

Investor Presentation

10 November 2025

Silex Systems Limited (**Silex** or the **Company**) (**ASX: SLX; OTCQX: SILXY**) provides the attached presentation to support upcoming Investor Relations activities. The presentation primarily focuses on current and future activities for the commercialisation program for the third-generation laser-based SILEX uranium enrichment technology, being undertaken in conjunction with exclusive licensee Global Laser Enrichment (**GLE**).

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



Commercialising Next-Generation Laser Enrichment Technology

Investor Briefing Presentation | November 2025

Dr Michael Goldsworthy
CEO/Managing Director

Julie Russell
CFO/Company Secretary

Silex Systems Limited

ASX: SLX

OTCQX: SILXY

For personal use only

Forward Looking Statements and Risk Factors

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 Presentation. Except as required by law or regulation (including the ASX Listing Rules and OTCQX Rules for US Companies), Silex does not intend, and is not obligated, to update the forward-looking statements, and Silex disclaims any obligation or undertaking to update forward-looking statements in this Presentation to reflect any changes in expectations.

No representation, warranty or assurance (express or implied) is given or made in relation to any forward-looking statement by any person (including the Company or any of its advisers). In particular, no representation, warranty or assurance (express or implied) is given that the occurrence of the events expressed or implied in any forward-looking statements in this Presentation will actually occur.

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.

The release of this Presentation was authorised by the Board.



Silex

Cover page image accreditation: Prof. Michelle Simmons team at UNSW/CQC2T demonstrated the fastest 2 qubit gate in silicon using atom qubits. Nature 571, 371 (2019) (Illustration by Tony Melov).

Silex Investment Highlights

Progressing at pace towards commercialising Silex's unique laser enrichment technology

- 1 Unique, innovative third-generation laser-based SILEX¹ uranium enrichment technology** for uranium and nuclear fuel production in the US, classified by the US and Australian Governments
- 2 Leveraged to strong global tailwinds**, including: nuclear energy growth (electrification, AI, hyperscalers); Net-Zero targets; US Government actions to revitalise the US nuclear industry
- 3 US-based nuclear fuel JV Global Laser Enrichment (GLE) – Silex (51%) and Cameco (49%)** – with perpetual technology licence royalties from GLE to Silex in addition to any equity distributions
- 4 Key large-scale technology demonstration (TRL-6)² completed in October 2025** – de-risking pathway to commercialisation, along with potential US Government funding support
- 5 Agreement between GLE and US DOE³** – exclusive access to valuable uranium tails inventories – up to 30-years of feedstock for commercial operations – large 'above-ground uranium mine' in the US
- 6 Additional growth opportunities** – enriched silicon for quantum computing and medical isotope enrichment provide additional growth potential for Silex shareholders

1. SILEX: Separation of Isotopes by Laser Excitation
2. TRL-6: Technology Readiness Level 6 (refer to slide 8 for reference)
3. DOE: US Department of Energy

Silex's Strategy is Focused on Maximising Shareholder Value

Two distinct value propositions for Silex shareholders when it comes to GLE¹

1 Equity interest in GLE – currently at 51% Silex ownership

- **Equity position:** Silex has a significant equity stake in GLE as a potential nuclear fuel supplier, currently at 51%
- **Cameco option:** Agreement between Silex and Cameco on call option for Cameco to acquire an additional 26% at fair market value
- **Option window:** open until April 2028

2 Perpetual royalty from GLE (under the exclusive SILEX technology licence agreement)

- **Perpetual SILEX royalty:** of 7% to 12% on GLE's enrichment SWU² revenues (purely by way of example, for ~8 MSWU of PLEF operations, royalties could potentially reach ~US\$90m p.a. based on 7% minimum royalty rate and current price ~US\$170/SWU)
- **Classification:** SILEX uranium enrichment technology classified by Australian and US Governments, with no patent disclosures permitted → no sunset on IP
- **Silex Trade Secret:** Technology kept under strictest security mandated by Australian and US governments

1. GLE's progress to commercialisation is dependent on several factors, including, but not limited to: technology maturation outcomes, market conditions, licensing, industry and government support, PLEF feasibility assessment, and other factors, and may vary according to differing scenarios or outcomes
2. SWU: Separative Work Units, typically used as a standard measure of enrichment services provided

Highlights and upcoming catalysts for GLE / Silex

RECENT HIGHLIGHTS

1 TECHNOLOGY DEMONSTRATION COMPLETED

- Key large-scale technology demonstration (TRL-6) successfully completed in October 2025 at GLE's Test Loop pilot plant facility
- Independent assessor's report confirms completion of TRL-6 and endorses GLE's plans to proceed to detailed design with confidence

2 SITE ACQUISITION

- ~700-acre site acquired for planned PLEF in November 2024

3 LEGISLATION / GOVERNMENT POLICY

- *Prohibiting Russian Uranium Imports Act* passed in May 2024 (no waivers for any imports from 2028)
- Trump executive orders to re-establish US leadership in nuclear energy (May 2025) – including quadrupling US nuclear energy generation

4 GOVERNMENT FUNDING

- GLE one of six awardees selected for US\$3.4bn LEU Enrichment Acquisition RFP¹ (December 2024) – award process underway by DOE
- Initial US\$0.5m awarded under Task Order 1 (TO1) awarded April 2025
- GLE submitted a bid for up to US\$900m funding for LEU capacity under Task Order 2 (TO2) in September 2025

EXPECTED UPCOMING CATALYSTS

1 CONTINUED TECHNOLOGY MATURATION

- TRL-7 activities underway, focusing on technology maturation and final designs for plant equipment
- MRL-7² activities underway, focusing on in-house and external manufacturing, and supply chain development for commercial plant

2 GOVERNMENT FUNDING OUTCOMES

- Q4 CY2025: Outcomes expected for DOE nuclear fuel incentive programs:
 - LEU Enrichment Acquisition RFP: Total funding pool US\$3.4bn
 - TO2 award for up to US\$900m expected to be announced in Q4 CY2025 – competitive bids under assessment
 - Innovative Technology Fund: up to US\$24m expected to be announced in Q4 CY2025

3 NRC³ LICENCE FOR PLEF⁴

- Progress of the full licence application to the US NRC for the PLEF commercial production plant planned for Paducah, KY (licence application accepted by NRC in August 2025)

4 OTHER COMMERCIALISATION MILESTONES

- Industry and stakeholder engagement
- Continued technology maturation and manufacturing activities

