Half Year Operational Update

25 February 2026

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Recent Highlights and Progress

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

Technology Maturation:

"The commercialisation of the SILEX laser technology for uranium enrichment, being conducted in conjunction with GLE, progressed through a pivotal milestone during the period in review, culminating in the receipt of an independent assessment in October 2025 validating that the SILEX technology had achieved TRL-6, involving large-scale demonstration with GLE's integrated enrichment pilot plant in Wilmington, North Carolina. This represents a major technology de-risking milestone. With TRL-7 activities advancing, Silex and GLE are progressing towards full-scale detailed design and planning for the potential deployment of the Paducah Laser Enrichment Facility (PLEF) in Paducah, Kentucky."

Commercialisation Plans:

"GLE's PLEF is uniquely positioned to play a pivotal role in rebuilding and strengthening the US domestic supply chain for the production of nuclear fuel, and is potentially a unique single-site solution for production of uranium, conversion, and enrichment services. Our commercialisation plans are underpinned by GLE's contract with the US DOE for exclusive access to over 200,000 metric tonnes of high-grade depleted tails inventories, which could be enriched by the SILEX laser technology at the PLEF to produce natural grade UF_6 at a rate equivalent of up to 5 million pounds a year for up to 30 years – essentially akin to an 'above-ground uranium mine'."

Additional Commercialisation Progress:

"During the half year, GLE also made significant progress in other key focus areas, including NRC's acceptance of the licence application for the PLEF, expansion of operations at the classified manufacturing facility in Wilmington, and progress on preliminary site activities for the PLEF. In the New Year, GLE was informed by the US DOE that it had been awarded up to US$28.5 million in funding to support the advancement of the next-generation SILEX laser enrichment technology."

Competitive Edge:

"GLE remains committed, with the full support of owners, Silex and Cameco, to progressing plans for the world's first laser enrichment plant at the PLEF. With significantly higher efficiency and orders of magnitude increase in process throughput, the SILEX technology places GLE in a very strong position relative to competitors using second generation centrifuge technology."

Recent Highlights and Progress

The SILEX Laser Uranium Enrichment Technology:

- The principal focus of Silex is on the commercialisation of our unique, third-generation SILEX laser-based uranium enrichment technology for nuclear fuel production, in conjunction with exclusive licensee, US-based Global Laser Enrichment LLC (GLE);
- GLE's commercialisation plan is centred on re-enriching US Department of Energy (DOE) legacy inventories of depleted uranium tails into a commercial source of uranium and conversion at its planned Paducah Laser Enrichment Facility (PLEF) at Paducah, KY, with the aim of commencing commercial operations by 2030. Under a contract with the DOE, GLE has exclusive access to over 200,000 metric tonnes of high-grade tails inventories, which will be used to produce natural grade uranium hexafluoride (UF_6) with the SILEX technology at an equivalent annual output rate of up to 5 million pounds of uranium and 2,000 metric tonnes of conversion capacity annually for up to three decades;
- GLE is the only new market entrant with an enrichment licence application currently under Nuclear Regulatory Commission (NRC) review. GLE continues to work with the NRC to secure its licence for the planned PLEF as early as CY2027;
- In October 2025, GLE and Silex announced the conclusion of an independent, third-party validation of the SILEX laser-based uranium enrichment technology, which was conducted by a leading Fortune 1000 technology provider in the national defence and global infrastructure markets. The independent review confirmed that GLE achieved TRL-6 [1] following the completion of its large-scale enrichment demonstration program at its Wilmington, NC, Test Loop facility, and endorsed GLE's plans to proceed to detailed design for the PLEF;
- TRL-6 achievement triggered a US$5 million milestone payment from GLE to Silex, which was received in December 2025;
- In January 2026, GLE was notified by the DOE that it was selected for an award, subject to final contract negotiations, of up to US$28.5 million to advance next-generation laser-based uranium enrichment technology.

Other Highlights:

- Construction of the first full-scale Quantum Silicon (Q-Si) Production Plant module neared completion during the half year at the Company's Lucas Heights facility, with commercial engagement also ramping up with potential customers;
- A $130 million institutional placement equity raising was successfully completed on 7 August 2025, followed by the closing of a Share Purchase Plan on 29 August 2025, with eligible applications received totalling ~$19.4 million;
- The Company held cash, term deposits, and dual currency investments at 31 December 2025 of ~$201.7 million, with no corporate debt.

