



**Silex**  
Systems Limited

## **GLE Presentation to WNFM 48<sup>th</sup> Annual Meeting and International Conference**

**8 June 2022**

Silex Systems Limited (Silex) (ASX: SLX) (OTCQX: SILXY) is pleased to provide the attached presentation that will be delivered by James Dobchuk, Global Laser Enrichment's (GLE) Chief Commercial Officer and President at the World Nuclear Fuel Market (WNFM) 48<sup>th</sup> Annual Meeting and International Conference, being held in Montreal, Canada this week.

The presentation provides an overview of GLE and its commercialisation pathways and the factors that may drive potential acceleration of its commercialisation timeline.

***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](http://www.silex.com.au) or by contacting:

**Michael Goldsworthy**

CEO/Managing Director

T +61 2 9704 8888

E [investor.relations@silex.com.au](mailto:investor.relations@silex.com.au)

**Julie Ducie**

CFO/Company Secretary

T +61 2 9704 8888

E [investor.relations@silex.com.au](mailto: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 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 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.

# GLOBAL Laser Enrichment

---

**WNFM 48th Annual Meeting and  
International Conference**

June 7, 2022  
Montreal, Quebec



# Overview

---

- Company Background
- GLE's Laser Technology Advantages
- Commercialization Pathways and Timelines
- Essentials for Acceleration



# GLE History & Key Milestones

<b>2007 →</b>	GE and GE-Hitachi Nuclear Energy (GEH) form subsidiary GLE (exclusive licensee of SILEX technology) to develop uranium enrichment services capability; Cameco acquires 24% equity interest in GLE (2008)
<b>2012 →</b>	GLE receives first and only US NRC license for construction and operation of commercial scale laser enrichment facility planned for Wilmington, NC (SNM-2019)
<b>2013 →</b>	GLE completes “Phase 1” (technology validation at prototype scale) of its multi-phase technology development and commercialization plan
<b>2016 →</b>	GLE secures landmark agreement to re-enrich significant stockpiles of DOE DUF <sub>6</sub> inventories
<b>2019 →</b>	Silex Systems and Cameco execute binding purchase agreement to acquire GE/GEH 76% interest in GLE
<b>2021 →</b>	Transaction receives USG approval; Silex Systems and Cameco acquire 51% and 49% interests in GLE, respectively
<b>2022 →</b>	First full year with new executive management team and restructured ownership



# About the Owners

---



Silex Systems Limited is an **Australian technology company** whose primary asset is the **SILEX laser enrichment technology**, invented and **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 GLE since 2006** in accordance with the Technology Commercialization and License Agreement, and under the SILEX Cooperation Treaty signed in 2000 by the Australian and US governments.

---

Cameco is **one of the largest global providers of the fuel needed to energize a clean-air world**. They are a **leading supplier of uranium refining, conversion and fuel manufacturing services**. Cameco's land holdings, including exploration, span about 1.7 million acres of land, the majority near Cameco existing Canadian operations. **Utilities around the world rely on Cameco nuclear fuel** products to generate power in safe, reliable, **carbon-free nuclear reactors**. Along with utilities, **Cameco is meeting the ever-increasing demand for clean baseload electricity** while delivering safe, reliable solutions to today's clean-air crisis.





# GLE's Laser Technology Advantages

---

- **Highly selective and efficient** – ability to fine-tune the process to excite and separate  $^{235}\text{UF}_6$  with higher efficiency and throughput compared to centrifuge technology
- **Modularity/flexibility** – market compatibility with greater flexibility to produce wide range of fuels for both the existing fleet and next generation reactor designs
- **Lower capital costs** – installation of laser enrichment capacity is expected to be deployed at lower cost (per unit capacity) than existing gas centrifuge technology
- **Compatible with existing fuel cycle** – balance of plant is consistent with current enrichment facilities
- **Bolster U.S. technology & supply diversity** – underpin re-emergence of US advanced nuclear technology leadership and reduce reliance on Russian supply



# Guiding Principles

---

## ➤ Expanding primary areas of focus to address market demands

- ✓ Enriching DOE tails to produce uranium ( $\text{DUF}_6 \rightarrow \text{NUF}_6$ ) and capturing the contained conversion value
- + Supplying higher enrichment requirements (HALEU)
- + Providing commercial EUP (LEU/LEU+)

## ➤ Core Corporate Philosophies

- Disciplined technology development process
- Market-driven commercialization plans
- Provide cost-effective fuel supply alternatives





# Commercialization Pathways

---

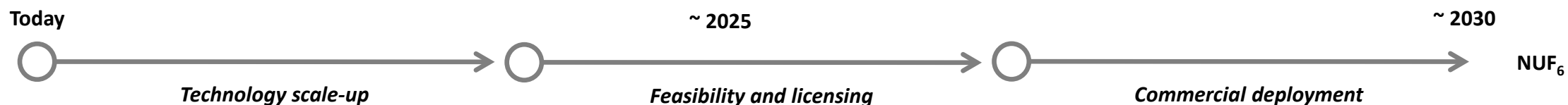
- **Considering an accelerated deployment schedule and pivoting to a multi-product approach**
  - Address post-Rosatom supply pivot of US utilities, USG and SMR/AR vendors
- **Potential to leverage existing agreement with DOE for tails enrichment**
  - Unlock the uranium, conversion and LEU potential of the PLEF agreement
- **Engaging in legislative initiatives**
  - Continue to highlight laser enrichment's advantages with key USG stakeholders
- **Expanding domestic and international relationships**

*Commercial acceleration requires technology advancement and scale-up*

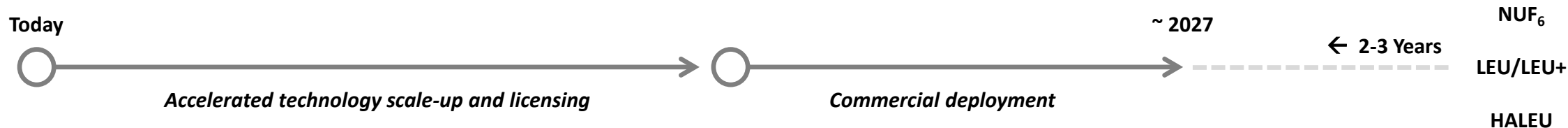


# Commercialization Timelines

## *Baseline – market-driven pace, minimized risk*



## *Potential acceleration - aggressive plan underpinned by key market drivers*



*Accelerating technology scale-up and commercialization will be driven by market and other factors*



# Essentials for Acceleration

---

**The following factors will drive potential acceleration of GLE's commercialization:**

- Long-term clarity regarding the restriction of Russian nuclear fuel supply
- Government programs and policies that encourage investment in the nuclear fuel cycle
- Line of sight to enhanced DOE partnership
- Timely and efficient regulatory licensing and approval processes
- Appropriate market signals and commercial support



**Thank you!**

**James Dobchuk**

President and Chief Commercial Officer