SILEX Uranium Enrichment Technology and GLE's Commercialisation Plan

Evolution of Uranium Enrichment Technology



1st Generation Technology

Gaseous Diffusion

Very low efficiency – tails legacy

High cost

Obsolete



2nd Generation Technology

Centrifuge

Modest efficiency

Moderate cost

Current technology



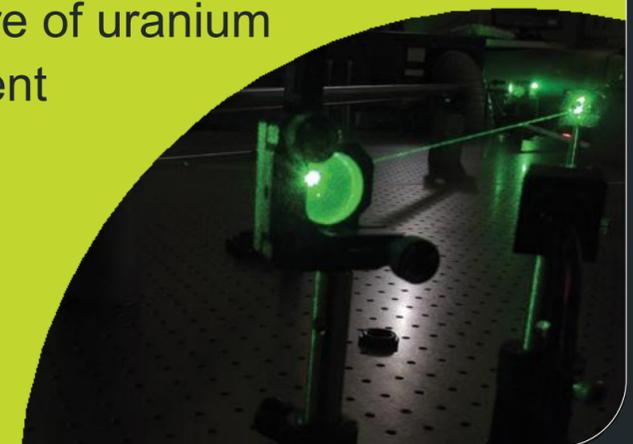
3rd Generation Technology

SILEX Laser

Higher efficiency and throughput

Anticipated to be lower cost

The future of uranium enrichment



SILEX laser process → higher separation efficiency and throughput vs centrifuge technology

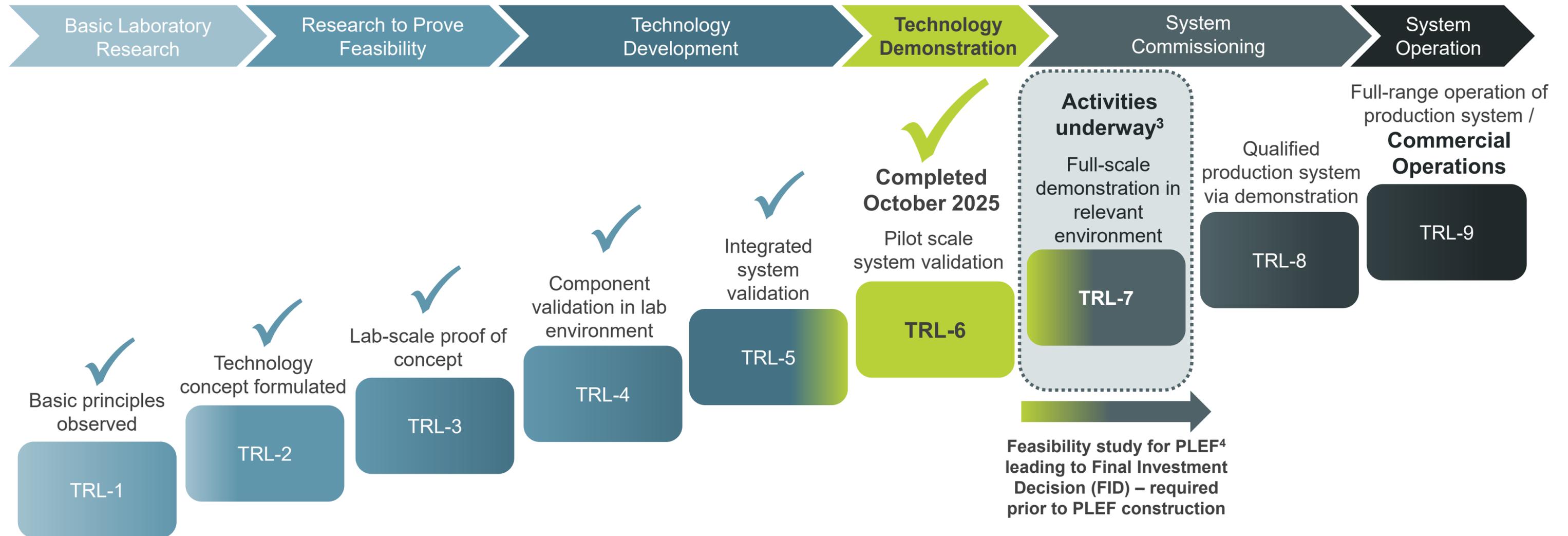
For personal use only

Technology Demonstration Completed in October 2025

GLE completed key large-scale technology demonstration (TRL-6¹) in October 2025

- Standard Technology Readiness Levels (TRL) scale used to assess the stage of technology / system development of the SILEX technology
- Increasing focus on establishing in-house manufacturing capability and US-based supply chain development for balance of plant (MRL-7)²

For personal use only



1. Technology Readiness Level 6 (TRL-6), as defined by *DOE Technology Readiness Assessment Guide* (G413.3-4A)

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

3. All scheduling estimates shown are tentative and subject to change and/or unforeseen delays

4. PLEF: Paducah Laser Enrichment Facility

Overview of Global Laser Enrichment (GLE)



- GLE is a US-based JV between Silex (51%) and Cameco Corporation (49%), with ~110 employees and contractors
- Focused on the commercialisation of the SILEX uranium enrichment technology in the US¹, with sites in North Carolina and Kentucky

For personal use only



Paducah Laser Enrichment Facility (PLEF)

- ~700-acre site strategically located adjacent to the US DOE's former Paducah Gaseous Diffusion Plant (PGDP)
- Tails processing project '*equivalent to an above-ground uranium mine*', with potential production of up to 5 million lbs p.a. for up to 30 years (as UF₆) and 2 million kgs p.a. conversion capacity

GLE Headquarters and Test Loop Demonstration Facility

- Currently operating in Wilmington, NC
- Large-scale enrichment demonstration completed – key technology de-risking milestone (TRL-6)²
- Wilmington classified manufacturing facility

GLE's commercial strategy – the 'Triple Opportunity' – enables potential production of all three grades of nuclear fuel at the PLEF

Strong tailwinds from US Government legislation and funding programs – well-positioned as a US-based, next-generation uranium enrichment provider

GLE's 'above-ground uranium mine' – DOE agreement provides 200,000 tonnes of depleted tails inventories – feedstock for the planned PLEF natural UF₆ production project

~US\$600m invested in GLE over 20 years to progress the SILEX technology to TRL-6

The Paducah Laser Enrichment Facility (PLEF)

GLE's economic potential based on its unique ability to address the
'Triple Opportunity'

PLEF UF₆

**Product: Natural Grade Uranium
(as UF₆)**

GLE's 'above-ground uranium mine' –
with enrichment of DOE depleted tails
inventories to produce natural UF₆
with U²³⁵ assay ~0.7%

Revenue potential

- Production of up to 5 million pounds natural grade uranium (as UF₆) annually for up to 30 years
- Revenue will include value of uranium and conversion
- At today's long-term uranium price of ~US\$80/lb, up to ~US\$400m/yr potential revenues for 5 millions lbs
- Plus 2 million kilograms conversion/yr – at today's long-term conversion price of ~US\$50/kgU, up to ~US\$100m/yr potential revenues

