Full Year Operational Update

27 August 2026

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Commercialisation Highlights and Progress

Comments from Dr Michael Goldsworthy, Silex's CEO/Managing Director:

GLE's PLEF - Competitive Edge from a Potential Single-site Solution:

"Global Laser Enrichment (GLE), together with its owners, Silex and Cameco, are progressing plans for the construction of the world's first laser-based uranium enrichment plant at the Paducah Laser Enrichment Facility (PLEF) in Kentucky (KY). The PLEF is potentially a unique single-site solution for US domestic production of uranium, conversion, and enrichment services. With significantly higher efficiency and orders of magnitude increase in process throughput, the SILEX technology places GLE in a very strong position to serve the accelerating US demand for nuclear fuel – relative to competitors using second generation gas centrifuge technology."

Technology Maturation:

"The commercialisation program for the SILEX uranium enrichment technology, being conducted in conjunction with GLE, progressed through a pivotal milestone during the year, culminating in the independent validation in October 2025 of the SILEX technology achieving TRL-6[1]. This milestone involved large-scale demonstration at GLE's integrated enrichment pilot plant in Wilmington, North Carolina (NC), and represents a major technology de-risking milestone. TRL-7 activities have advanced significantly during the reporting period, with Silex and GLE progressing detailed design and demonstration of full-scale commercial equipment, in parallel with planning for the potential deployment of the PLEF."

Commercialisation Plans:

"GLE's planned PLEF is uniquely positioned to play a pivotal role in rebuilding and strengthening the US domestic supply chain for the production of nuclear fuel. GLE's commercialisation plans are underpinned by the 2016 contract with the US Department of Energy (DOE), which provides for GLE's exclusive access to over 200,000 metric tonnes of high-grade depleted tails inventories, stored adjacent to GLE's site for the planned PLEF. The plan involves enriching this material using the SILEX laser enrichment technology to produce natural grade UF_6 at a rate equivalent to a mine producing up to 5 million pounds of uranium a year for ~30 years – essentially an 'above-ground uranium mine' in the US. The PLEF would furthermore provide around 2 million kilograms per year of conversion capacity."

Additional Commercialisation Progress:

"During the year, GLE also made significant progress in other key focus areas, including the Nuclear Regulatory Commission's (NRC's) acceptance and review of the licence application for the PLEF, expansion of operations at GLE's classified manufacturing facility in Wilmington, and continued progress on preliminary site activities for the PLEF."

[1] Technology Readiness Level 6 (TRL-6), as defined by DOE Technology Readiness Assessment Guide (G 413.3-4A)

Commercialisation Highlights and Progress

SILEX Laser Uranium Enrichment Technology:

- Silex's principal focus is on the commercialisation of our unique, third-generation SILEX laser-based uranium enrichment technology for nuclear fuel production, in conjunction with 51% owned and US-based Global Laser Enrichment (GLE), who holds an exclusive licence for the SILEX technology. Global nuclear company Cameco owns the remaining 49% interest in GLE;
- In October 2025, Silex and GLE announced the conclusion of an independent, third-party validation of the SILEX enrichment technology, conducted by a leading Fortune 1000 technology provider, confirming that the technology had achieved the pivotal TRL-6 maturity level involving a large-scale (pilot plant) demonstration program at GLE's Wilmington, NC, Test Loop facility. The TRL-6 achievement triggered a US$5 million milestone payment from GLE to Silex, which was received in December 2025;
- Having achieved the significant TRL-6 milestone, the current focus is on design and demonstration of full-scale commercial production technology and manufacturing maturation programs (TRL-7 / MRL-7[2]), as well as preliminary detailed design for the first commercial plant – the Paducah Laser Enrichment Facility (PLEF);
- GLE's commercialisation plan is based on deploying the SILEX technology to re-enrich US Department of Energy (DOE) legacy inventories of high-grade depleted uranium tails to produce natural grade uranium (as UF_6) at its planned PLEF, in Paducah, KY, with the aim of commencing commercial operations by 2030. Under a contract signed in 2016 with the DOE, GLE has exclusive access to over 200,000 metric tonnes of tails inventories, which will provide around 30 years of feedstock to produce the natural grade UF_6 at an annual output rate equivalent to a uranium mine producing up to 5 million pounds of uranium, as well as 2 million kilograms of conversion annually;
- GLE's application for a licence to construct and operate the PLEF was accepted by the NRC for review in August 2025, with the NRC publishing its draft environmental impact study for the plant in March 2026. GLE continues to work with the NRC to secure the PLEF licence, with the process expected to be completed in early CY2027;
- In January 2026, DOE notified GLE that it had been selected for a funding award of US$28.5 million to advance next-generation laser-based uranium enrichment technology;
- In March 2026, GLE received preliminary approval for a comprehensive package of incentives from the Commonwealth of Kentucky and McCracken County to support the development of the PLEF, which is expected to be the single largest capital investment in Western Kentucky's history. The performance-based incentives package will provide up to US$98.9 million in tax and other economic incentives subject to GLE reaching agreed investment and job creation thresholds;
- GLE and its owners continue work to define the scope and requirements for a PLEF feasibility study and to detail the criteria for a Final Investment Decision (FID) for the world's first commercial laser-based uranium enrichment plant.

