



Silex
Systems Limited

GLE and Duke Energy sign Letter of Intent to develop areas of mutual interest and cooperation

4 July 2022

Silex Systems Limited (Silex) (ASX: SLX; OTCQX: SILXY) is pleased to announce the execution of a non-binding Letter of Intent (LOI) between Global Laser Enrichment (GLE) and Duke Energy Carolinas, LLC and Duke Energy Progress, LLC (Duke Energy) for the purpose of developing areas of mutual interest and cooperation in the nuclear fuel supply chain. The LOI identifies a number of key areas of potential cooperation, including supporting GLE's deployment of the SILEX laser enrichment technology in the United States and the potential acceleration of commercialisation timelines.

Michael Goldsworthy, Silex's CEO/Managing Director said:

"The LOI between GLE and Duke Energy is another positive step in advancing GLE's strategy to commercialise the SILEX technology and support the diversification of domestic U.S. uranium, conversion and enrichment capabilities and capacity."

"As the U.S. Government ramps up initiatives to rebuild its domestic nuclear fuel supply chain and lessen its dependence on nuclear fuel imports, particularly from Russia, we anticipate GLE's engagement with U.S. nuclear power generators will help support the commercialisation of the SILEX technology," he added.

GLE is the exclusive licensee of the SILEX laser technology for uranium enrichment and is a 51%/49% jointly-controlled venture between Silex and global uranium and nuclear fuel provider Cameco Corporation. Duke Energy is one of the largest energy companies in the U.S. operating 11 major nuclear power units across six sites in North Carolina and South Carolina, generating nearly 11,000 megawatts of reliable, carbon-free electricity.

Subject to market conditions, regulatory requirements and other factors, GLE could become a significant contributor to nuclear fuel production in the U.S. for the world's current and future nuclear reactor fleets. GLE is uniquely positioned, through its ongoing commercialisation of the SILEX technology, to address the "Triple Opportunity" emerging in the nuclear fuel supply chain as a result of global climate change and geopolitical issues:

- 1) Tails processing (PLEF¹) to produce natural grade UF₆ and help alleviate UF₆ conversion supply pressure;
- 2) Build capacity to supply enrichment (SWU) to the market for the production of Low Enriched Uranium (LEU) and Low Enriched Uranium plus (LEU+); and
- 3) Build additional capacity to produce High Assay LEU (HALEU) fuel for next generation advanced small modular reactors.

While no decision has yet been made, Silex and Cameco are reviewing the feasibility of accelerating GLE's commercialisation program in response to these emerging opportunities, subject to alignment with evolving market conditions.

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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¹ PLEF: Paducah Laser Enrichment Facility

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 '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 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 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 and Zero-Spin Silicon production, 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; 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.