PLEF LEU

**Product: Low Enriched Uranium
(LEU/LEU+)**

for conventional nuclear power reactors
LEU includes U²³⁵ assays of 3% to 5%
LEU+ includes U²³⁵ assays of 5% to 10%

Revenue potential

- Potential initial LEU production of 2 million enrichment units (SWU) per year (to process DOE material)
- At today's long-term SWU price of US ~\$170/SWU, potential revenue of up to ~US\$340m/yr
- LEU/LEU+ capacity expandable if market demand grows – potentially up to 6MSWU/yr or more if global use of nuclear energy gathers pace

PLEF HALEU

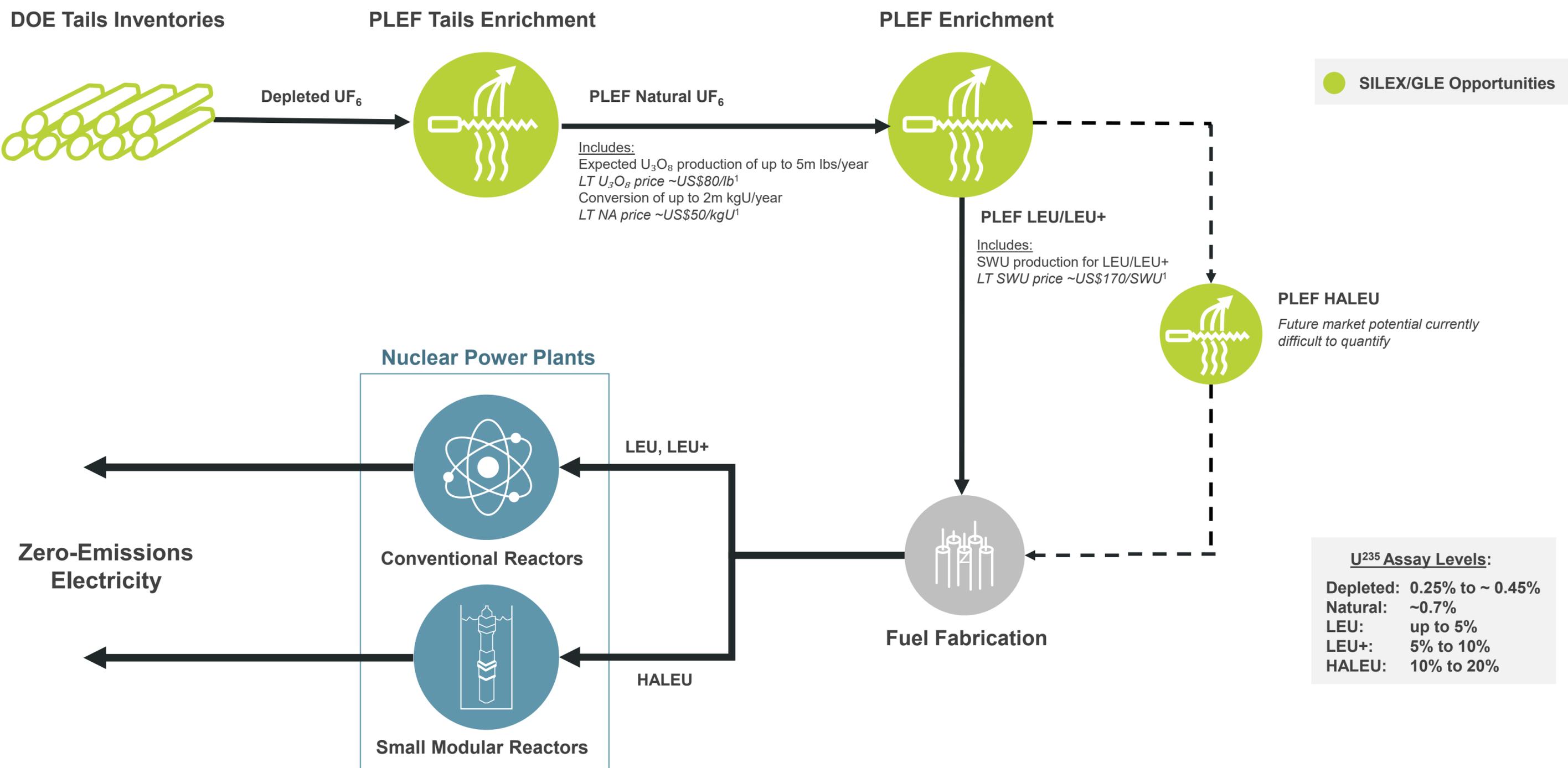
**Product: High Assay LEU
(HALEU)**

fuel for next-generation advanced
reactors, including small modular
reactors (SMRs)
HALEU includes U²³⁵ assays up to 20%

Revenue potential

- Future HALEU market size and timing difficult to quantify until SMR market evolves
- HALEU is likely to be traded as kilograms HALEU – market price yet to be established, but potentially a high value fuel

