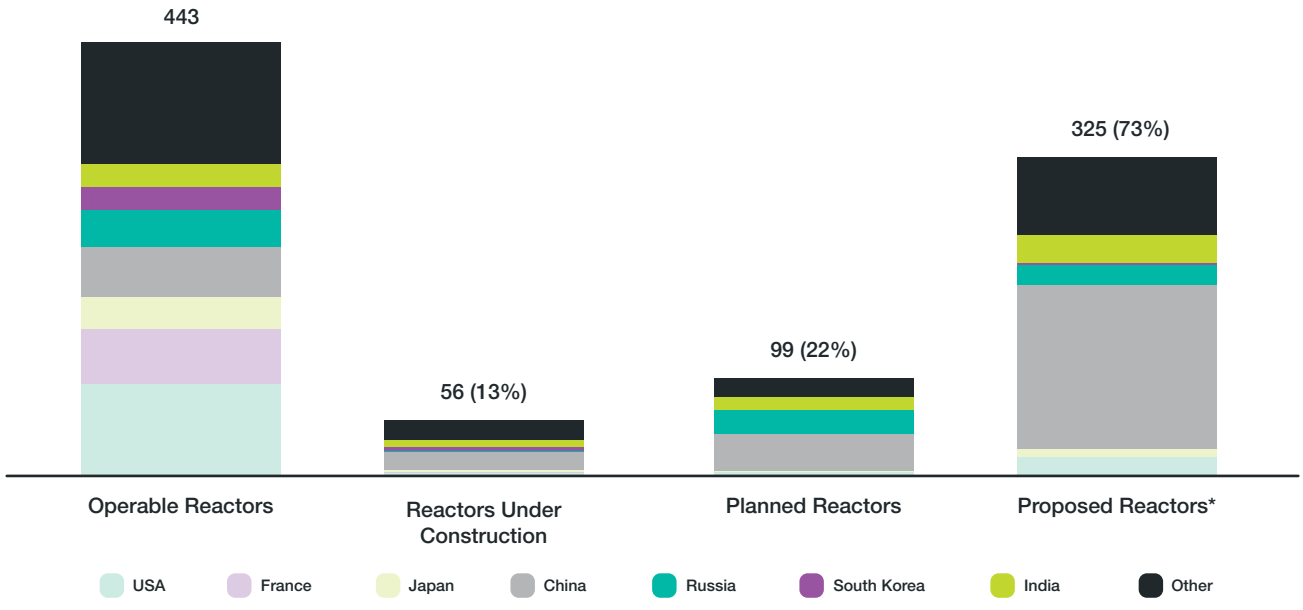
Nuclear today plays a key role in the supply of carbon-free base load electricity and is anticipated to play an increasing role in the energy mix as countries around the world strive to meet ambitious net zero targets.

According to the World Nuclear Association, there are currently 443 operable nuclear reactors globally and 56 reactors under construction. Today's operating reactor fleet currently generate ~10% of the world's electricity supply.

The US is the world's largest producer of nuclear power with 93 operable reactors, currently accounting for more than 30% of worldwide nuclear generation of electricity. Despite bold nuclear construction programs in China, India and the Middle East, the US is expected to remain the largest nuclear power generator for many years to come. There is also growing interest and significant investment being made into the development of emerging advanced reactor and small modular reactor technologies.

With significant growth forecasted in nuclear power generation around the world and the ever-increasing awareness of the adverse effects of climate change, we remain encouraged by the opportunities emerging for the SILEX technology and GLE in the global nuclear industry. We believe the SILEX technology - the only third-generation laser enrichment technology being commercialised in the world today, can help make nuclear power a more efficient and cost-effective solution for carbon-free base load electricity generation.

World Nuclear Reactor Population



* Other Proposed Reactors include 16 proposed in Saudi Arabia, 8 in Turkey and 8 in South Africa

Source: World Nuclear Association July 2021

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ZS-Si Production for Quantum Computing

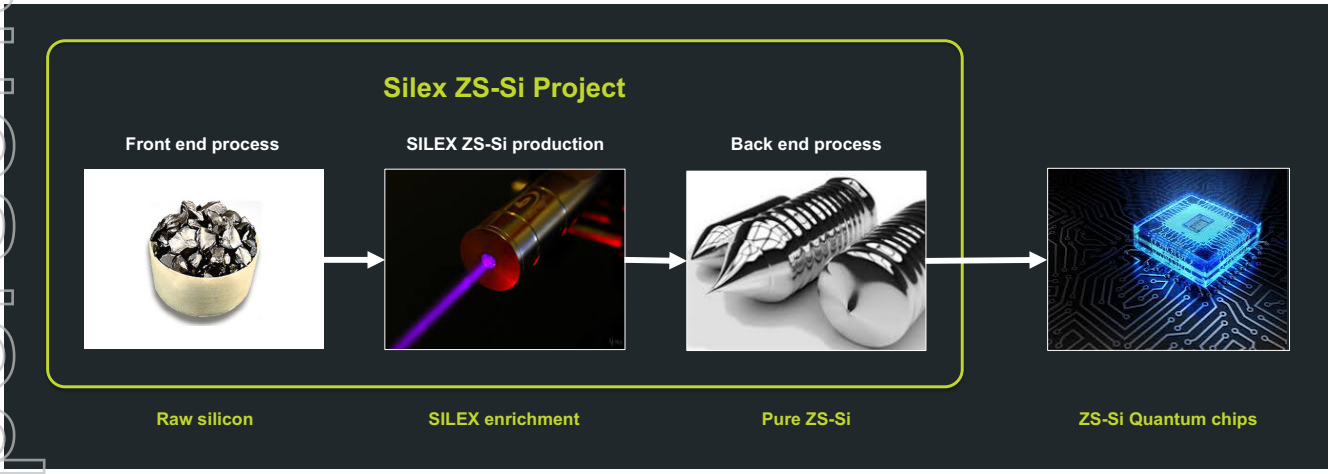
In December 2019, Silex launched a new R&D project in conjunction with project partners Silicon Quantum Computing Pty Ltd (SQC) and UNSW Sydney (UNSW), to develop a process for the commercial production of high-purity 'Zero-Spin Silicon' (ZS-Si) using a variant of the SILEX laser isotope separation (LIS) technology.

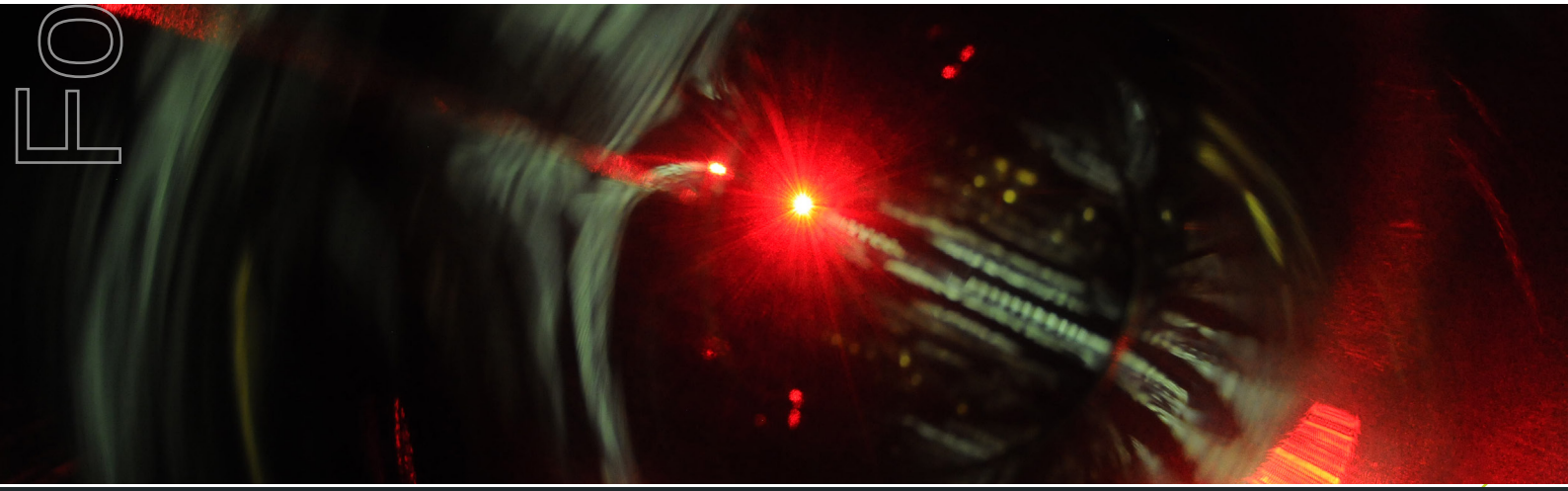
ZS-Si is a unique form of isotopically enriched silicon required for the fabrication of next generation processor chips which will power silicon-based quantum computers. Silex's LIS technology has the potential to efficiently produce ZS-Si to provide a secure supply of this material for project partner and initial customer SQC, in support of its world-leading efforts to commercialise silicon-based quantum computing technology in conjunction with UNSW.

The three-year ZS-Si project, which was awarded a $3 million Federal Government funding grant from the Cooperative Research Centre Projects (CRC-P) in February 2020, is due for completion at the end of CY2022. The first stage of the three-stage project was successfully completed in June 2020, establishing 'proof-of-concept' for the silicon LIS. The second stage of the project involves the design, construction and operation of scaled-up prototype equipment with the objective of verifying the efficiency and scalability of the silicon LIS technology and the underlying economics of the process.