[2] MRL: Manufacturing Readiness Level (DOD Guide at dodmrl.com/MRL_Definitions_2010.pdf)

Quantum Silicon (Q-Si) Technology:

- Construction of the first full-scale Q-Si Production Plant was completed during the year at the Company's Sydney facility, with functional integration and commissioning now advancing. Enriched silicon-28 in the form of high-purity Q-Si is required for next-generation silicon-based quantum computers. With sample production expected to commence in Q1 CY2027, commercial engagement with potential customers continues to increase.

Other Highlights:

- A $130 million institutional placement equity raising was successfully completed on 7 August 2025, followed by the completion of a Share Purchase Plan on 29 August 2025, with eligible applications received totalling ~$19.4 million;
- The Company held cash and term deposits at 30 June 2026 of ~$180.7 million, with no corporate debt.

Our Strategy

We are committed to the commercialisation of our innovative SILEX laser-based enrichment technology across multiple global markets, with a primary focus on contributing to the reliable and sustainable supply of nuclear fuel for the global nuclear power industry, a vital enabler of the world's energy security and clean energy needs.

The execution of this strategy focuses on the pursuit of the *'Triple Opportunity'* in the global nuclear fuel supply chain, through GLE's commercial deployment of the SILEX technology at the planned PLEF, in what could become a 'single-site solution' for the production of multiple grades of nuclear fuel.

PLEF site, Paducah, KY

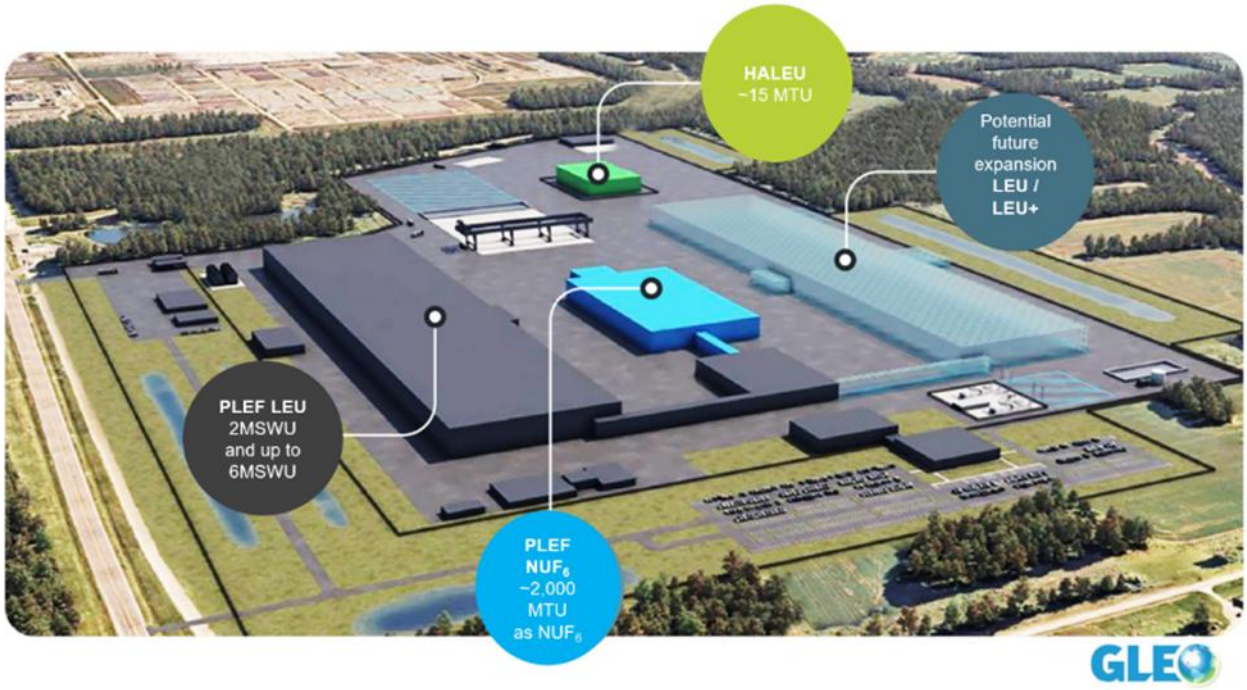
The 'Triple Opportunity' for GLE and the SILEX Technology