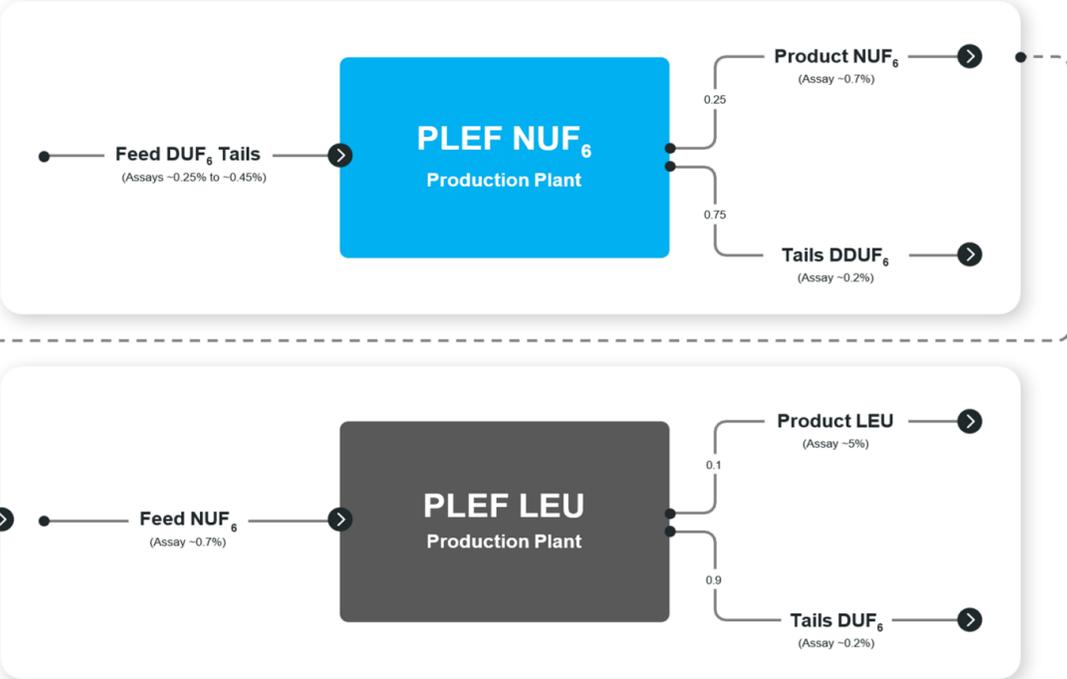
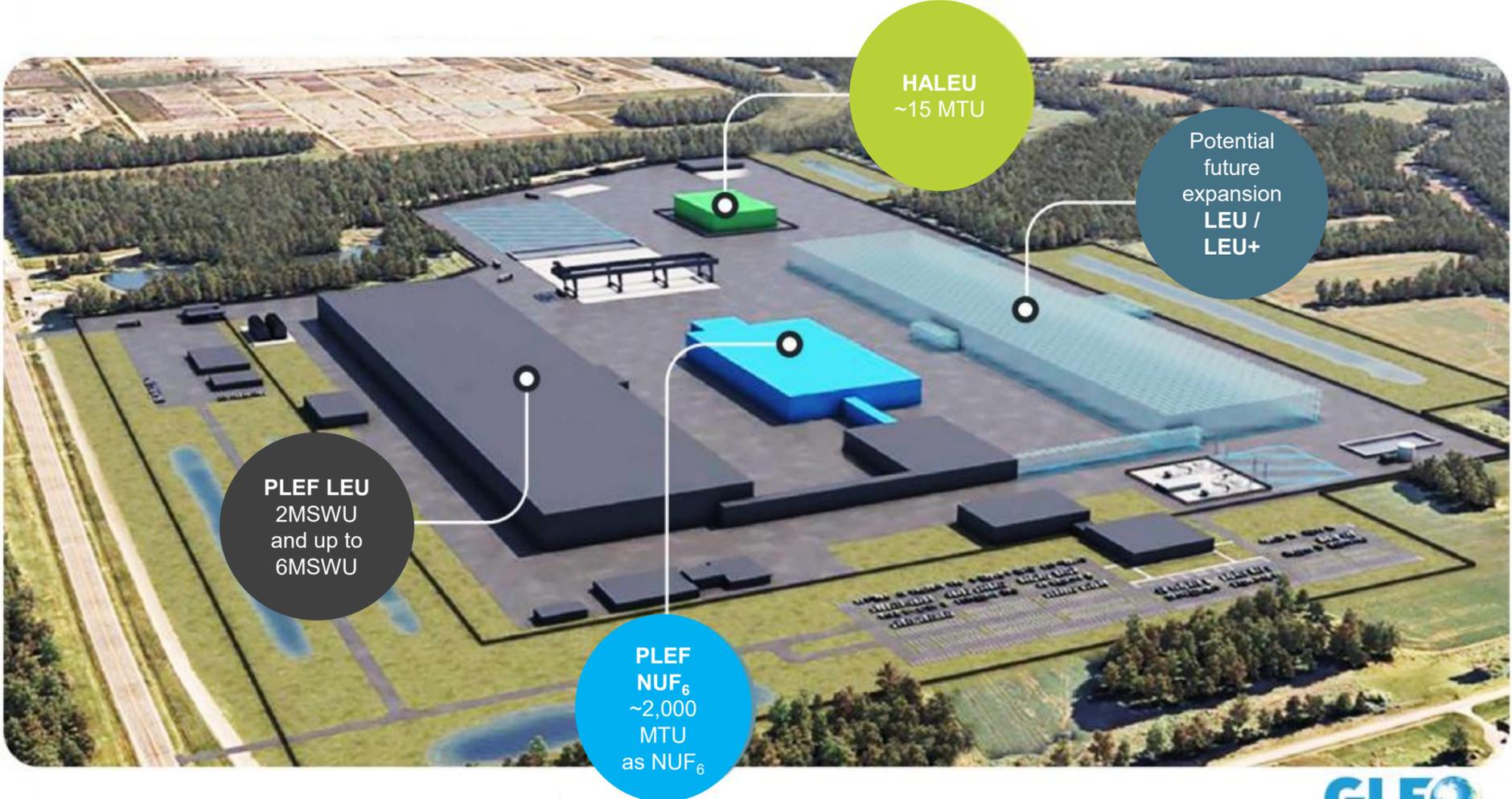
PLEF Nuclear Fuel Opportunities for GLE and the SILEX Technology



For personal use only

GLE's Potential PLEF Commercial Plant Opportunities¹

GLE – PLEF Potential Commercial Plant (conceptual only)



DUF₆: Depleted UF₆
DDUF₆: Double Depleted UF₆

1. Dependent on various factors, including, but not limited to: technology maturation outcomes, market conditions, licensing, industry and government support, PLEF feasibility assessment, and other factors, and may vary according to differing scenarios. Actual production capacity and output will depend on prevailing nuclear fuel market conditions and other factors

For personal use only

PLEF UF₆ Production Opportunity

(Natural UF₆ production from DOE tails – an ‘above ground uranium mine’)

**Aim to commence
initial commercial
operations by 2030¹**

**Akin to a ‘Tier 1’
Uranium Resource²**

Based on the expected low
cost and longevity of
production

(Silex estimate of all-in cost
currently <US\$30/lb)

**Equivalent U₃O₈
Production**

Potential production of up to 5
million lbs p.a. for
up to 30 years
(~150m lb contained resource)

**Potential UF₆
production allows GLE
to capture Conversion
value in revenue**

Feed and Product is UF₆
(current term conversion value
~US\$50/kg)

(with potential production of up to 2 million
kgU p.a.)