The third stage will culminate with the planned production of initial commercial quantities of ZS-Si from a SILEX pilot production facility, leading to a full economic assessment of the ZS-Si business case.

Silex will retain ownership of the ZS-Si production technology and related Intellectual Property developed through the project. The first commercial quantities of ZS-Si produced from the pilot facility will be purchased by SQC under an Offtake Agreement executed in December 2019.





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Background to Silicon Quantum Computing

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, global logistics 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 and others) vying for leadership in this emerging strategic industry.

The global quantum computing (QC) opportunity, which is anticipated to expand dramatically over the next two decades, has recently been forecast by CSIRO Futures to be worth around $50 billion in 2040, with an annual growth rate of 6%[2]. A significant proportion of this value will relate to hardware, of which silicon-based quantum computers are anticipated to play a leading role.

ZS-Si is a key enabling material for the silicon QC processor chip. Natural silicon (Si) consists of 3 isotopes: 92.2% Si-28, 3.1% Si-30 (each with zero electron spin state) and 4.7% Si-29 (with a spin state of ½). The presence of Si-29 in concentrations above 500 parts per million (ppm) (0.05%) prevents effective QC performance, so ZS-Si must be produced by elimination of the Si-29 isotope. The lower the concentration of Si-29, the better a silicon quantum processor will perform in terms of computational power, accuracy and reliability.

Current methods for production of enriched silicon are limited and costly with only a few kilograms produced annually, mostly using gas centrifuge technology. Should the ZS-Si project be successful, it could potentially enable Australia to establish itself as a world-leader in ZS-Si production. If the market for ZS-Si evolves, this could create a new value-added export market. As the ZS-Si project progresses, Silex will engage with other potential customers, possibly including some global computer chip manufacturers who are also developing silicon quantum computing technology.



2. 'Growing Australia's Quantum Technology Industry', Report by CSIRO Futures, May 2020

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Other Potential Markets for the SILEX Technology

Initially, the Silex team investigated laser isotope separation techniques for several stable elements, including Chlorine, Molybdenum, Carbon, Oxygen and Silicon. Several of these stable isotopes already have existing commercial markets and production is achieved via traditional methods such as cryogenic distillation for carbon and oxygen, and gas centrifuge for the others listed above.

There are emerging markets for isotopes in the medical radiopharmaceutical industry, such as Molybdenum and Ytterbium. Silex is currently assessing the application of the SILEX technology to the enrichment of these valuable medical radioisotopes.



The cREO® Semiconductor Technology

5G Filters Mobile Handset

Silex subsidiary Translucent Inc developed a novel set of semiconductor materials known as 'crystalline Rare Earth Oxides' (cREO®) for application to the manufacturing of advanced semiconductor devices (such as wireless and optical communications) which use high-performance compound semiconductor materials rather than silicon. cREO® is a potentially enabling platform technology that could create a step-change in the integration of various compound semiconductor devices with large scale silicon wafer-based production techniques.

The cREO® technology was purchased by UK-based IQE in accordance with the 2015 License and Assignment Agreement. Under this Agreement, Translucent is currently eligible for minimum annual royalties and ultimately, a perpetual royalty of at least 3% will be payable to Translucent on the sales revenues from any IQE products that utilise the cREO® technology. The second minimum royalty payment of US$400,000 for the year ended CY2020 was received in early 2021.

IQE is the global leader in the design and manufacture of advanced semiconductor wafer products used in many of today's advanced semiconductor devices and is a key player in the emerging 5G wireless technologies market. IQE operates manufacturing facilities in the US, UK and Asia. The current focus for the cREO® technology is in the application to 5G mobile handset components.

IQE's Solution – IQepiMo™ based on cREO®

IQE has developed a new high frequency 5G filter product (called IQepiMo™) which is built on the cREO® technology platform. Following a period of customer and partner device trials, IQE announced in February 2021 the achievement of a key demonstration milestone for IQepiMo™, disclosing that the trials showed significant improvement in the performance of its 5G filter device, compared to incumbent technology. Additional trials of the new RF filter product are continuing with IQE's partners.

cREO® may also apply to other opportunities beyond 5G filters including Power Electronics and these opportunities may be explored by IQE at a later date.

Concise Financial Report

for the year ended 30 June 2021

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Silex

SILEX SYSTEMS LIMITED
& ITS SUBSIDIARIES

ABN 69 003 372 067

Directors' Report

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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 2021.

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 M K Holzberger
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 Zero-Spin Silicon project.

The development and commercialisation program for the SILEX uranium enrichment technology has been undertaken jointly since 2007 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. GLE has been recently restructured and is now owned 51% by Silex and 49% by Cameco Corporation.

The SILEX Zero-Spin Silicon (ZS-Si) project commenced in December 2019 and 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 developing a variant of the SILEX technology for the commercial production of ZS-Si, 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.

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4. Review of operations

The review contains the following sections:

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

a) Operations

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

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

In addition, Silex's semiconductor material technology known as cREO® was purchased by UK-based IQE Plc in 2018. This technology is currently being commercialised by IQE for application in the 5G mobile communications industry under a license and royalty agreement signed in 2015.

SILEX Uranium Enrichment

The development and commercialisation program for the SILEX uranium enrichment technology has been undertaken jointly since 2007 by Silex (at its Lucas Heights, Sydney facility) and by GLE (in Wilmington, North Carolina), under an agreement originally executed in 2006 (and as amended in 2021). GLE is the exclusive Licensee of the SILEX uranium enrichment technology. The GLE acquisition was completed on 31 January 2021 following conclusion of a US Government approval process and resulted in Silex acquiring a 51% interest in GLE and Cameco increasing its interest from 24% to 49%. The terms of the GLE restructure were in accordance with a binding Membership Interest Purchase Agreement (MIPA) between Silex, Cameco Corporation (Cameco) and GE-Hitachi Nuclear Energy (GEH) that was executed in December 2019 for the joint purchase of GEH's 76% interest in GLE.

The MIPA included a number of key financial terms and provisions including the Purchasers' obligation to reimburse GEH for their respective share of funding for GLE's Wilmington activities up until closing. Silex reimbursed GEH US$170,000 per month from 1 January 2020 through to 31 January 2021, representing 51% of GLE's funding, with the balance (49%) being contributed by Cameco. Following closing of the MIPA, Silex and Cameco have been responsible for the ongoing funding of GLE (in the ratio of 51:49 respectively).

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 their interest to 75% (subject to US Government approvals). This option can be exercised by Cameco from two years from completion of the transaction (i.e., from 31 January 2023) up until the date 30 months after the technology is satisfactorily demonstrated at full commercial pilot scale (anticipated to be in the mid-2020's).

The GLE acquisition also included a site lease between GLE and GEH enabling GLE to complete the SILEX technology commercialisation program at the Test Loop facility in Wilmington, North Carolina. This program will culminate with the full-scale demonstration of the SILEX uranium enrichment technology with a pilot plant facility, currently being built at the Wilmington site.

In parallel with the GLE restructure activities, a focused operational effort has continued on the technology commercialisation program at both the Silex, Sydney and GLE, Wilmington project sites. Laser system development activities in Sydney include design upgrades and optimisation for the prototype commercial-scale laser system. Activities in Wilmington include the scaling up of enrichment process equipment and preparation of the Test Loop facility for future deployment of prototype production equipment required for pre-commercial uranium enrichment testing.

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Zero-Spin Silicon for Quantum Computing

In December 2019 Silex launched a new R&D project in conjunction with project partners SQC and UNSW, to develop a process for the commercial production of high-purity ZS-Si using a variant of the SILEX laser isotope separation (LIS) technology. ZS-Si is a unique form of isotopically enriched silicon required for the fabrication of next generation processor chips which will power silicon-based quantum computers. Silex's LIS technology has the potential to efficiently produce ZS-Si to provide a secure supply of this material for initial customer SQC, in support of its world-leading efforts to commercialise silicon-based quantum computing technology in conjunction with UNSW.

The three-year ZS-Si project, which was awarded a $3 million Federal Government funding grant from the Cooperative Research Centres Projects (CRC-P) in February 2020, is due for completion at the end of CY2022.

The first commercial quantities of ZS-Si may potentially be produced from the Silex pilot facility from CY2023, and will be purchased by SQC under an Offtake Agreement executed in December 2019. The Offtake Agreement includes SQC making three annual payments of $300,000 as an offset against future purchases of ZS-Si produced by Silex. The second $300,000 payment was received in December 2020, with the final $300,000 payment due in December 2021.

cREO® Technology

The cREO® technology was purchased by UK-based IQE Plc (AIM: IQE) in early 2018 in accordance with a 2015 License and Assignment Agreement. As a result, payment of US$5 million was received by Silex in September 2018 (in IQE stock). Minimum annual royalties have been payable by IQE since CY2019 with the CY2020 minimum royalty of US$400,000 being received in February 2021. Minimum annual royalties are anticipated to continue until the earlier of completion of IQE's cREO® commercialisation program or CY2024. In addition, a perpetual revenue royalty of at least 3% will be payable to Silex on the sale of any IQE products that utilise the cREO® technology.