GLE's path to market is focused on its potential to address the *'Triple Opportunity'* for nuclear fuel production, which is being driven by geopolitical and environmental developments that are transforming the global nuclear fuel supply chain.

The *'Triple Opportunity'* specifically involves GLE's potential production of three different grades of nuclear fuel in the US, commencing with natural UF_6 production at the planned PLEF:

1. **UF_6:** production of natural grade uranium hexafluoride (NUF_6) (with U^{235} assays of 0.7%) via enrichment of depleted UF_6 tails (U^{235} assays of 0.25% to 0.5%) with the SILEX technology. Since the tails are already converted, this would also help to alleviate UF_6 conversion supply pressures;
2. **Low-enriched Uranium (LEU):** production of LEU (U^{235} assays up to 5%) and LEU+ (assays from 5% to 10%), achieved with additional SILEX enrichment capacity – to supply fuel for existing and future large-scale conventional and advanced reactors;
3. **High-Assay, Low-enriched Uranium (HALEU):** production of HALEU (U^{235} assays up to ~20%) via further enrichment with the SILEX technology – to supply fuel for next-generation advanced reactors, including small modular reactors (SMRs).

GLE – PLEF Commercial Plant Opportunities (conceptual)



For the first opportunity - tails enrichment, GLE's planned annual production of up to 2,000 MTU as NUF_6 equates to the supply of around 10% of the current US uranium and conversion demand for the US nuclear reactor fleet. This also represents a nearly tenfold increase in US domestic natural uranium output, significantly enhancing US national energy security and fuel independence.

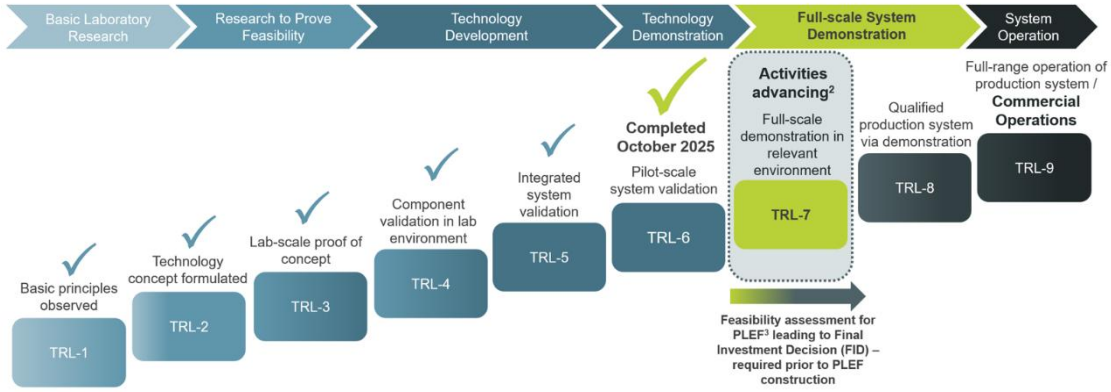
GLE's Commercialisation Program

i. TRL-6 Achievement and Continuing Technology Maturation:

Silex and GLE continue to progress the commercialisation of the world's most advanced third-generation enrichment technology, after achieving the large-scale (pilot plant) demonstration and key de-risking TRL-6 milestone in October 2025. The SILEX laser uranium enrichment process offers significant efficiency gains and process throughput increases over current centrifuge technology, potentially resulting in reduced capital and operating costs.

GLE now is focused on detailed design and demonstration of the SILEX technology at full-scale system performance under relevant conditions (i.e., TRL-7) and planning for commercial deployment of the PLEF, which is expected to culminate in a feasibility assessment and FID. Scoping of the feasibility assessment and definition of FID criteria are currently being advanced by GLE and its owners, Silex and Cameco. Efforts also are being focused on preliminary deployment activities, including advancing manufacturing readiness (MRL), PLEF site preparations, and establishing a robust US domestic supply chain to support commercial deployment of the SILEX technology.

Technology Readiness Level (TRL[1]) Framework



1. Technology Readiness Level (TRL), as defined by *DOE Technology Readiness Assessment Guide* (G413.3-4A)
2. All scheduling estimates shown are tentative and subject to change and/or unforeseen delays
3. PLEF: Paducah Laser Enrichment Facility

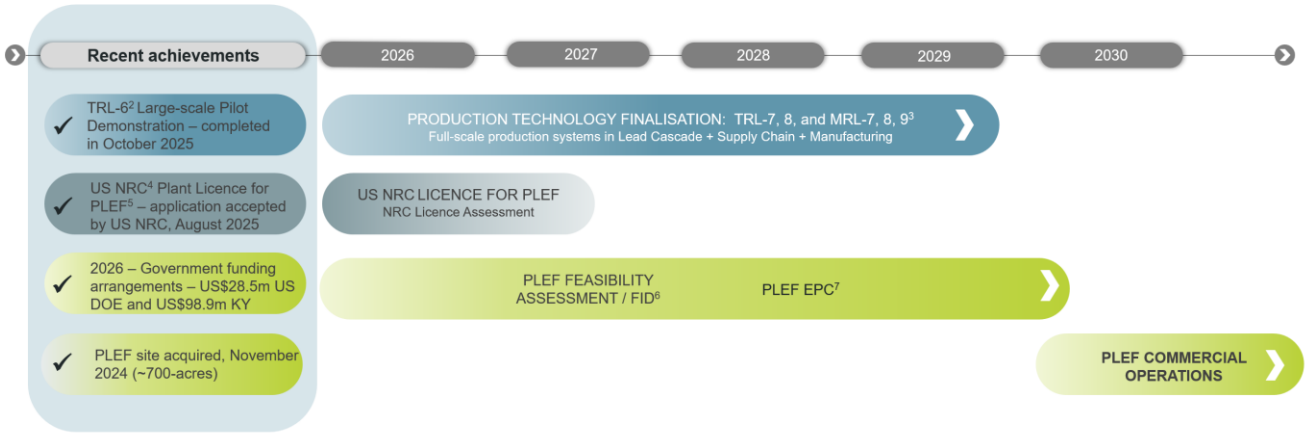
ii. Commercialisation Activities and Timeline:

Progress made by GLE in key commercialisation activities for the PLEF include:

- Currently progressing towards advancing technology maturation (TRL-7) and manufacturing activities (MRL-7), including the continued expansion of in-house manufacturing capabilities at GLE's headquarters in Wilmington, NC;
- Continued development of supply chains, with outreach to vendors, identification of long-lead procurement items, and planning for onshoring of critical component and system manufacture;
- Preliminary site works, including initial site clearing and electrical supply infrastructure at GLE's PLEF site in Western Kentucky;
- Continued work with the NRC to support its licence assessment for the planned PLEF, which is expected to be completed in early CY2027. The NRC completed its acceptance review of GLE's licence application in August 2025 and published its draft environmental impact study for the PLEF in March 2026. GLE is first in line with the NRC for licence approval, which would provide GLE with the required licence to construct and operate the PLEF;
- The DOE notified GLE in January 2026 that it had been selected for a funding award of US$28.5 million to advance next-generation laser-based uranium enrichment technology. In addition, GLE received preliminary approval in March 2026 for a comprehensive package of incentives from the Commonwealth of Kentucky and McCracken County to support the development of the PLEF. The performance-based incentives package will provide up to US$98.9 million in tax and other economic incentives subject to GLE reaching agreed investment and job creation thresholds;
- Extensive engagement with the Wilmington, NC, and Paducah, KY, communities, including GLE's provision of support for local economic and business development and the expansion of regional education and training programs to enable future GLE workforce development, as well as relationship building and stakeholder engagement. Notably, GLE, hosted 'open house' sessions with the Paducah community to answer community members' questions about the planned PLEF.

GLE and the SILEX uranium enrichment technology has the potential to become a major contributor to nuclear fuel production for the world's current and future nuclear reactor fleet, through the production of uranium in several different forms, including natural grade uranium (and conversion) as UF_6, LEU and LEU+, and high-assay LEU (HALEU) for next-generation advanced reactors, including SMRs.

GLE's Indicative Target Commercialisation Timeline[1]



1. Indicative target timeline subject to schedule risks, such as technology maturation outcomes, market conditions, licensing, industry and government support, PLEF feasibility assessment, unforeseen delays, and other factors, and may vary according to changing circumstances and differing scenarios
2. Technology Readiness Level 6 (TRL-6), as defined by *DOE Technology Readiness Assessment Guide* (G413.3-4A)
3. MRL: Manufacturing Readiness Level (DOD Guide at dodmrl.com/MRL_Definitions_2010.pdf)
4. NRC: Nuclear Regulatory Commission
5. PLEF: Paducah Laser Enrichment Facility
6. FID: Final Investment Decision
7. EPC: Engineering, Procurement, and Construction of commercial plant

Nuclear Power Outlook and Fuel Market Update

i. Nuclear Power Outlook:

Nuclear power is playing an increasingly important role in the supply of carbon-free, baseload electricity, and is anticipated to play a much greater role in the global energy mix as countries around the world adopt policies to meet more urgent net-zero emissions targets and race to assure their energy security and energy fuel supply chains.

There is strong global growth in demand for nuclear power, as evidenced in the granting of life extensions for existing reactors, the planned return to service of idled reactors, including restarts announced in response to growing electricity demand from AI and data centres ('hyperscalers'), as well as construction of, and planning for, hundreds of new nuclear power units around the world. The *Declaration to Triple Nuclear Energy*, launched at COP28 in Dubai in 2023 and now signed by 38 countries, established a 1,200 GWe nuclear capacity expansion target by 2050. The World Nuclear Association's January 2026 *World Nuclear Outlook Report* concluded that total nuclear capacity could reach 1,446 GWe by 2050 when considering current operable reactors, reactors under construction, planned, proposed, and potential reactors, together with current government targets.

The US is currently the largest producer of nuclear power in the world, with ~30% of global nuclear generation today. Nuclear power in the US represents ~20% of its total electricity production across 28 states. The US government set targets in 2025 to quadruple nuclear power capacity by 2050 to ~400 GWe from the current capacity of ~100 GWe, underscoring the expected continued importance of nuclear in the production of energy in the US.

In pursuit of the US Government's objectives, an US$80 billion strategic partnership between the US Department of Commerce, Westinghouse, and its owners, Brookfield Asset Management and Cameco, was announced in October 2025, with a plan outlined to deploy a new fleet of Westinghouse AP1000 nuclear reactors across the United States. Furthermore, in June 2026, the US DOE announced a conditional loan commitment to finance the purchase of long-lead time items needed to rebuild America's commercial nuclear supply chain. The US$17.5 billion American Nuclear Supply Chain Loans will help to finance the construction of 10 Westinghouse AP1000 reactor units across five sites in the US, with each reactor generating 1.1 GW of electrical power output.