**Potential to
enrich further**

From natural grade (0.7%):

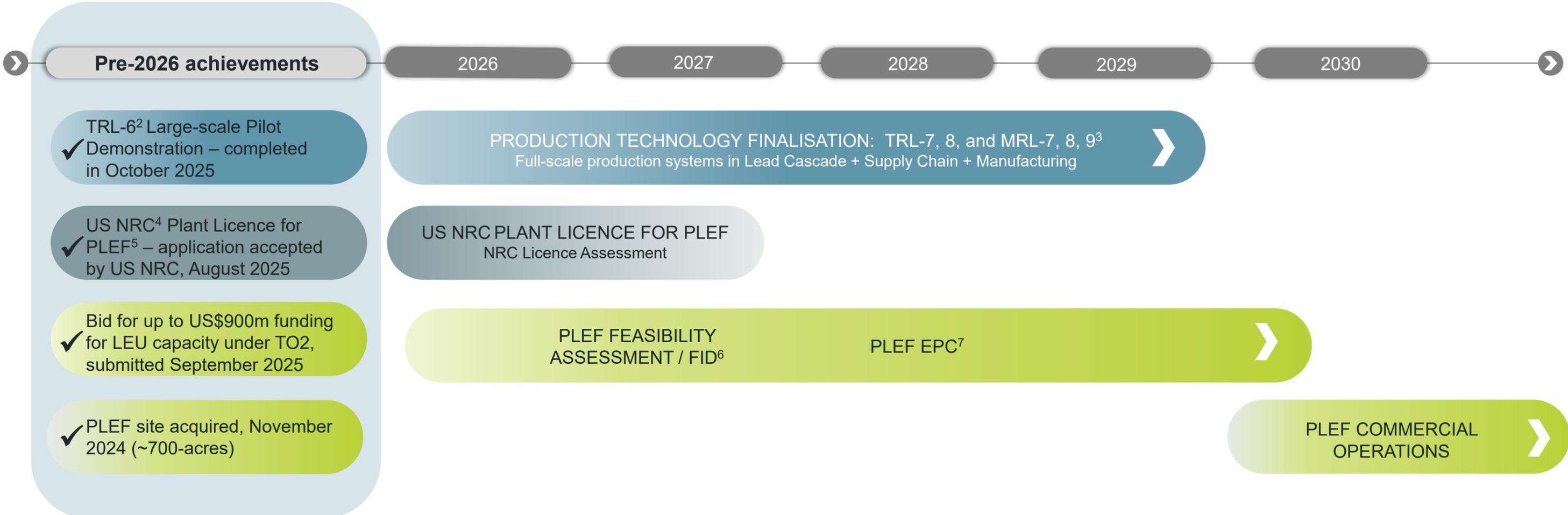
- to LEU (up to 5%)
- to LEU+ (up to 10%)
- to HALEU (up to 20%)

1. All target dates are subject to technology maturation outcomes, market conditions, licensing, industry and government support, PLEF feasibility assessment, and other factors, and may vary according to differing scenarios
2. All production estimates are based on preliminary modelling by Silex of project economics and longevity. Actual production output will depend on prevailing uranium market conditions and other factors

GLE's Indicative Target Timeline for Commercialisation of SILEX Technology¹



For personal use only



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

GLE's Commercialisation Activities for the SILEX technology

Paducah, KY, commercial plant site and licensing activities¹:

- GLE acquired a ~700-acre site for the planned PLEF in November 2024
- Site is strategically located adjacent the US DOE's former first-generation PGDP
- Site provides access to the PGDP cylinder yards where the tails inventories are stored for future processing at the PLEF
- NRC completed its acceptance review of GLE's licence application for the PLEF in August 2025. GLE is hopeful of a timely review, with current expectations ~18 months (early CY2027)
- Activities on the PLEF site continue, including initial site clearing and other preliminary site works



PLEF site, Paducah, KY

GLE's Commercialisation Activities for the SILEX technology

Paducah, KY, commercial plant site and licensing activities¹:



PLEF site, Paducah, KY

For personal use only

GLE's Commercialisation Activities for the SILEX technology

GLE HQ and classified manufacturing facility in Wilmington, NC – establishing a US domestic manufacturing base and supply chain:



GLE HQ and Classified Manufacturing Facility – Wilmington, NC

Summary – Status of GLE’s Commercialisation Activities:



GLE is focusing on technology maturation and early-stage activities for the planned PLEF commercial plant

Technology maturation	<ul style="list-style-type: none"> GLE and Silex completed the large-scale pilot demonstration (TRL-6) in October 2025 – a key technology de-risking milestone Technology maturation (TRL-7 and MRL-7) advancing towards final design and manufacturing of commercial plant systems
PLEF plant site secured	<ul style="list-style-type: none"> GLE has acquired a strategically located site in Paducah, KY, for the planned PLEF (~700-acre site) Provides direct access to up to 30 years of feedstock for PLEF operations to produce uranium and conversion
US market access	<ul style="list-style-type: none"> GLE’s multi-purpose PLEF project could become a key supplier of nuclear fuels (including natural UF₆, LEU, LEU+, and HALEU) to the US nuclear industry, the largest nuclear fuel market in the world
Regulatory and permitting	<ul style="list-style-type: none"> The PLEF NRC licence application was accepted by NRC in August 2025 (first-in-line for assessment) Now under review on an expedited timeframe (shortened from ~30 months to ~18 months) – expected early CY2027
Supply chain assurance	<ul style="list-style-type: none"> In-house classified manufacturing facility expansion and on-shoring of supply chain will provide increased control of time, cost, and quality, as well as greater IP protection
Stakeholder support	<ul style="list-style-type: none"> GLE has strong support from utilities (including four Letters of Intent signed with large nuclear utilities) and industry, as well as community and state business groups across Kentucky and North Carolina
Government support	<ul style="list-style-type: none"> Meaningful US Government funding programs to potentially support GLE’s single-site solution for uranium, conversion, and enrichment, with GLE’s competitive bid (1 of 6) currently being assessed for up to US\$900m in funding support
Pioneering owners	<ul style="list-style-type: none"> <i>Silex</i>: inventor and developer of SILEX laser enrichment – technology lead for GLE JV <i>Cameco</i>: large Western nuclear fuel cycle company with vertically integrated nuclear business (including Westinghouse JV)
Environmental benefits	<ul style="list-style-type: none"> GLE provides a ‘clean-up to clean-energy solution’ – converting legacy depleted tails waste into fuel for zero-emissions, low-cost nuclear energy across the US and elsewhere