COVID-19 Implications

The developments and implications associated with the COVID-19 global pandemic continue to be constantly monitored. COVID has created significant uncertainty and challenges across the world and our priority remains to ensure we conduct our operations with extreme caution and concern for the safety and wellbeing of our team. Our operations have continued under our COVID management plan which is in line with Government requirements and recommendations. Our plan remains under constant review and is expected to be a core part of our operations for some time. Our current response includes the following actions:

- Constant monitoring of safety and hygiene protocols
- All meetings held virtually
- The restriction of all non-essential visitors and contractors to our facility
- Supporting corporate staff to work from home
- Suspension of all business travel until further notice
- Supporting staff to obtain their vaccinations as soon as possible

The Company received $154,500 from the Federal Government's JobKeeper program for the year ended 30 June 2021 ($66,000 was received for the year ended 30 June 2020). The Company also received $50,000 during the year ended 30 June 2021 from the Federal Government's Temporary Cash Boost for Employers ($50,000 received for the year ended 30 June 2020).

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b) Financial Results

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

	2021 $	2020 $
Revenue from continuing operations	**2,067,875**	1,001,206
Other income	**1,365,733**	1,238,157
(Loss) before tax	**(6,927,268)**	(7,805,182)
Income tax expense	**–**	–
Net (loss) from continuing operations	**(6,927,268)**	(7,805,182)
Net (loss) for the year	**(6,927,268)**	(7,805,182)
Net (loss) is attributable to:		
Owners of Silex Systems Limited	**(6,927,268)**	(7,805,182)

The net loss from ordinary activities was $6.9m compared to $7.8m in the prior year. The decrease in net loss from ordinary activities is mainly due to a $1.1m increase in Revenue from continuing operations. Following the completion of the acquisition of GLE on 31 January 2021, Silex recommenced being reimbursed by GLE for its costs on the uranium project. Recoverable project costs were $1.3m for the five months ended 30 June 2021. Silex's obligation to reimburse GEH for our share of funding for GLE's Wilmington activities ceased at closing. The Development expenditure up to 31 January 2021 was $1.6m compared to $4.5m in the prior year. The prior year included a holdback amount of US$1.125m paid to GEH for the reimbursement of costs held over from the previous Term Sheet (which became payable on the signing of the MIPA).

From closing, Silex's 51% share of GLE's net loss from is recognised in Share of net loss of associates and joint ventures accounted for using the equity method and was $2.1m for the current period.

Employee benefits expense and Research and development materials were also higher in the current year, with increases of $0.9m and $0.3m respectively to the prior period, as our headcount and project activities increased.

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

Silex Systems

The loss generated by Silex Systems was $3.8m in the current and prior year. The increase in Recoverable project costs revenue of $1.3m was offset by an increase in expenses (mainly Employee benefits expense and Research and development materials).

Translucent

The Translucent segment result was a $0.7m profit in the current year compared to a profit of $0.6m the prior year. The current year result included $0.7m Royalty revenue from the sale of intellectual property which related to the accrual of royalties in accordance with the sale of the cREO® technology to IQE Plc compared to $0.6m in the prior year.

Silex USA

The Silex USA segment result was a loss of $3.8m compared to a loss of $4.6m in the prior year. The prior year included a holdback amount of US$1.125m paid to GEH for the reimbursement of GLE costs held over from the previous Term Sheet.

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c) Financial Position

A summary of our balance sheet is set out below:

	30 June 2021 $	30 June 2020 $
Assets		
Total current assets	**22,746,967**	29,066,557
Total non-current assets	**1,294,859**	319,238
Total assets	**24,041,826**	29,385,795
Liabilities		
Total current liabilities	**1,931,124**	1,890,184
Total non-current liabilities	**39,571**	29,406
Total liabilities	**1,970,695**	1,919,590
Net assets	**22,071,131**	27,466,205
Equity		
Total equity	**22,071,131**	27,466,205

As at 30 June 2021, Silex's net assets were $22.1m. Significant assets are cash holdings of $14.1m (cash and term deposits) and Financial assets at fair value through Other comprehensive income of $5.8m (shares in IQE). The reduction in net assets of $5.4m was mainly due to the net loss for the year and was partly offset by the disposal of 2.8 million IQE shares (at a gain compared to the 30 June 2020 value).

d) Business Strategy and Future Prospects

Silex's Strategy

Silex is a platform technology company, focused on the commercialisation of our innovative SILEX laser isotope separation technology across multiple markets. The execution of our strategy is through the following activities:

- Taking a leading role in the SILEX uranium enrichment technology commercialisation program through our ownership of a 51% interest in exclusive Licensee GLE;
- Building our path to market in the US through the Paducah uranium production opportunity, which is underpinned by GLE's agreement with the US Department of Energy (DOE);
- Developing the SILEX technology for the production of enriched silicon in the form of Zero-Spin Silicon – a key material required for quantum computer chip fabrication; and
- Undertaking an assessment of additional potential applications of the SILEX technology in fields such as medical radioisotopes.

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SILEX Uranium Enrichment

The SILEX technology is the only known third-generation laser-based uranium enrichment technology 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 three different forms:

- **Natural Grade Uranium (U_{nat}):** via re-enrichment of DOE inventories of depleted tails through the Paducah Laser Enrichment Facility (PLEF) project - producing uranium at natural U^{235} assay of ~0.7%;
- **Low Enriched Uranium (LEU):** for use as fuel in today's conventional nuclear power reactors – which require fuel with U^{235} assays of between 3% to 5%; and
- **High Assay LEU (HALEU):** a customised fuel for next generation Small Modular Reactors (SMRs) currently under development - several of which require fuel with U^{235} assays of between 5% and 19.9%.

Uranium production and enrichment are the two largest value drivers of the nuclear fuel cycle, accounting for up to 70% of the value of a fuel bundle at current market prices. Commercialisation of the SILEX uranium enrichment technology through Licensee GLE may enable the SILEX technology to become a unique, multi-purpose nuclear fuel production platform for existing and emerging nuclear power generation systems, including as a potential producer of HALEU.

Status of Nuclear Fuel Markets

There is significant growth forecasted in nuclear power generation around the world. There are many countries which have prioritised government policy initiatives relating to tackling climate change and ensuring energy security, stating that nuclear power should form a meaningful part of their energy mix in the future. According to the World Nuclear Association, there are currently 443 operating nuclear reactors globally and 56 reactors under construction. Today's operating reactor fleet currently generate ~10% of the world's electricity supply. Nuclear today plays a key role in the supply of carbon-free base load electricity and is anticipated to play an increasing role in the energy mix as countries around the world strive to meet ambitious net zero targets.

The US is the world's largest producer of nuclear power with 93 operable reactors, currently accounting for more than 30% of worldwide nuclear generation of electricity. Despite bold nuclear construction programs in China, India and the Middle East, the US is expected to remain the largest nuclear power generator for many years to come. There is also growing interest and significant investment being made into the development of emerging advanced reactor and small modular reactor technologies.

The outlook in the markets for nuclear fuel continue to improve with increasing concerns regarding security of supply over the longer term. The uranium spot price is currently ~US$33/lb, having increased in recent years from a low of US$18/lb. The term price of enrichment has also improved significantly in recent years and increased more than 15% to ~US$60/SWU in the last 12 months. The improvements in the prices of the various components of nuclear fuel reflect the recent filling of the demand gap that resulted from the forced and premature nuclear reactor shutdowns that have occurred since Fukushima in March 2011. With respect to uranium production, there has also been reductions to primary production in recent years, including disruptions in response to COVID-19 that continue to bear on the market.

With the ever-increasing awareness of the adverse effects of climate change, we remain encouraged by the opportunities emerging for the SILEX technology and GLE in the global nuclear industry. We believe the SILEX technology - the only third generation laser enrichment technology being commercialised in the world today, can help make nuclear power a more efficient and cost-effective solution for carbon-free base load electricity generation.

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The Paducah 'Tier 1' Uranium Production Project

The Paducah commercial project opportunity is an ideal path to market for the SILEX technology and GLE. Underpinning this opportunity is the Sales Agreement between GLE and the US Department of Energy (DOE) which provides GLE access to large stockpiles of depleted uranium tails inventories owned by the DOE.

The Paducah commercial project opportunity will involve GLE constructing the proposed 'Paducah Laser Enrichment Facility' (PLEF) utilising the SILEX technology to enrich the DOE tails inventories which have been stored in the form of depleted uranium hexafluoride (UF_6 - containing U^{235} assays of between 0.25% to 0.4%) to produce natural grade uranium (assay of ~0.71%). Subject to completion of the technology commercialisation project, regulatory approvals, financing and prevailing market conditions, it is anticipated the PLEF will commence commercial operations from the late 2020's.

Production of natural grade uranium at the PLEF would continue over three decades, with the output sold into the global uranium market at a production rate equivalent to a uranium mine producing an annual output of around 5 million pounds of uranium oxide, which would rank in the top ten of today's uranium mines by production volume. Preliminary analysis by Silex of the PLEF project indicates it could rank as a 'Tier 1' uranium resource based on estimates of the long-life and low cost of production.

SILEX Technology 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 any 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.

In light of the current market conditions, the receipt of potential additional milestone payments and royalties remains uncertain.

The Company continues to take a cautious approach to the SILEX technology commercialisation program in line with current market conditions. Ultimately, the future of the technology and likelihood of success in the remaining commercialisation program is dependent on a recovery in the global markets for natural and enriched uranium. Commercialisation of the SILEX uranium enrichment technology therefore remains subject to these and other risks.

