



Silex
Systems Limited

GLE's Evaluation of U.S. Department of Energy HALEU Enrichment Acquisition RFP

25 March 2024

Silex Systems Limited (Silex) (ASX: SLX; OTCQX: SILXY) advises that Global Laser Enrichment LLC (GLE), the exclusive licensee of the third-generation laser-based SILEX uranium enrichment technology, has completed its evaluation of the U.S. Department of Energy's (DOE) Request for Proposal (RFP) for the enrichment acquisition of high-assay, low-enriched uranium (HALEU). In conjunction with its owners Silex and Cameco, GLE has decided not to submit a proposal to the DOE.

It has been determined that the RFP does not warrant GLE changing from its first commercial priority of establishing the Paducah Laser Enrichment Facility (PLEF) for production of natural grade uranium hexafluoride (UF₆). The PLEF opportunity is underpinned by the 2016 agreement between GLE and the DOE, which, through the acquisition of over 200,000 metric tonnes of depleted tails owned by the DOE, provides the feedstock for the production of natural UF₆ at a planned rate equivalent to the production of around 5 million pounds of uranium a year for approximately 30 years. GLE will continue to engage with key stakeholders and actively assess additional opportunities for industry and government support to potentially accelerate commercial deployment of the SILEX technology at the planned PLEF.

GLE is currently awaiting details from the DOE regarding the previously disclosed potential US\$100 million funding opportunity announcement to support novel enrichment technology, which is expected to be published this year. In addition, US\$2.7 billion in funding was recently authorised by the U.S. Congress in the *Consolidated Appropriations Act 2024* and signed into law by President Biden to support domestic production of enriched nuclear fuels. The US\$2.7 billion of funding, which is contingent on a U.S. government ban on Russian nuclear fuel imports, is expected to provide support for production of both Low Enriched Uranium and HALEU. We continue to encourage the DOE to move expeditiously to publish all available funding opportunities to create a competitive, diverse U.S. fuel supply chain and to enable the cessation of reliance on Russian-sourced nuclear fuel.

GLE will continue the accelerated demonstration of the SILEX technology at its Test Loop pilot facility in Wilmington, North Carolina. In addition, the recently approved CY2024 plan and budget allows GLE to progress other key project activities, including Paducah, KY, site acquisition activities, preparing an NRC license application for the PLEF, and completion and commissioning of the new GLE corporate headquarters and manufacturing facility in Wilmington, NC.

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:

Michael Goldsworthy
CEO/Managing Director
T +61 2 9704 8888
E investor.relations@silex.com.au

Julie Russell
CFO/Company Secretary
T +61 2 9704 8888
E investor.relations@silex.com.au

Forward Looking Statements and Risk Factors:

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

Silex Systems Limited ABN 69 003 372 067 (Silex) is a technology commercialisation company whose primary asset is the SILEX laser enrichment technology, originally developed at the Company's technology facility in Sydney, Australia. The SILEX technology has been under development for uranium enrichment jointly with US-based exclusive licensee Global Laser Enrichment LLC (GLE) for a number of years. Success of the SILEX uranium enrichment technology development program and the proposed Paducah commercial project remain subject to a number of factors including the satisfactory completion of the engineering scale-up program and nuclear fuel market conditions and therefore remains subject to associated risks.

Silex is also at various stages of development of additional commercial applications of the SILEX technology, including the production of 'Zero-Spin Silicon' for the emerging technology of silicon-based quantum computing. The 'Quantum Silicon' project remains dependent on the outcomes of the project and the viability of silicon quantum computing and is therefore subject to various risks. Silex is also conducting research activities in its Medical Isotope Separation Technology (MIST) Project, which is early-stage and subject to numerous risks. The commercial future of the SILEX technology in application to uranium, silicon, medical and other isotopes is therefore uncertain and any plans for commercial deployment are speculative.

Additionally, Silex has an interest in a unique semiconductor technology known as 'cREO®' through its 100% ownership of subsidiary Translucent Inc. The cREO® technology developed by Translucent has been acquired by IQE Plc based in the UK. IQE has paused the development of the cREO® technology until a commercial opportunity arises. The future of IQE's development program for cREO® is very uncertain and remains subject to various technology and market risks.

Forward Looking Statements

The commercial potential of these technologies is currently unknown. Accordingly, no guarantees as to the future performance of these technologies can be made. The nature of the statements in this Announcement regarding the future of the SILEX technology as applied to uranium enrichment, Zero-Spin Silicon production, medical and other isotope separation projects, the cREO® technology and any associated commercial prospects are forward-looking and are subject to a number of variables, including but not limited to, unknown risks, contingencies and assumptions which may be beyond the control of Silex, its directors and management. You should not place reliance on any forward-looking statements as actual results could be materially different from those expressed or implied by such forward-looking statements as a result of various risk factors. Further, the forward-looking statements contained in this Announcement 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 Announcement. Silex does not intend, and is not obligated, to update the forward-looking statements except to the extent required by law or the ASX Listing Rules.

Risk Factors

Risk factors that could affect future results and commercial prospects of Silex include, but are not limited to: ongoing economic and social uncertainty, including in relation to the impacts of the COVID-19 pandemic; geopolitical risks, in particular relating to Russia's invasion of Ukraine and tensions between China and Taiwan which may impact global supply chains, among other risks; uncertainties related to the effects of climate change and mitigation efforts; the results of the GLE/SILEX uranium enrichment pilot demonstration program; the market demand for natural uranium and enriched uranium; the outcome of the project for the production of Zero-Spin Silicon for the emerging technology of silicon-based quantum computing; the outcome of the MIST program; the potential development of, or competition from alternative technologies; the potential for third party claims against the Company's ownership of Intellectual Property; the potential impact of prevailing laws or government regulations or policies in the USA, Australia or elsewhere; whether IQE's commercialisation program for cREO® is resumed, the results from the program and the market opportunities for cREO® products; actions taken by the Company's commercialisation partners and other stakeholders that could adversely affect the technology development programs and commercialisation strategies; and the outcomes of various strategies and projects undertaken by the Company.