For personal use only

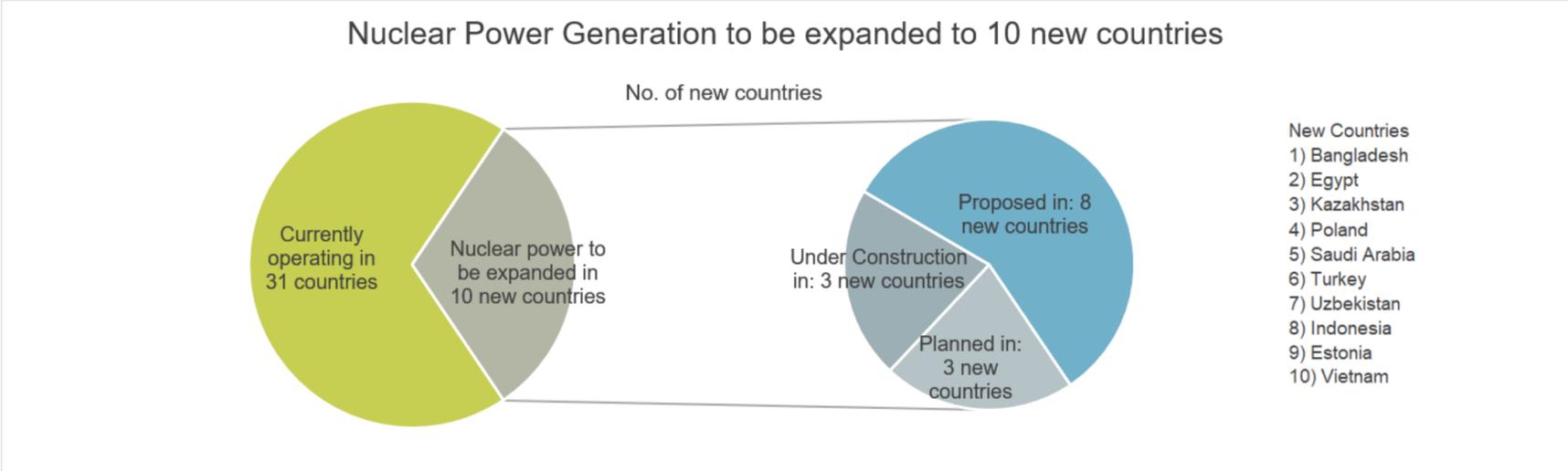
Uranium Sector and Nuclear Fuel

The renaissance of the global nuclear industry

Significant Nuclear Power Growth Expected



World Nuclear Power Reactor Population



- 438 Operable Power Reactors Worldwide
- Nuclear supplies ~10% of global electricity
- Strong nuclear energy growth projected – Net-Zero targets, electrification, and energy security priorities
- AI and global data centre electricity demand projected to double by 2030
- Other additions to world nuclear reactor population expected as SMRs progress – various designs advancing needing LEU, LEU+, or HALEU
- Reactor restarts, licence extensions, and new conventional reactors and SMRs – all contributing to solid demand growth for nuclear fuel