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Zero-Spin Silicon for Quantum Computing

Silex's LIS technology has the potential to efficiently produce ZS-Si to provide a secure supply of this material for initial customer and project partner SQC, in support of its world-leading efforts to commercialise silicon-based quantum computing technology in conjunction with UNSW.

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 and others) vying for leadership in this emerging strategic industry.

The first stage of the three-stage project was successfully completed in June 2020, establishing 'proof-of-concept' for the silicon LIS process identified by Silex. The second stage of the project is scheduled for completion at the end of CY2021. The second stage involves the design, construction and operation of a scaled-up prototype demonstration facility with the objective of verifying the efficiency and scalability of the silicon LIS technology and the underlying economic limit of the process (in terms of achievable isotopic purity). The design and construction of the facility was completed in May 2021 and the second stage operation and testing program remains on track to be completed by the end of CY2021.

The third stage, scheduled to be completed in CY2022, will culminate with the planned production of initial commercial quantities of ZS-Si from a SILEX pilot production facility, leading to a full techno-economic assessment of the ZS-Si business case.

Following pilot production and the full economic assessment of the ZS-Si business case, the Company may proceed with the construction of a SILEX commercial ZS-Si production plant at Silex's Lucas Heights facility. The ZS-Si project remains dependent on the outcomes of the project and the viability of silicon quantum computing and is therefore at risk.

cREO® Technology

The commercial prospects of the cREO® technology remain positive with IQE continuing to pursue the development of the technology for their unique high frequency (RF) filter product (called IQepiMo™) for 5G mobile handset applications. IQE is the global leader in the design and manufacture of advanced semiconductor wafer products used in many of today's advanced semiconductor devices and is a key player in the emerging 5G wireless technologies market.

In November 2020, IQE announced the successful development of their IQepiMo™ product which is built on the cREO® template technology. Following several months of customer and partner device trials, IQE announced in February 2021 the achievement of a key demonstration milestone for IQepiMo™ with significant improvement in the performance of its 5G filter device measured at the high-end frequency range, compared to incumbent technology. This represents encouraging progress towards managing high frequency signals in 5G devices such as mobile handsets.

Minimum annual royalties have been payable by IQE since CY2019 with the CY2020 minimum royalty of US$400,000 being received in February 2021. In addition, a perpetual revenue royalty of at least 3% will be payable to Silex on the sale of any IQE products that utilise the cREO® technology.

The outcome of the cREO® commercialisation program being conducted by IQE remains subject to various technology and market risks.

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5. Earnings per share

	2021 Cents	2020 Cents
Earnings per share for (loss) from continuing operations attributable to the ordinary equity holders of the Company		
Basic earnings per share	**(4.0)**	(4.5)
Diluted earnings per share	**(4.0)**	(4.5)
Earnings per share for (loss) attributable to the ordinary equity holders of the Company		
Basic earnings per share	**(4.0)**	(4.5)
Diluted earnings per share	**(4.0)**	(4.5)

6. Significant changes in state of affairs

On 31 January 2021, closing of the Agreement between Silex, Cameco and GEH for the joint purchase of GEH's 76% interest in GLE occurred. As a result, Silex acquired a 51% interest in GLE and Cameco increased its interest from 24% to 49%. Several other agreements and documents were executed and closed simultaneously, including a site lease to enable the continuance of GLE's operations at its Test Loop facility in Wilmington, North Carolina. The Agreement provides for deferred annual purchase payments to GEH totalling US$20 million consisting of four annual payments of US$5 million (shared pro-rata by Silex and Cameco) triggered after the first year GLE generates US$50 million in revenues. Various contractual arrangements have also been made with GLE partner Cameco, including an option for Cameco to potentially acquire a further 26% equity in GLE from Silex at fair market value.

Silex's 51% interest in GLE is accounted for as a joint venture which is further outlined in note 6 to these financial statements. Furthermore, as a result of closing of the Agreement, the contingent liability disclosed in the prior year financial report has been extinguished.

During the year, Silex disposed of 30% of its holding in IQE shares with net proceeds of $3.9m (US$3.0m) received. The disposal of the shares has been recognised in these financial statements.

7. Matters subsequent to the end of the financial year

There continues to be significant uncertainty associated with the potential impacts of the COVID-19 pandemic. Although full-time operations were maintained at the Company's Lucas Heights facility during FY2021, the Company continues to review the evolving COVID-19 situation with a view to making additional changes to operations if needed and/or if advised by the NSW Government. Consideration of the prolonged impact of the pandemic and efforts to safely minimise disruption to the Company's activities is ongoing.

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.

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8. 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	175,000
	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 twenty-nine 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	5,999,055
	Number of options	250,000
	Number of rights	100,000

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Ms Melissa Holzberger LLM, Dip Intl Nuclear Law, LLB, BA, GDLP, FGIA, GAICD. *Independent non-executive director*		
Experience and expertise	Independent non-executive director since January 2019. Experienced company director, commercial lawyer and international nuclear law specialist. Founder and principal of the firm Sloan Holzberger Lawyers, is a Non-executive director of ASX-listed company, Paladin Energy Limited and is a member of the Federal Government's Australian Radiation Protection and Nuclear Safety Agency's (ARPANSA) Radiation Health and Safety Advisory Council.	
Other current listed company directorships	Non-executive director of Paladin Energy Limited since May 2021.	
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	27,777
	Number of options	Nil
	Number of rights	Nil

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 1989 (Finance director since 1993)	
Former listed company directorships in last 3 years	None	
Special responsibilities	Member of Audit Committee Member of People & Remuneration Committee	
Interests in shares, options and rights	Number of ordinary shares	2,814,021
	Number of options	Nil
	Number of rights	Nil

9. 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		Audit Committee Meetings		People & Renumeration Committee Meetings	
Director's name	**Number Held[1]**	**Number Attended**	**Number Held[1]**	**Number Attended**	**Number Held[1]**	**Number Attended**
Mr C A Roy	12	12	3	3	2	2
Dr M P Goldsworthy	12	12	▲	▲	▲	▲
Ms M K Holzberger	12	12	3	3	2	2
Mr C D Wilks	12	12	3	3	2	2

1. *Number of meetings held during the time the director held office or was a member of the committee during the year*

▲ *Not a member of the relevant committee at the time the scheduled meetings were held*

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10. Remuneration Report

On behalf of the People & Remuneration Committee and the Board, I am pleased to present to you the FY2021 Silex Systems Limited Remuneration Report, for which we seek your support at our Annual General Meeting (AGM) in October 2021. The details of the remuneration received by the Company's Key Management Personnel (KMP) are prepared in accordance with accounting standards, legislative requirements and best practice corporate governance guidance.

The Company's People & Remuneration Committee oversees remuneration strategy, policy and framework, and executive KMP remuneration. The Committee evaluates the Company's strategy and objectives and makes remuneration 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.

The Company executed on a number of important strategic priorities in FY2021, most notably, the acquisition of GLE following the receipt of US Government approvals. In response to the closing of the GLE acquisition, our successful early transition of GLE to new ownership and the pleasing progress to date with regard to our ZS-Si project, we took the opportunity during the year to review the Company's executive incentive programs to align future rewards with the achievement of both our short-term and long-term strategic objectives.

As a result, a multi-year incentive program was developed and we intend to continue to offer short-term and long-term incentives using a variety of equity-based awards rather than cash. The Committee and the Board believe the new multi-year incentive program is both modest and appropriate given the significance of the potential achievement of the targets on the long-term value for shareholders, and we recommend it to shareholders for approval.

It was also once again resolved that no increases be awarded with respect to base remuneration for FY2021 or FY2022 for our CEO/MD and CFO/Company Secretary, with the Committee recommending that remuneration be more heavily weighted to incentive opportunities. During the year, we introduced an annual fee associated with the additional governance responsibilities with regard to Chairing the GLE Governing Board. The additional fee is payable using both Silex equity (subject to shareholder approval at the 2021 AGM) and cash. All other Board and Committee fees remain unchanged since the last Remuneration Report.

Details of the remuneration outcomes for FY2021, reflecting the achievements during the year and the new multi-year remuneration arrangements for our executives are provided in this report. Equity-based incentives for our CEO/MD with respect to FY2021, which are detailed in this report, remain subject to shareholder approval and will be detailed in the Notice of Meeting for our 2021 AGM.

The Committee and the Board believe equity-based compensation is important to conserve cash reserves as much as possible and to motivate employees to align their interests with those of our shareholders to drive positive outcomes in the longer term. Our Employee Incentive Plan (EIP), that was reintroduced for employees in May 2019, is an important component of our remuneration structure to drive performance and to incentivise retention. We are pleased that staff have welcomed the opportunity to receive equity-based compensation. The EIP allows us to use a variety of equity awards, vesting criteria, eligibility and tailored key performance indicators as may be appropriate from time to time.

We continuously monitor market developments and best practice recommendations with respect to compensation 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 2021.