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

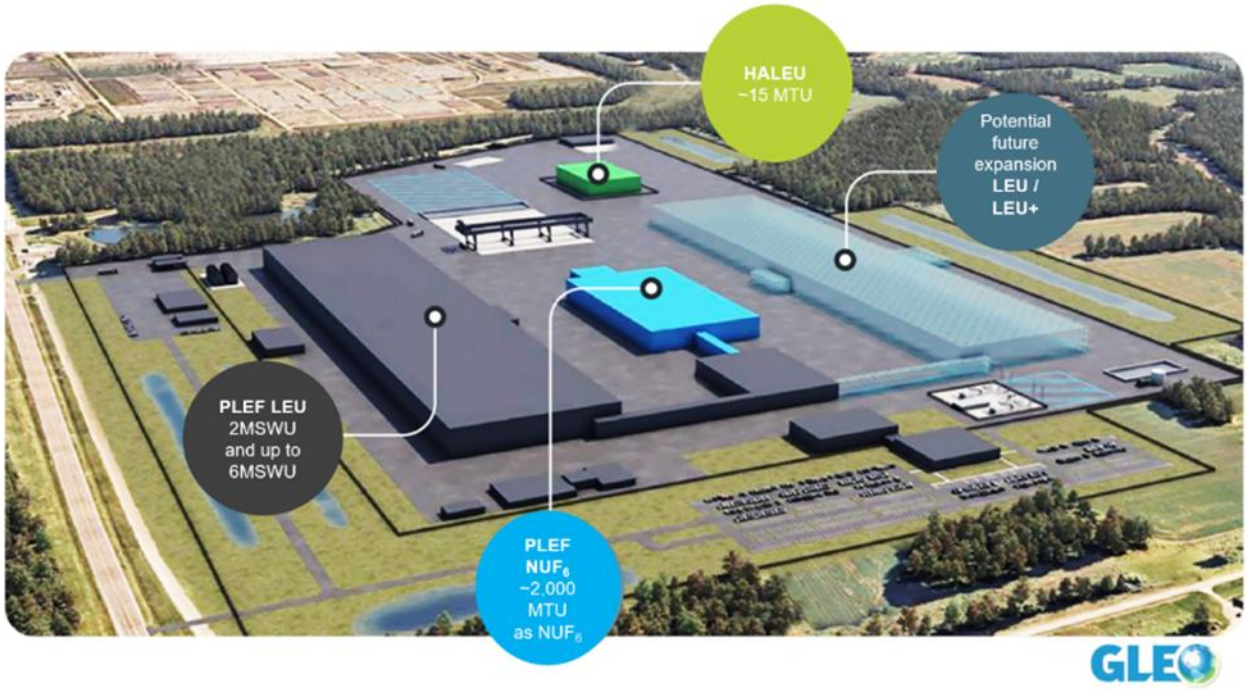
The 'Triple Opportunity' for GLE and the SILEX Technology

GLE's path to market is focused on its potential to address the *'Triple Opportunity'* for nuclear fuel production, which has emerged as a result of geopolitical and environmental developments that are driving a transformation of the global nuclear fuel supply chain.

The *'Triple Opportunity'* could involve production of three different grades of nuclear fuel in the US by GLE, commencing with natural UF_6 production at the planned PLEF:

1. **PLEF UF_6 Production:** production of natural grade uranium hexafluoride (NUF_6) (with U-235 assays of 0.7%) via processing of depleted UF_6 tails (U-235 assays of 0.25% to 0.5%) with the SILEX technology, which, being already converted, would also help to alleviate UF_6 conversion supply pressures;
2. **PLEF LEU Production:** 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. **PLEF HALEU Production:** 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)



GLE's planned annual production of 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 domestic natural uranium output, significantly enhancing US national energy security and fuel independence.