Sources: World Nuclear Association, October 2025; IEA, Energy and AI, April 2025

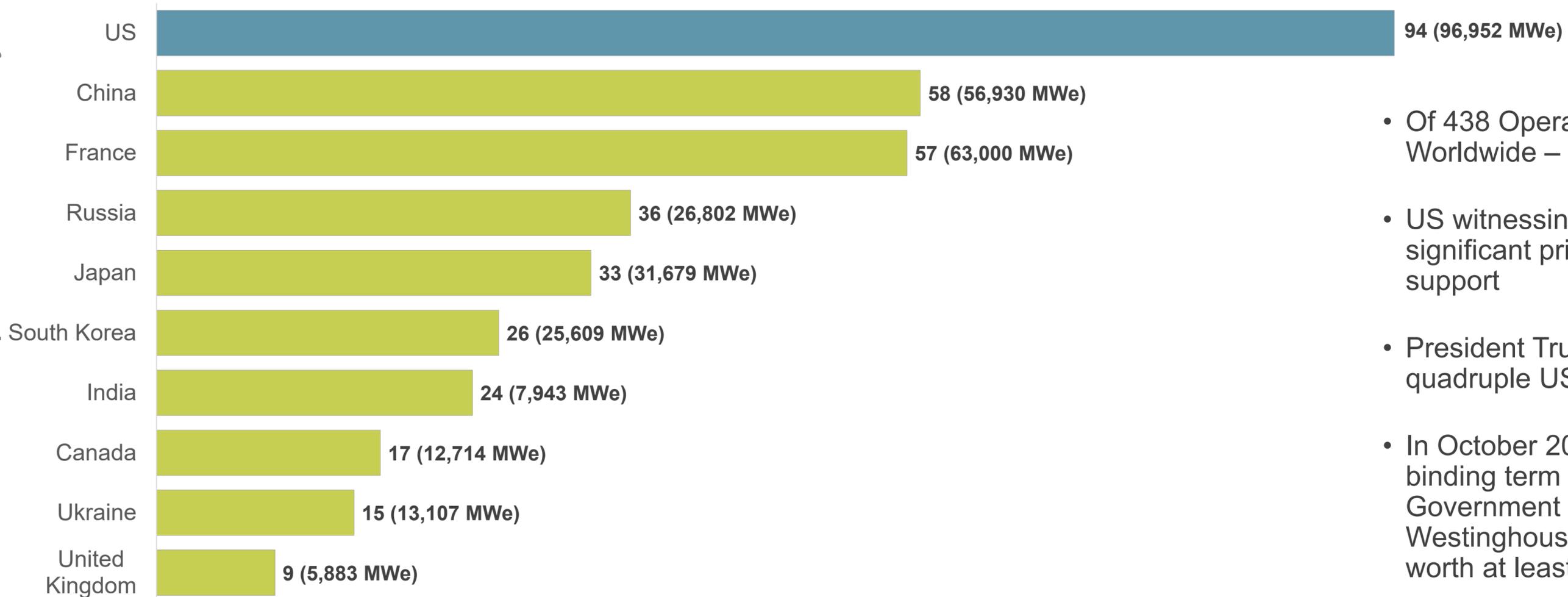
For personal use only

The US is the world's largest producer of Nuclear Power



Conventional Large-Scale Operable Reactors

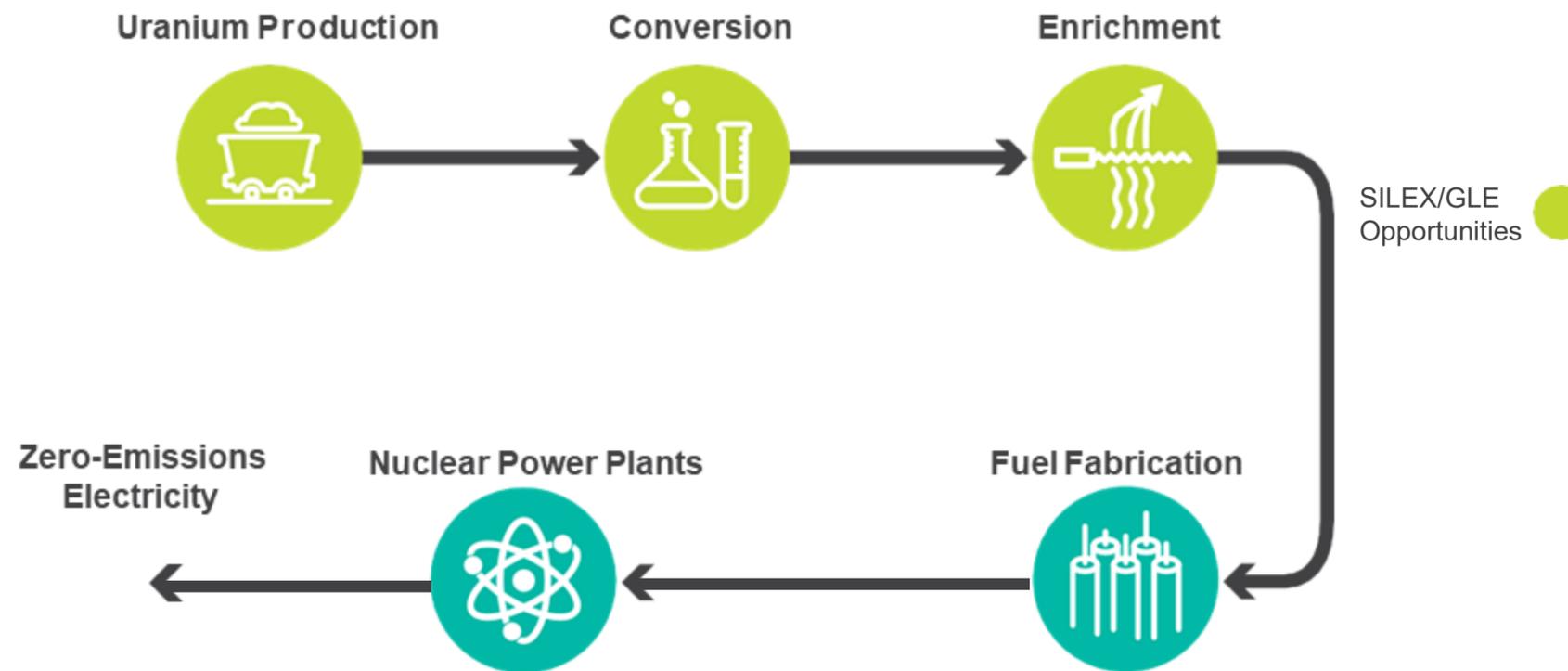
Total Operable Reactor Units (Top 10)



- Of 438 Operable Reactors Power Worldwide – 94 in US (21%)
- US witnessing a nuclear renaissance, with significant private and public sector support
- President Trump Executive Order to quadruple US nuclear fleet by 2050
- In October 2025, Cameco announced binding term sheet with Brookfield and US Government to deploy multiple Westinghouse AP1000 nuclear plants worth at least US\$80bn

Nuclear Fuel Supply Chain and Evolving Issues

The Nuclear Fuel Supply Chain



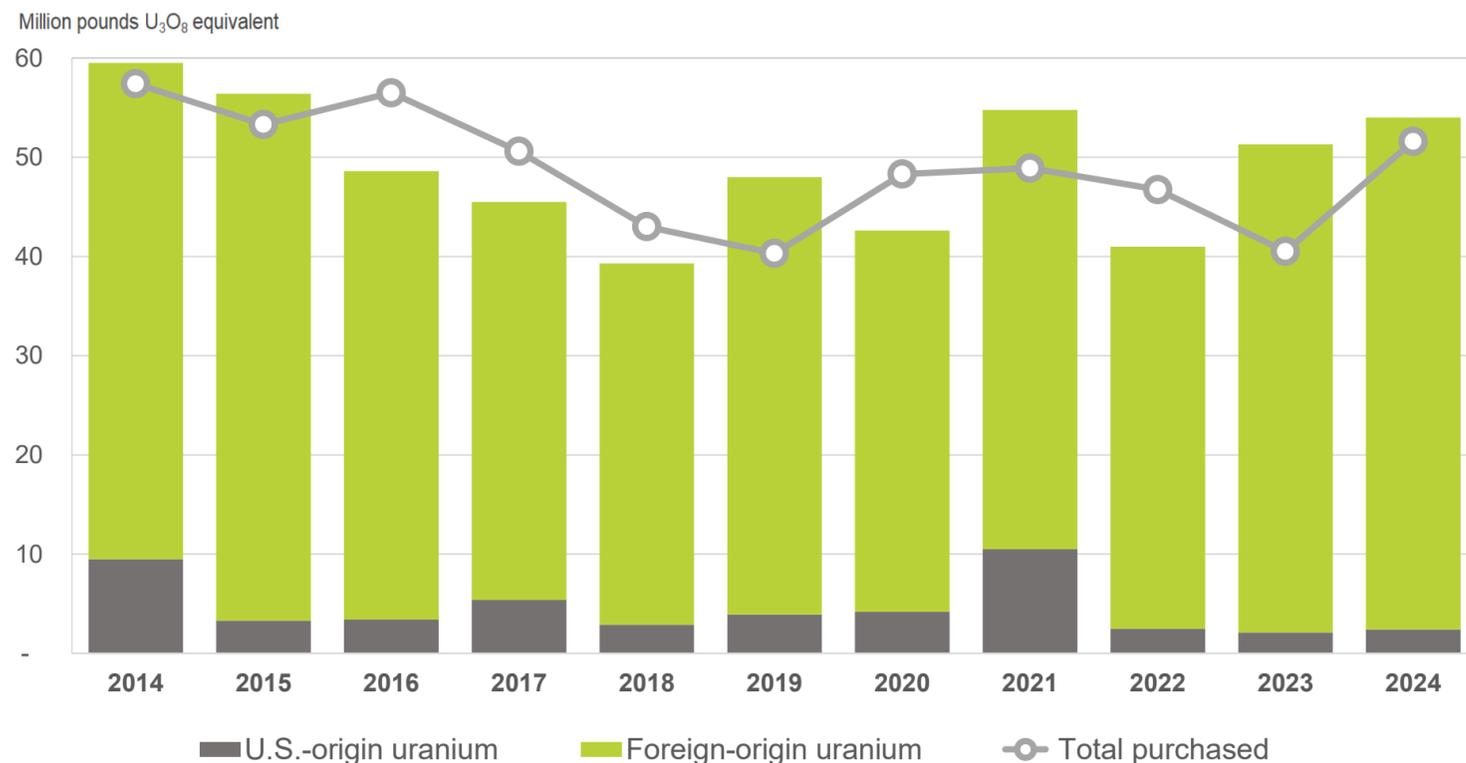
Issues facing the Global Nuclear Fuel Supply Chain:

- Western supply chain recent history – curtailments and under-investment in resources and production capability
- Supply chain risks have been exposed by over-dependence on Russian-sourced nuclear fuel
- **Conversion services** – only three Western suppliers (Cameco, Orano, Converdyn), excluding Russia
- **Enrichment services** – only two Western suppliers (Urenco, Orano), excluding Russia
- **HALEU fuel for advanced reactors (incl. SMRs)** – technology reactor developers were relying on Russian HALEU