Craig Roy
Chair, People & Remuneration Committee

Directors' Report

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The Directors present the Remuneration Report for the year ended 30 June 2021, 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) Voting at the Company's 2020 Annual General Meeting
e) Elements of executive KMP remuneration
f) Link between FY2021 remuneration and performance
g) Contractual arrangements with executive KMPs
h) Non-executive directors' remuneration arrangements
i) Directors' and KMP remuneration
j) Performance based remuneration granted and forfeited during the year
k) Terms and conditions of the equity-based payment arrangements
l) Reconciliation of options, rights and ordinary shares held by KMP

a) Directors and KMP disclosed in this report

The 2021 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 M K Holzberger	Non-executive director
Mr C D Wilks	Non-executive director
Other executive KMP	
Ms J E Ducie	CFO/Company Secretary

b) Remuneration governance

Board oversight

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

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People & Remuneration Committee structure

The People & 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 2021 were as follows:

Committee members	Mr C A Roy | Chair Ms M K Holzberger Mr C D Wilks
Committee secretary	Ms J E Ducie
Number of meetings in FY2021	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 relative to its performance, and to make specific recommendations in relation to KMP compensation, 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, 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 FY2021. 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 the closing of the GLE acquisition and the pleasing progress to date with regard to our ZS-Si project, we conducted a review of the Company's executive KMP incentive programs during the year to align future rewards with the achievement of our strategic objectives. A multi-year incentive program was developed, involving the issue of Short-term incentives (STIs) and Long-term incentives (LTIs) using a variety of equity-based awards and therefore aligned with the creation of shareholder value over the long-term. With regard to our CEO/MD, the Board resolved to introduce the new LTI structure for FY2021 (subject to shareholder approval).

The executive KMP remuneration framework will comprise two components:

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

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Remuneration structure

Element	Purpose	Performance Metrics	Structure	Potential Value
Total Fixed Remuneration (TFR)	Provide competitive market salary, including superannuation and non-monetary benefits.	Nil	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 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 operational and strategic deliverables for the Company.	CEO: FY2021 - 100,000 Performance Rights** (Nb. FY2022 to FY2025 – potential award of 75,000 Performance Rights per annum subject to shareholder approval at the 2021 AGM. Underlying performance criteria to be set by the Board at the commencement of each financial year)	Potential value: $44,500
			CFO: FY2021 - 50,000 Performance Rights (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)	Potential value: $22,433
LTI*	Alignment to long-term shareholder value, retention via 2-year escrow period applied to any incentive award	Performance linked to contribution to the creation of shareholder value over the longer term.	CEO: FY2021*** - Potential award of 750,000 options (to cover 5 performance years) subject to shareholder approval at the 2021 AGM, representing 150,000 options per annum for FY2021 through to and including FY2025	Estimated potential value****: $407,880 Expensed over FY2021 to FY2027. Average annual expense of $58,269
			CFO: FY2021 - 200,000 options issued in March 2021 (Nb. FY2022 to FY2024 – award of 300,000 Options representing 100,000 options per annum for FY2022 through to and including FY2024)	Potential value: $134,180 (Nb. FY2022 to FY2024 options: Estimated potential value per 100,000 options $46,750. To be expensed over 3-year vesting period****)
Extended LTI*	Alignment to long-term shareholder value, retention via 2-year escrow period applied to any incentive award	Performance linked to scale-up of the unique SILEX uranium enrichment technology by 31 December 2025.	CEO: FY2021*** - Potential award of 412,500 Performance Rights (to cover 5.5 performance years) subject to shareholder approval at the 2021 AGM	Potential value: $TBD Value based on Silex Systems Limited share price on date of issue of Rights
			CFO: An Extended LTI is not currently offered to the CFO. Consideration by the Board may be given to an offering in future years	

* *At all times the Board has the discretion to make a final determination based on share price 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.*

** *Approved by shareholders at the 2020 AGM*

*** *Subject to shareholder approval at the 2021 AGM*

**** *Options exercise price of $0.94, based on the 10-trading day VWAP up to and including 24 June 2021*

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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.

A multi-year equity-based incentive program has been developed, involving the issue of Short-term incentives (STIs) and Long-term incentives (LTIs). Annual incentives have been set through to FY2024 for the CFO and FY2025 for the CEO, in order to drive performance and talent retention. STIs have a 12-month performance period and LTIs are assessed over a three-year period and are designed to promote long-term stability in share price appreciation. The CEO's potential 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 Extended LTI will be subject to independent verification.

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) Voting at the Company's 2020 Annual General Meeting

Silex Systems Limited received more than 99% of "yes" votes on its Remuneration Report for the 2020 financial year.

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e) Elements of executive KMP remuneration

The executive KMP remuneration for FY2021 comprised the following elements:

	CEO/MD	CFO/Company Secretary
Total Fixed Remuneration (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 Incentives		
Composition	An equity-based STI may be granted annually at the discretion of the Board. Subject to shareholder approval, the STI is intended to comprise an annual grant of Performance Rights.	An equity-based STI may be granted annually at the discretion of the Board. The STI is intended to comprise an annual grant of Performance Rights.
Opportunity	100,000 Performance Rights	50,000 Performance Rights
Assessment	KPIs were intended to be stretch targets and included obtaining regulatory approval and closing of the MIPA for Silex's purchase of 51% of GLE, delivery of technology milestones for the Company's projects and the achievement of other strategic and commercial performance measures. Assessment: 77% of the performance rights vested and 77,000 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 intended to be stretch targets and included obtaining regulatory approval and closing of the MIPA for Silex's purchase of 51% of GLE, delivery of project plans for the Company's activities, and the achievement of other strategic and commercial performance measures. Assessment: 83% of the performance rights vested subject to completion of an underlying service-condition that ended 31 July 2021. 41,666 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.
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 Incentives		
Composition	Subject to shareholder approval, the proposed LTI is intended to be a multi-year incentive equivalent to an annual grant of 150,000 options for the 5 years ending 30 June 2025.	An equity-based LTI may be granted annually at the discretion of the Board. For FY2021, the LTI comprised a grant of options.
Opportunity	Issue of 750,000 options (i.e., 150,000 options attributable to each year from FY2021 to FY2025)	Issue of 200,000 options
Assessment	The equity-based LTI will have vesting periods that end from 30 June 2024 to 30 June 2028. The equity-based LTI grant is subject to shareholder approval at the AGM. In the event shareholder approval is received for the LTI grant, and 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 annual equity-based LTI has a 3-year vesting period. Any resulting allotment of Silex Systems Limited shares on completion of the underlying service-condition and option exercise, will be subject to a further escrow period of 2 years.
Exercise price	Should shareholder approval be received for the above grant of options, the options' exercise price will be $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 up to and including 24 June 2021.	The options' exercise price is 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 grant date. For the March 2021 issue of options, the exercise price is $1.20.

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	CEO/MD	CFO/Company Secretary
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-Term Incentive		
Composition	Subject to shareholder approval, the proposed Extended LTI is intended to be a multi-year incentive equivalent to 412,500 Performance Rights for a performance period ending 31 December 2025.	An Extended LTI is not currently offered to the CFO. Consideration by the Board may be given to an offering in future years.
Opportunity	Issue of 412,500 Performance Rights	–
Assessment	The proposed Extended LTI will commence from FY2021 and ending 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 verification. In the event shareholder approval is received for the Extended LTI and the performance criteria achieved, any resulting allotment of Silex Systems Limited shares will be subject to a further escrow period of 2 years.	–
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.	–
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.	–

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f) Link between FY2021 remuneration and performance

FY2021 performance and impact on remuneration

The Company's performance during FY2021 was considered strong, with delivery on a number of strategic priorities, including closing of the GLE acquisition following the receipt of US Government approvals and significant milestones achieved for the Zero-Spin Silicon project. 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 awarded the CEO/MD 77% of the FY2021 performance rights and the CFO/Company Secretary 83% of the FY2021 performance rights (subject to completion of the service-condition ending 31 July 2021). The Board also resolved to implement multi-year equity-based incentives for the CEO/MD from FY2021 (subject to shareholder approval) and the CFO/Company Secretary from FY2022. The incentive design is intended to retain executive 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 $
2017	(5.9)	12,500	0.37
2018	(2.7)	N/A	0.20
2019	(3.0)	60,000	0.40
2020	(4.5)	61,600	0.78
2021	(4.0)	62,935	0.90

g) Contractual arrangements with executive KMPs

Component	CEO/MD	CFO/Company Secretary
Total Fixed Remuneration	$550,000	$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 Unvested 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	Partial payment for pro-rata STI, if applicable, may be at Board discretion Unvested LTI may remain on foot subject to achievement of the performance criteria at the original date of testing
Termination of employment (with cause) or by the individual	STI is not awarded and all unvested LTI will lapse. Vested and unexercised LTI may be exercised following termination at Board discretion	STI is not awarded, and all unvested LTI will lapse. Vested and unexercised LTI may be exercised following termination at Board discretion

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h) 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. The standard Board and Committee fees have not changed since the last Remuneration Report.

Following the closing of the GLE acquisition in January 2021, a new Governing Board for the restructured GLE was established, which comprises two members each from Silex and Cameco. The Silex members are the Silex CEO/MD and the Silex Board Chair, who will also Chair the GLE Governing Board through to 31 December 2023. In view of the extra work load and responsibility associated with the role of Chair of the new Governing Board, an additional $40,000 per annum will be paid to the Chair from 1 January 2021. It is proposed that $20,000 of the fees be paid in cash, with the balance, $20,000 proposed to be paid by the issue of Silex shares (as announced to the ASX on 25 February 2021 in the Company's Operational Update).

Subject to shareholder approval at the 2021 AGM, 84,507 shares, at a deemed price of $0.71, are to be issued in lieu of a cash payment of $60,000, being 50% of the Directors' fees payable for the 3-year term of the appointment as Chair of the GLE Governing Board. The deemed price of $0.71 is based on the 10-trading day volume weighted average price at which the Company's shares traded on the Australian Stock Exchange preceding 17 December 2020.

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 FY2021.