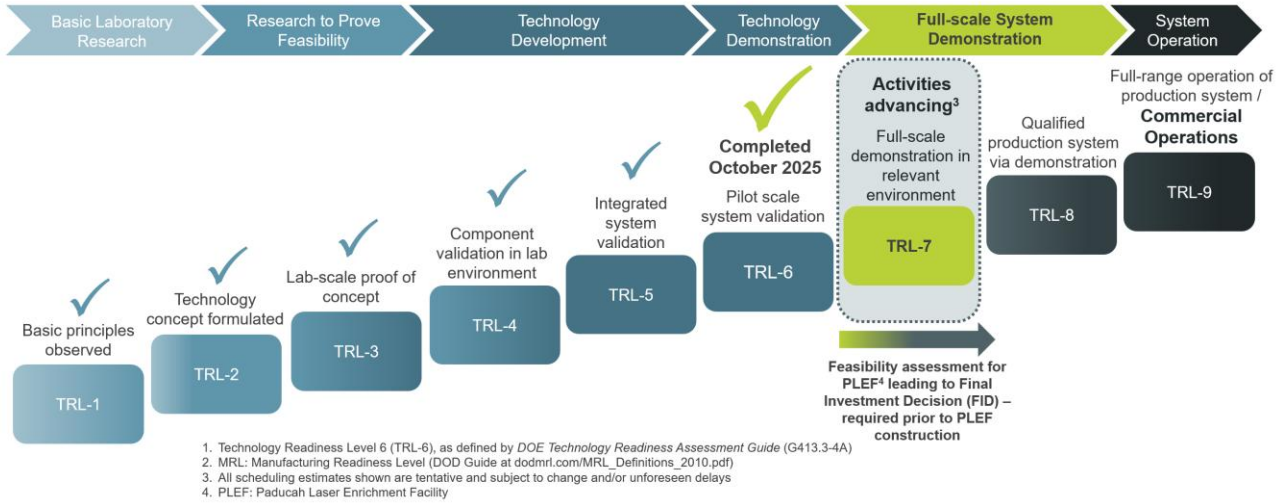
GLE's Commercialisation Program

i. TRL-6 Achievement and Continuing Technology Maturation Activities:

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 advancements over current centrifuge technology.

GLE is now focused on detailed design and demonstration of the SILEX technology at full-scale system performance under relevant conditions (i.e., TRL-7) and disciplined commercial deployment of the PLEF, which could lead to a feasibility assessment and Final Investment Decision thereafter. Current efforts also include preliminary deployment activities, including manufacturing readiness (MRL[2]), PLEF site preparations, and building out a US domestic manufacturing base and supply chain to support deployment of the SILEX technology for tails re-enrichment and US domestic enrichment capacity.

Technology Readiness Level (TRL) Framework*



* All scheduling is tentative and remains dependent on progress and delays, and is subject to change at any time

ii. Commercialisation Activities and Timeline:

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

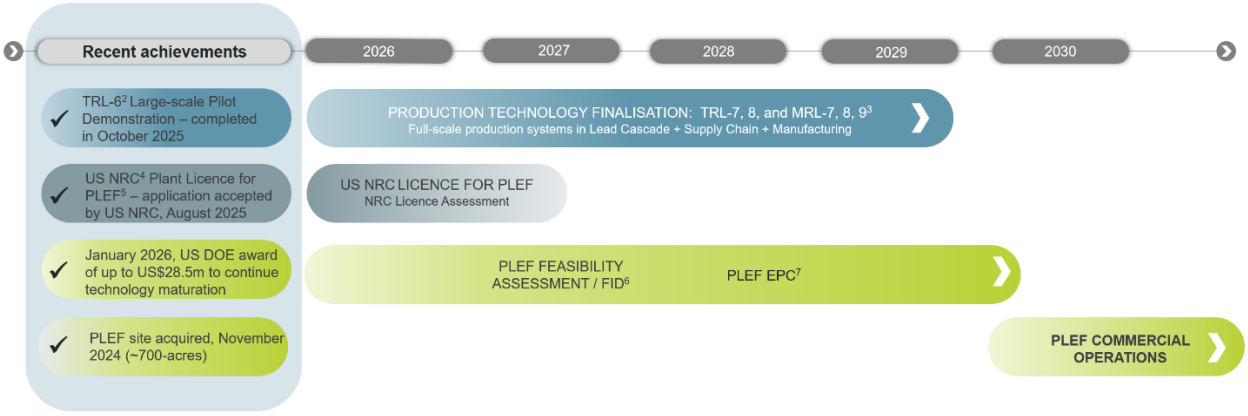
- Advancing technology maturation (TRL-7) and manufacturing activities (MRL-7), including the continued expansion of in-house manufacturing capabilities at GLE's headquarters in Wilmington, NC;
- Continued development of supply chains, with outreach to vendors, identification of long-lead procurement items, and planning for onshoring of critical component and system manufacture;