There also is significant international investment in the development of next-generation advanced reactor technologies, including SMRs. With substantial growth forecast in the demand for electricity, SMRs, with their anticipated lower build costs, reduced construction times, smaller footprints, inherent safety features, and ability to load follow, offer greater flexibility and grid stability, particularly with today's electricity grids relying more heavily on disperse, intermittent renewable energy sources.

In the new age of electrification of the global economy and in a carbon-constrained and geopolitically challenged world, we are greatly encouraged by the outlook for zero-emissions nuclear energy and the multiple opportunities for the SILEX uranium enrichment technology and GLE.

ii. Fuel Market Update:

Over the last three decades, global energy markets have become highly dependent on cheap, Russian-sourced nuclear fuel. However, the shift by Western markets away from Russian material precipitated by its February 2022 invasion of Ukraine, along with other significant market developments, has created urgency in establishing alternative supply sources for the medium to long term, leading to sustained increases in prices across the key components of the nuclear fuel cycle:

- the term price for uranium is currently at ~US$94 per pound, which is near its highest level in over 20 years;
- term conversion prices also continue to increase, with the North American conversion price at ~US$55/kgU;
- the term enrichment price has risen to ~US$180/SWU and is expected to continue to strengthen.

It is clear that demand for nuclear fuel continues to be elevated by positive developments over and above the War in Ukraine, creating significant opportunities for GLE to participate in supply-constrained Western / open markets – across a range of different fuel grades.

There remains an ongoing focus by nuclear fuel buyers to contract long-term fuel requirements. GLE is the only US enrichment company that has the potential to offer a single-site solution for production of uranium, conversion, and enrichment – a unique offering to nuclear power generators in the US and other key customer markets, making GLE a highly strategic energy security partner.

Quantum Silicon (Q-Si) Production Project

Silex's Q-Si Production Project, which commenced in August 2023, is being undertaken in conjunction with initial offtake partner, Silicon Quantum Computing Pty Ltd (SQC), and UNSW Sydney. The Project will result in the establishment of the world's first laser-based enrichment plant to produce highly enriched silicon-28. The ~3.5-year Project is supported with $5.1 million in funding from the Federal Government's Defence Trailblazer for Concept to Sovereign Capability program and a cash contribution of $4.35 million from SQC.

In June 2026, construction of the silicon enrichment plant (the Q-Si Production Plant) at our facility in Sydney was completed, with plant integration and commissioning activities to be completed later this calendar year.

Sample production of highly enriched silicon-28 is expected to commence in Q1 CY2027. The initial production plant is expected to produce up to 20kg of Q-Si annually (depending on several factors, such as market demand and customer purity requirements), which will be converted into gaseous and solid product forms, as required by various customers around the world.

Potential expansion of modular production capacity at a new dedicated site could occur over the coming years if market demand grows. Internal market analysis indicates the current market is small (less than 50 kgs per year); however, we expect this market to expand significantly over the next five to 10 years as silicon-based quantum computers are commercialised.

Enriched silicon-28 in the form of high-purity Q-Si is required for next-generation silicon-based quantum computers being developed by advanced semiconductor companies around the world. Quantum computers could revolutionise the computing industry by providing an immense increase in computing power, when compared with today's most advanced classical chips made by companies such as Intel, NVIDIA, IBM, GlobalFoundries, TSMC, and Samsung. Quantum computing is therefore expected to underpin a transformational performance uplift in the emerging AI industry.

Q-Si products are used by silicon-based quantum computing developers as the substrate material for the fabrication of 'nuclear spin' and 'quantum well' qubits – the building blocks of quantum computers, akin to transistor devices in classical silicon chips, but on a much smaller atomic scale. Silex has been working with SQC to qualify Q-Si products with the highest possible levels of isotopic and chemical purity. Increasing levels of engagement with other potential customers offshore is expected to result in additional product offtake arrangements being concluded over the next year and beyond. Silex retains 100% ownership of the Q-Si production technology and related Intellectual Property (IP) developed through the Project.

Corporate

As at 30 June 2026, the Company held ~$180.7 million in cash and term deposits, with no corporate debt.