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

The current annual fee structure is outlined below:

	Chair	Member
Board	100,000	80,000
Audit Committee*	10,000	8,000
People & Remuneration Committee*	10,000	8,000
Other		
Global Laser Enrichment Holdings LLC**	40,000	–

* *Committee fees payable from 1 April 2020.*
** *Payable from 1 January 2021.*

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

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i) Directors' and KMP remuneration

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

		Fixed remuneration				Variable remuneration				
Name	Year	Cash salary and fees[1] $	Non-monetary benefits[1,3] $	Annual and Long service leave[2] $	Post-employment benefits $	Cash bonus[1] $	Performance rights (deferred shares)[3] $	Options[3] $	Total $	Perf. Related %
Executive directors										
Dr M P Goldsworthy	**2021**	**526,106**	**–**	**5,494**	**23,894**	**–**	**43,758**	**21,202**	**620,454**	**10%**
	2020	528,097	–	(62,301)	21,903	–	–	5,895	493,594	1%
Non–executive directors[4]										
Mr C A Roy	**2021**	**137,358**	**10,000**	**–**	**3,803**	**–**	**–**	**–**	**151,161**	**–**
	2020	109,678	–	–	4,750	–	–	–	114,428	–
Ms M K Holzberger	**2021**	**98,000**	**–**	**–**	**9,310**	**–**	**–**	**–**	**107,310**	**–**
	2020	84,500	–	–	8,027	–	–	–	92,527	–
Mr C D Wilks	**2021**	**96,000**	**–**	**–**	**9,120**	**–**	**–**	**–**	**105,120**	**–**
	2020	84,000	–	–	7,980	–	–	–	91,980	–
Other Executive KMP										
Ms J E Ducie	**2021**	**302,906**	**–**	**19,009**	**22,094**	**–**	**20,190**	**21,462**	**385,661**	**11%**
	2020	302,297	–	(35,466)	22,703	61,600	–	6,393	357,527	19%
Total executive directors and other KMP	**2021**	**829,012**	**–**	**24,503**	**45,988**	**–**	**63,948**	**42,664**	**1,006,115**	
	2020	830,394	–	(97,767)	44,606	61,600	–	12,288	851,121	
Total NED remuneration	**2021**	**331,358**	**10,000**	**–**	**22,233**	**–**	**–**	**–**	**363,591**	
	2020	278,178	–	–	20,757	–	–	–	298,935	
Total KMP remuneration	**2021**	**1,160,370**	**10,000**	**24,503**	**68,221**	**–**	**63,948**	**42,664**	**1,369,706**	
	2020	1,108,572	–	(97,767)	65,363	61,600	–	12,288	1,150,056	

1. *Short-term benefits as per Corporations Regulations 2M 3.03(1) Item 6.*
2. *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.*
3. *Equity-settled share-based payments as per Corporations Regulations 2M.3.03(1) Item 11.*
4. *Non-executive directors' fees increased due to the reinstatement of Committee Fees from 1 April 2020. In addition, the Company commenced payment of additional 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 h) for further details.*

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j) Performance-based remuneration granted and forfeited during the year

With respect to FY2021, the STI granted and awarded and LTI granted to the executive KMP are as follows:

	STI (Rights)			LTI (Options)	
Name	Value granted $	Rights awarded %	Rights forfeited %	Value granted** $	Value exercised $
Dr M P Goldsworthy	44,500	77%	23%	45,840	–
Ms J E Ducie*	22,433	83%	17%	134,180	–

* *STI (Rights) Award for CFO/Company Secretary subject to completion of service-based condition expiring 31 July 2021.*

** *The value at grant date calculated in accordance with AASB 2 Share-based Payment of options granted during the year as part of remuneration.*

k) Terms and conditions of the equity-based payment arrangements

STI – Performance Rights

Commencing for FY2021, an annual STI in the form of Performance Rights is to be issued 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 at grant date $	Performance achieved %	Vested* %
25/09/2020	31/07/2021	$0.5650	100%	–
25/09/2020	31/07/2021	$0.2160	50%	–
23/11/2020	30/06/2021	$0.5850	95%	95%
23/11/2020	30/06/2021	$0.2350	50%	50%

* *Award for CFO/Company Secretary subject to completion of service-based condition expiring 31 July 2021.*

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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. There were no vested options as at 30 June 2021 and therefore no options exercised in FY2021 (or FY2020).

The potential grant of options to our CEO/MD for the FY2021 LTI is subject to shareholder approval at the 2021 AGM. If granted, details will be provided to the ASX and included in the Remuneration Report for the year ending 30 June 2022.

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 and exercise date	Expiry date	Exercise price $	Value per option at grant date $	Performance achieved	Vested %
21/05/2019	21/05/2022	20/05/2024	$0.35	$0.1635	To be determined	N/A
2/12/2019	21/05/2022	1/12/2024	$0.35	$0.1589	To be determined	N/A
1/04/2020	1/04/2023	31/03/2025	$0.21	$0.1458	To be determined	N/A
23/11/2020	23/11/2023	22/11/2025	$0.57	$0.3056	To be determined	N/A
24/03/2021	24/03/2024	23/03/2026	$1.20	$0.6709	To be determined	N/A

I) Reconciliation of options, rights and ordinary shares held by KMP

Options held by KMP

The table below shows a reconciliation of options held by each KMP from the beginning to the end of FY2021. There were no vested options as at 30 June 2021.

			Vested				Balance at the end of the 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								
2/12/2019	100,000	–	–	–	–	–	–	100,000
23/11/2020	–	150,000	–	–	–	–	–	150,000
Ms J E Ducie								
21/05/2019	100,000	–	–	–	–	–	–	100,000
01/04/2020	100,000	–	–	–	–	–	–	100,000
24/03/2021	–	200,000	–	–	–	–	–	200,000

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Rights held by KMP

The table below shows a reconciliation of rights held by each KMP from the beginning to the end of FY2021.

Name and grant date	Balance at the start of the year	Granted as compensation	Vested*		Forfeited		Balance at end of year (unvested)
			Number	%	Exercised	%	
Dr M P Goldsworthy 23/11/2020	–	100,000	77,000	77%	23,000	23%	–
Ms J E Ducie 25/09/2020	–	50,000	–	–	–	–	50,000

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	Balance at the start of the year	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
Directors					
Mr C A Roy	150,000	–	–	25,000	175,000
Dr M P Goldsworthy	5,979,055	–	–	20,000	5,999,055
Ms M K Holzberger	27,777	–	–	–	27,777
Mr C D Wilks	2,814,021	–	–	–	2,814,021
Other Executive KMP					
Ms J E Ducie	20,000	–	–	–	20,000

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 **https://www.silex.com.au/corporate/corporate-governance/**.

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11. 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	500,000
2/12/2019	1/12/2024	$0.35	100,000
1/04/2020	31/03/2025	$0.21	660,000
23/11/2020	22/11/2025	$0.57	150,000
24/03/2021	23/03/2026	$1.20	1,000,000

* *The options granted include issues to eligible employees in accordance with the 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. No options were exercised during the year.

12. Company secretary

Ms J E Ducie BBus, CA, MBA (Exec), GAICD was appointed to the position of Company secretary in 2010. Before joining Silex, Ms Ducie 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.

13. Indemnification and insurance of directors

The Company has entered into Deeds to indemnify the directors 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.

14. 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.

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15. Non-audit services

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.

Details of the amounts paid or payable to the auditor (PricewaterhouseCoopers) for non-audit services provided during the year are set out below.

The Board of Directors has considered the position and, in accordance with the advice received from the Audit Committee, is satisfied that the provision of the non-audit services is compatible with the general standard of independence for auditors imposed by the *Corporations Act 2001*. The Directors are satisfied that the provision of non-audit services by the auditor, as set out below, did not compromise the auditor independence requirements of the *Corporations 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
- none of the services undermine the general principles relating to auditor independence as set out in APES 110 Code of Ethics for Professional Accountants.

During the year the following fees were paid or payable for non-audit services provided by the auditor of the parent entity, its related practices and non-related audit firms:

	2021 $	2020 $
Other assurance services		
PricewaterhouseCoopers Australian firm	–	–
Total remuneration for other assurance services	–	–
Other services		
Total remuneration for other services	–	–
Total remuneration for non-audit services	–	–

16. Auditor's independence declaration

A copy of the auditors' independence declaration as required under section 307C of the *Corporations Act 2001* is set out on page 42.

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

Dr M P Goldsworthy
CEO/MD

Mr C A Roy
Chair

Sydney, 26 August 2021

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Auditor's Independence Declaration

As lead auditor for the audit of Silex Systems Limited for the year ended 30 June 2021, I declare that to the best of my knowledge and belief, there have been:

(a) no contraventions of the auditor independence requirements of the *Corporations Act 2001* in relation to the 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.

David Ronald
Partner
PricewaterhouseCoopers

Sydney
26 August 2021

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Corporate Governance Statement

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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. During the year ended 30 June 2021, the Company implemented a number of the new principles and recommendations as contained in the *4th Edition*

The 2021 Corporate Governance Statement is dated as at 30 June 2021 and reflects the corporate governance practices in place throughout the 2021 financial year. The 2021 Corporate Governance Statement was approved by the Board and lodged with the ASX Appendix 4G on 26 August 2021. 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**.

Concise Financial Report

for the year ended 30 June 2021

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Relationship of the concise financial report to the full financial report

The concise financial report is an extract from the full financial report for the year ended 30 June 2021. The financial statements and specific disclosures included in the concise financial report have been derived from the full financial report.