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

- Preliminary site works, including initial site clearing at GLE's Paducah, KY, PLEF site. GLE acquired a ~700-acre site for the planned PLEF in November 2024, situated adjacent the DOE's former first-generation Paducah Gaseous Diffusion Plant (PGDP), at which the legacy depleted uranium inventories (PLEF feedstock) are located. GLE has exclusive access to over 200,000 metric tonnes of these inventories, which will be used to produce natural grade UF_6 with the SILEX technology at an equivalent annual output rate of up to 5 million pounds of uranium or 2,000 MTU as NUF_6 for three decades;
- Continued work with the NRC to support its licence assessment for the planned PLEF, which is expected to be completed as early as CY2027. The NRC completed its acceptance review of GLE's licence application in August 2025. GLE is first in line with the NRC for licence approval, which would provide GLE with the required licence to produce NUF_6 and LEU at its planned PLEF facility;
- Extensive engagement with the Wilmington, NC, and Paducah, KY, communities, including economic and business development, planning for expansion of local education and training programs to support future GLE workforce development, and relationship building.

Subject to various factors, including industry and government support, a feasibility assessment for the PLEF, and supportive market conditions, GLE will continue to advance these commercialisation activities towards potential deployment of the PLEF.

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

iii. Fuel Market Update:

Over the last three decades, global nuclear fuel markets have become highly dependent on Russian supply of cheap fuel. However, the shift by Western markets away from Russian-sourced 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$90 per pound, which is nearing its highest level in over 20 years;
- term conversion prices also continue to increase, with the North American conversion price at ~US$55/kgU; and
- the term enrichment price has risen to ~US$175/SWU – also approaching historic highs.

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

Market conditions will form an important component of the factors to be considered in a feasibility assessment that will be required for a Final Investment Decision for the PLEF.

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, SQC, and UNSW Sydney. The Project's objective is to establish the first production module for highly enriched silicon-28 and to develop the skills and capability to manufacture Q-Si products, in multiple product forms at commercial scale. 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 initial offtake partner, SQC. It is anticipated that the Q-Si production module will produce up to 20kg annually of Q-Si, which will be converted into gaseous and solid product forms, as required by potential customers in the emerging global silicon-based quantum computing industry.

During the half-year, Silex made substantial progress on the construction of the Q-Si production module, including in-house laser and process plant component manufacture. Subsequent to December 2025, Silex completed the assembly of the production module and has commenced preliminary commissioning activities. Silex also continued to engage with silicon-based quantum computing developers and other potential industrial users of Q-Si, including semiconductor manufacturers, to develop a customer base for the Company's products. Silex retains 100% ownership of the Q-Si production technology and related Intellectual Property (IP) developed through the Project.

Corporate

The Company was confirmed as being included in the S&P/ASX 200 Index, effective prior to the open of trading on 22 December 2025, as a result of the December quarterly review.

As at 31 December 2025, the Company held ~$201.7 million in cash, term deposits, and dual currency investments, with no corporate debt.

Workplace Health and Safety

The health, safety, and well-being of our people is paramount. We have a steadfast focus on the health, safety, and well-being of our team members across all sites.

We have a proactive Work Health and Safety (WHS) program in place, which focuses on continuing development of our formal WHS Management System as our work environment and technology commercialisation programs evolve, as well as a strong informal “work shop floor” WHS implementation and learning process, driven by a strongly reinforced nuclear safety and security culture.

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 **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 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 also is conducting early-stage research activities in its Medical Isotope Separation Technology (**MIST**) Project, which also is subject to various risks and outcomes. The commercial future of the SILEX technology in application to uranium, silicon, medical, 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, medical 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 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 MIST Project; the potential development of, or competition from, alternative technologies; the regulatory changes and evolving eligibility criteria under the US *Inflation Reduction Act* (2022) and the *Nuclear Fuel Security Act* (2023); 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.