Workplace Health and Safety

The health, safety, and well-being of our people is paramount – across all sites on which we operate.

Our proactive Work Health and Safety (WHS) program focuses on continuing maturation of our formal WHS Management System, as our work environment and technology commercialisation activities evolve. This includes our robust, informal "work shop floor" WHS implementation and learning processes, driven by a strongly reinforced nuclear safety and security culture. We actively manage WHS risks with various control and mitigation measures, with regular reviews aimed at continuous improvement. Our WHS Management System encompasses physical, mental, social and psychosocial wellbeing.

Authorised for release by the Silex Board of Directors.

Further information on the Company's activities can be found on the Silex website: www.silex.com.au or by contacting:

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Important Information

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

Silex Systems Limited ABN 69 003 372 067 (**Silex** or the **Company**) is a technology commercialisation company, the primary asset of which is the SILEX laser enrichment technology (**SILEX technology**), originally developed at the Company's technology facility in Sydney, Australia. The SILEX technology has been under development for uranium enrichment jointly with 51% owned 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 SILEX technology maturation program, nuclear fuel market conditions, industry and government support, project feasibility, and commercial plant licensing, and, therefore, remains subject to associated risks.

Silex also is at various stages of development of additional commercial applications of the SILEX technology, including the production of 'Quantum Silicon' (**Q-Si**) for the emerging technology of silicon-based quantum computing. The Q-Si Project remains dependent on the outcomes of the Project, as well as the successful development of silicon-based quantum computing technology by third parties, and is, therefore, subject to various risks. Silex is also conducting early-stage research activities in its Stable Isotope Project (**SIP**), which focuses on additional enriched isotopes required for semiconductor and medical applications and is also subject to various risks and outcomes. The commercial future of the SILEX technology in application to uranium, silicon, stable, and other isotopes therefore is uncertain, and any plans for commercial deployment are speculative.

Forward Looking Statements

The commercial potential of the abovementioned technologies and activities is currently unknown. Accordingly, no guarantees as to the future performance of these technologies can be made. The nature of the statements in this Announcement regarding the future of the SILEX technology as applied to uranium enrichment, Q-Si production, stable and other isotope separation projects, and any associated commercial prospects, including technology maturation activities and other commercialisation milestones at GLE, are forward-looking and are subject to a number of variables, including, but not limited to, known and unknown risks, contingencies, and assumptions that 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 disclosure involve subjective judgement and analysis and, accordingly, are subject to: change at any time due to variations in the outlook for, and management of, Silex's business activities (including project outcomes); changes in industry trends and government policies; and new or unforeseen circumstances. The Company's management believes that there are reasonable grounds to make such statements as at the date of this disclosure. 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. None of Silex, its related companies, or any of their respective officers, directors, employees, affiliates, partners, representatives, consultants, agents, or advisers makes any representation or warranty as to the accuracy of any forward-looking statements contained in this Announcement.

Not Advice

Information in this Announcement, including forecast financial information, should not be considered as investment, legal, tax, or other advice. You should make your own assessment and seek independent professional advice in connection with any investment decision.

Risk Factors

Risk factors that could affect the future results and commercial prospects of Silex include, but are not limited to: ongoing economic and social uncertainty, including in relation to global economic stresses, such as interest rates; inflation; tariffs (including tariffs imposed by the United States); geopolitical risks, in particular, those relating to Russia's invasion of Ukraine, the war between Iran and the US, and tensions between China and Taiwan, which may affect global supply chains and capital markets; uncertainties related to the effects of climate change and mitigation efforts; the results of the GLE/SILEX uranium enrichment technology maturation program; the market demand for natural uranium and enriched uranium; the outcome of the Q-Si Project for the production of enriched silicon for the emerging silicon-based quantum computing industry; the outcome of the SIP; the potential development of, or competition from, alternative technologies; the regulatory changes and uncertainties related to various US Government funding initiatives, 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 US, Australia, or elsewhere; actions taken by the Company's commercialisation partners and other stakeholders that could adversely affect the technology development programs and commercialisation strategies of Silex; and the outcomes of various strategies and projects undertaken by the Company.