The concise financial report cannot be expected to provide as full an understanding of the financial performance, financial position and financing and investing activities of Silex Systems Limited and its subsidiaries as the full financial report. Further financial information can be obtained from the full financial report.

The full financial report and auditor's report will be sent to members on request, free of charge. Please call **+61 2 9704 8888** and request a copy of the full financial report (or email **enquiries@silex.com.au**). Alternatively, you can access both the full financial report and the concise report via the internet on our website: **www.silex.com.au**.

Silex

SILEX SYSTEMS LIMITED
& ITS SUBSIDIARIES

ABN 69 003 372 067

Consolidated income statement

for the year ended 30 June 2021

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	Note	2021 $	2020 $
Revenue from contracts with customers	3	**1,924,440**	581,724
Interest revenue	3	**143,435**	419,482
Revenue from continuing operations		**2,067,875**	1,001,206
Other income	4	**1,365,733**	1,238,157
Research and development materials		**(594,567)**	(292,102)
Development expenditure		**(1,601,413)**	(4,547,376)
Finance costs		**(1,590)**	(9,662)
Depreciation and amortisation expense		**(312,332)**	(356,845)
Employee benefits expense		**(4,427,100)**	(3,563,479)
Consultants and professional fees		**(675,834)**	(769,308)
Printing, postage, freight, stationery and communications		**(46,529)**	(69,439)
Rent, utilities and property outgoings		**(46,973)**	(24,317)
Net foreign exchange losses		**(219,823)**	(82,194)
Net impairment losses		**(2,665)**	(2,909)
Share of net loss of associates and joint ventures accounted for using the equity method	6	**(2,125,072)**	–
Other expenses from continuing activities		**(306,978)**	(326,914)
(Loss) before income tax		**(6,927,268)**	(7,805,182)
Income tax expense		**–**	–
Net (loss) from continuing operations		**(6,927,268)**	(7,805,182)
Net (loss) for the year		**(6,927,268)**	(7,805,182)
Net (loss) is attributable to:			
Owners of Silex Systems Limited		**(6,927,268)**	(7,805,182)

	Cents	Cents
Earnings per share for (loss) from continuing operations attributable to the ordinary equity holders of the company		
Basic earnings per share	**(4.0)**	(4.5)
Diluted earnings per share	**(4.0)**	(4.5)
Earnings per share for (loss) attributable to the ordinary equity holders of the company		
Basic earnings per share	**(4.0)**	(4.5)
Diluted earnings per share	**(4.0)**	(4.5)

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

Consolidated statement of comprehensive income

for the year ended 30 June 2021

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	2021 $	2020 $
Net (loss) for the year	**(6,927,268)**	(7,805,182)
Other comprehensive income		
Items that may be reclassified to profit or loss:		
Exchange differences on translation of foreign operations	**(829,010)**	230,232
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	**2,015,407**	(1,926,619)
Other comprehensive income for the year, net of tax	**1,186,397**	(1,696,387)
Total comprehensive income for the year	**(5,740,871)**	(9,501,569)
Attributable to:		
Owners of Silex Systems Limited	**(5,740,871)**	(9,501,569)
Total comprehensive income for the year	**(5,740,871)**	(9,501,569)

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

Consolidated balance sheet

as at 30 June 2021

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	Note	30 June 2021 $	30 June 2020 $
Assets			
Current assets			
Cash and cash equivalents		**6,402,798**	1,615,034
Other financial assets at amortised cost - term deposits		**7,700,000**	16,800,000
Trade and other receivables		**2,628,652**	1,732,168
Other current assets		**215,743**	398,121
Financial assets at fair value through other comprehensive income		**5,799,774**	8,521,234
Total current assets		**22,746,967**	29,066,557
Non-current assets			
Investments accounted for using the equity method	6	**916,254**	–
Right-of-use assets		**42,041**	47,738
Property, plant and equipment		**336,564**	271,500
Total non-current assets		**1,294,859**	319,238
Total assets		**24,041,826**	29,385,795
Liabilities			
Current liabilities			
Trade and other payables		**1,123,767**	1,095,601
Lease liabilities		**36,613**	43,755
Provisions		**770,744**	750,828
Total current liabilities		**1,931,124**	1,890,184
Non-current liabilities			
Lease liabilities		**1,791**	4,347
Provisions		**37,780**	25,059
Total non-current liabilities		**39,571**	29,406
Total liabilities		**1,970,695**	1,919,590
Net assets		**22,071,131**	27,466,205
Equity			
Contributed equity		**232,645,003**	232,645,003
Reserves		**12,002,259**	10,470,065
Accumulated losses		**(222,576,131)**	(215,648,863)
Total equity		**22,071,131**	27,466,205

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

Consolidated statement of changes in equity

for the year ended 30 June 2021

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	Attributable to owners of Silex Systems Limited			
	Contributed equity $	Reserves $	Accumulated losses $	Total $
Balance at 30 June 2019	**231,750,374**	**12,127,493**	**(207,843,681)**	**36,034,186**
Net (loss) for the year	–	–	(7,805,182)	(7,805,182)
Other comprehensive income	–	(1,696,387)	–	(1,696,387)
Total comprehensive income for the year	**–**	**(1,696,387)**	**(7,805,182)**	**(9,501,569)**
Transactions with owners in their capacity as owners				
Shares issued, net of transactions costs	894,629	–	–	894,629
Employee share schemes - value of employee services	–	38,959	–	38,959
	894,629	**38,959**	**–**	**933,588**
Balance at 30 June 2020	**232,645,003**	**10,470,065**	**(215,648,863)**	**27,466,205**
Net (loss) for the year	–	–	(6,927,268)	(6,927,268)
Other comprehensive income	–	1,186,397	–	1,186,397
Total comprehensive income for the year	**–**	**1,186,397**	**(6,927,268)**	**(5,740,871)**
Transactions with owners in their capacity as owners				
Shares issued, net of transactions costs	–	–	–	–
Employee share schemes - value of employee services	–	345,797	–	345,797
	–	**345,797**	**–**	**345,797**
Balance at 30 June 2021	**232,645,003**	**12,002,259**	**(222,576,131)**	**22,071,131**

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

Consolidated statement of cash flows

for the year ended 30 June 2021

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	2021 $	2020 $
Cash flows from operating activities		
Receipts from customers and government grants (inclusive of GST)	**2,841,240**	2,172,673
Payments to suppliers and employees (inclusive of GST)	**(7,874,844)**	(9,653,778)
Interest received	**260,193**	649,904
Interest paid	**(1,590)**	(9,662)
Net cash (outflows) from operating activities	**(4,775,001)**	(6,840,863)
Cash flows from investing activities		
Payment for investments accounted for using the equity method	**(3,005,054)**	–
Proceeds from other financial assets at amortised cost - term deposits	**9,100,000**	5,400,000
Payments for property, plant and equipment	**(182,614)**	(237,405)
Proceeds from sale of property, plant and equipment	**1,682**	–
Proceeds from sale of financial assets at fair value through other comprehensive income	**3,877,575**	–
Net cash inflows from investing activities	**9,791,589**	5,162,595
Cash flows from financing activities		
Proceeds from issue of shares, net of transaction costs	**–**	894,629
Repayment of principal elements of leases	**(199,337)**	(256,545)
Net cash (outflows)/inflows from financing activities	**(199,337)**	638,084
Net increase/(decrease) in cash and cash equivalents	**4,817,251**	(1,040,184)
Cash and cash equivalents at the beginning of the financial year	**1,615,034**	2,653,590
Effects of exchange rate changes on cash	**(29,487)**	1,628
Cash and cash equivalents at end of year*	**6,402,798**	1,615,034
*Term deposits excluded from Cash and cash equivalents	**7,700,000**	16,800,000

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

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Note 1 Significant changes in the current accounting period

On 31 January 2021, closing of the Agreement between Silex, Cameco and GEH for the joint purchase of GEH's 76% interest in GLE occurred. As a result, Silex acquired a 51% interest in GLE and Cameco increased its interest from 24% to 49%. Several other agreements and documents were executed and closed simultaneously, including a site lease to enable the continuation of GLE's operations at its Test Loop facility in Wilmington, North Carolina. The Agreement provides for deferred annual purchase payments to GEH totalling US$20 million consisting of four annual payments of US$5 million (shared pro-rata by Silex and Cameco) triggered after the first year GLE generates US$50 million in revenues. Various contractual arrangements have also been made with GLE partner Cameco, including an option for Cameco to potentially acquire a further 26% equity in GLE from Silex at fair market value. Silex's 51% interest in GLE is accounted for as a joint venture which is further outlined in note 6 to these financial statements.

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Note 2 Segment information

	Silex Systems $	Translucent $	Silex USA $	Total $
2021				
Total segment revenue	1,507,256	1,619,261	–	3,126,517
Inter-segment revenue	(105,509)	(953,133)	–	(1,058,642)
Revenue from external customers	**1,401,747**	**666,128**	**–**	**2,067,875**
Segment result	**(3,791,942)**	**663,353**	**(3,798,679)**	**(6,927,268)**
Total segment assets	**15,422,737**	**7,647,681**	**971,408**	**24,041,826**
Total segment liabilities	**1,961,692**	**9,003**	**–**	**1,970,695**
2020				
Total segment revenue	496,018	1,631,268	–	2,127,286
Inter-segment revenue	(76,536)	(1,049,544)	–	(1,126,080)
Revenue from external customers	**419,482**	**581,724**	**–**	**1,001,206**
Segment result	**(3,794,933)**	**568,674**	**(4,578,923)**	**(7,805,182)**
Total segment assets	**19,695,751**	**9,442,811**	**247,233**	**29,385,795**
Total segment liabilities	**1,662,515**	**9,842**	**247,233**	**1,919,590**

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:

	2021 $	2020 $
Segment result	**(6,927,268)**	(7,805,182)
Net (loss) before income tax from continuing operations	**(6,927,268)**	(7,805,182)

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Note 3 Revenue from continuing operations

	2021 $	2020 $
Recoverable project costs	**1,258,312**	–
Royalty revenue - sale of cREO® technology	**666,128**	581,724
	1,924,440	581,724
Interest revenue	**143,435**	419,482
	2,067,875	1,001,206

Note 4 Other income

	2021 $	2020 $
Research and development tax incentive	**1,087,674**	841,144
Cooperative Research Centres Project (CRC-P) Grant	**128,927**	223,963
Government Assistance – COVID-19 related	**147,450**	173,050
Profit on sale of property, plant and equipment	**1,682**	–
	1,365,733	1,238,157

Note 5 Dividends

No dividends were declared or paid during the year or in the prior year.

Note 6 Interests in joint ventures

Set out below are details of the Global Laser Enrichment Holdings LLC joint venture as at 30 June 2021, which is material to the Company:

Name of entity	Place of business/ country of incorporation	% of ownership interest		Nature of relationship	Measurement method	Carrying amount	
		2021	2020			2021	2020
Global Laser Enrichment Holdings LLC*	USA	51%	100%*	Joint venture	Equity method	916,254	–

** Global Laser Enrichment Holdings LLC (GLE Holdco) was a subsidiary at 30 June 2020. It became a joint venture on 31 January 2021. Immediately prior to becoming a joint venture, GLE Holdco had $nil net assets therefore no gain or loss was required to be booked following Cameco's acquisition of its 49% interest.*

GLE Holdco acquired Global Laser Enrichment LLC (GLE) on 31 January 2021. GLE holds the exclusive worldwide license to commercialise the SILEX technology for uranium enrichment. GLE's current focus is to complete the full-scale demonstration of the technology utilising a pilot plant currently being built in Wilmington, NC.

The Company's share of net losses of GLE Holdco for the 5 months ended 30 June 2021 is $2,125,072. The Company's commitments to provide funding for the joint venture capital commitment, if called, is $3,717,586 at 30 June 2021.

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Note 7 Events occurring after reporting date

There continues to be significant uncertainty associated with the potential impacts of the COVID-19 pandemic. The Company continues to review the evolving COVID-19 situation in line with NSW Government advice. Consideration with respect to the continuing impact of the pandemic is ongoing.

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 8 Basis of preparation

This concise financial report relates to the consolidated entity consisting of Silex Systems Limited and the entities it controlled at the end of, or during, the year ended 30 June 2021. The accounting policies have been consistently applied to all years presented, unless otherwise stated below. The financial statements in this report are presented in Australian dollars.

Directors' Declaration

30 June 2021

The directors declare that in their opinion, the concise financial report of the consolidated entity for the year ended 30 June 2021 as set out on pages 44 to 53 complies with Accounting Standard AASB 1039: Concise Financial Reports.

The concise financial report is an extract from the full financial report for the year ended 30 June 2021. The financial statements and specific disclosures included in the concise financial report have been derived from the full financial report.

The concise financial report cannot be expected to provide as full an understanding of the financial performance, financial position and financing and investing activities of the consolidated entity as the full financial report, which is available on request.

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



Dr M P Goldsworthy
CEO/MD



Mr C A Roy
Chair

Sydney, 26 August 2021

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Independent auditor's report

to the members of Silex Systems Limited

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Report on the concise financial report

Our opinion

In our opinion, the accompanying concise financial report of Silex Systems Limited (the Company) and its controlled entities (together, the Group) for the year ended 30 June 2021 complies with Australian Accounting Standard AASB 1039 *Concise Financial Reports*.

What we have audited

The Group concise financial report derived from the financial report of the Group for the year ended 30 June 2021 comprises:

- the consolidated balance sheet as at 30 June 2021
- the consolidated statement of comprehensive income for the year then ended
- the consolidated income statement 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 related notes

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 concise 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 audit 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 and Ethical Standards Board's APES 110 *Code of Ethics for Professional Accountants* (the Code) that are relevant to our audit of the concise financial report in Australia. We have also fulfilled our other ethical responsibilities in accordance with the Code.

Concise financial report

The concise financial report does not contain all the disclosures required by the Australian Accounting Standards in the preparation of the financial report. Reading the concise financial report and the auditor's report thereon, therefore, is not a substitute for reading the financial report and the auditor's report thereon.

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Liability limited by a scheme approved under Professional Standards Legislation

Independent auditor's report

to the members of Silex Systems Limited

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The financial report and our report thereon

We expressed an unmodified audit opinion on the financial report in our report dated 26 August 2021.

That report also includes:

- The communication of 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 of the current period.

Responsibilities of the directors for the concise financial report

The directors are responsible for the preparation of the concise financial report in accordance with Accounting Standard AASB 1039 *Concise Financial Reports*, and the *Corporations Act 2001*, and for such internal control as the directors determine is necessary to enable the preparation of the concise financial report.

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

Our responsibility is to express an opinion on whether the concise financial report, complies in all material respects, with AASB 1039 *Concise Financial Reports* based on our procedures which were conducted in accordance with Auditing Standard ASA 810 *Engagements to Report on Summary Financial Statements*.

Report on the remuneration report

The following paragraphs are copies from our report on the remuneration report of Silex Systems Limited for the year ended 30 June 2021.

Our opinion on the remuneration report

We have audited the remuneration report included in pages 27 to 39 of the directors' report for the year ended 30 June 2021.

In our opinion, the remuneration report of Silex Systems Limited for the year ended 30 June 2021 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

PricewaterhouseCoopers

David Ronald
Partner

Sydney
26 August 2021

Shareholders' information

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Information relating to shareholders as at 13 August 2021

(a) Distribution schedule of equity securities

Holding	Class of equity security: Ordinary					
	Shares		Options		Performance rights	
	No. of holders	% of shares	No. of holders	% of options	No. of holders	% of rights
1 - 1,000	2,036	0.60%	–	–	–	–
1,001 - 5,000	2,284	3.51%	–	–	–	–
5,001 - 10,000	740	3.40%	–	–	–	–
10,001 - 100,000	968	17.15%	7	19.92%	16	100.00%
100,001 and over	224	75.34%	11	80.08%	–	–
Total number of holders	**6,252**	**100.00%**	**18**	**100.00%**	**16**	**100.00%**

There were 1,157 holders of less than a marketable parcel of ordinary shares.

(b) Names of twenty largest quoted equity security holders as at 13 August 2021

Name	Number of securities	Percentage held
Jardvan Pty Ltd	29,801,030	17.25%
Majenta Holdings Pty Ltd	5,703,923	3.30%
Polly Pty Ltd	4,073,863	2.36%
Hillboi Nominees Pty Ltd	3,980,026	2.30%
Throvena Pty Ltd	2,978,203	1.72%
Hamlac Pty Ltd	2,525,937	1.46%
Mr Christopher David Wilks	2,405,070	1.39%
HSBC Custody Nominees (Australia) Limited	2,324,710	1.35%
Silicon Quantum Computing Pty Ltd	2,300,000	1.33%
Quintal Pty Ltd	2,002,952	1.16%
Spar Nominees Pty Ltd	1,960,000	1.13%
Sporran Lean Pty Ltd	1,799,000	1.04%
Deering Nominees Pty Ltd	1,700,000	0.98%
RD Super Pty Ltd	1,460,000	0.85%
BNP Paribas Nominees Pty Ltd	1,417,892	0.82%
Mr Peter James Thomas + Ms Helen Thomas	1,371,157	0.79%
Mr Xiangyang Wu	1,294,400	0.75%
Eugob Nominees Pty Ltd	1,225,000	0.71%
Morgan Stanley Australia Securities (Nominee) Pty Limited	1,192,000	0.69%
McCusker Holdings Pty Ltd	1,150,000	0.67%
	72,665,163	**42.06%**

Shareholders' information

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(c) Substantial holders

Name	Number of securities	Percentage held
Jardvan Pty Ltd	29,801,030	17.25%

(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 13 August 2021

As at 13 August 2021, 2,300,000 shares were subject to voluntary escrow. The escrow period ends 6 January 2022.

(f) Unquoted equity securities as at 13 August 2021

	Number on issue	Number of holders
Options issued under the Silex Systems Limited Employee Incentive Plan	2,410,000	18
Performance rights issued under the Silex Systems Limited Employee Incentive Plan	490,000	16

Company directory

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Directors

Mr C A Roy – Chair
Dr M P Goldsworthy – CEO/MD
Ms M K Holzberger
Mr C D Wilks

Audit Committee

Ms M K Holzberger – Chair
Mr C A Roy
Mr C D Wilks

People & Remuneration Committee

Mr C A Roy – Chair
Ms M K Holzberger
Mr C D Wilks

Company Secretary

Ms J E Ducie

Registered Office and Principal Place of Business

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New Illawarra Road
Lucas Heights NSW 2234, Australia

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NSW 2234, Australia

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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
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



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