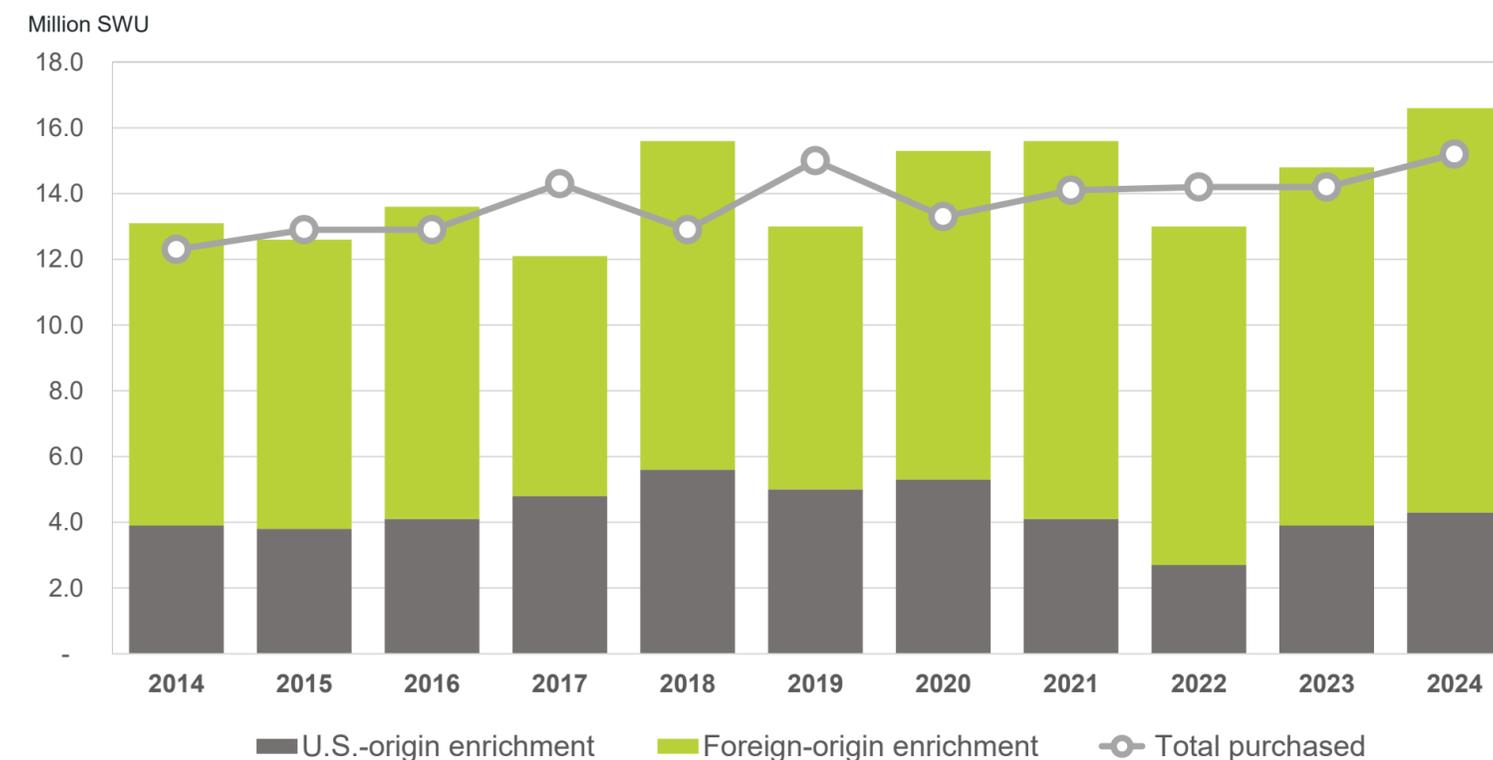
GLE's PLEF may help address US uranium and enrichment vulnerability



Uranium purchased by owners and operators of U.S. civilian nuclear power reactors, 2014-2024



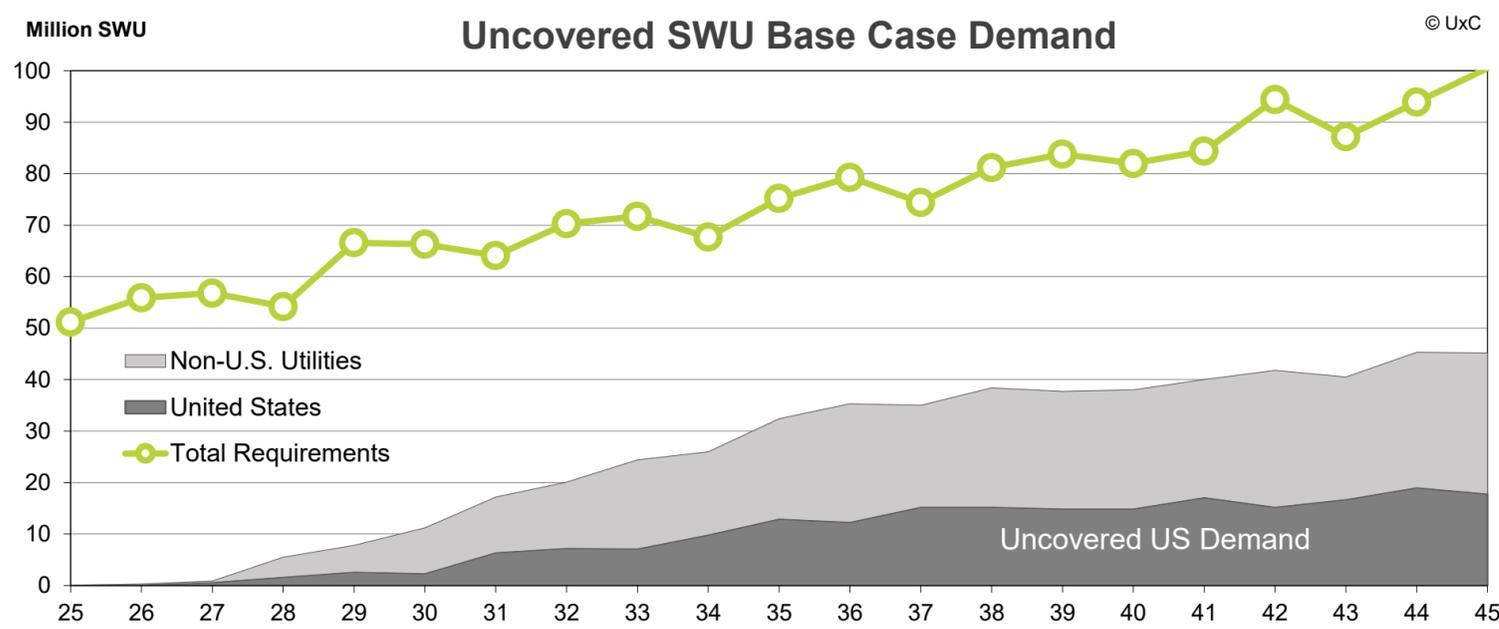
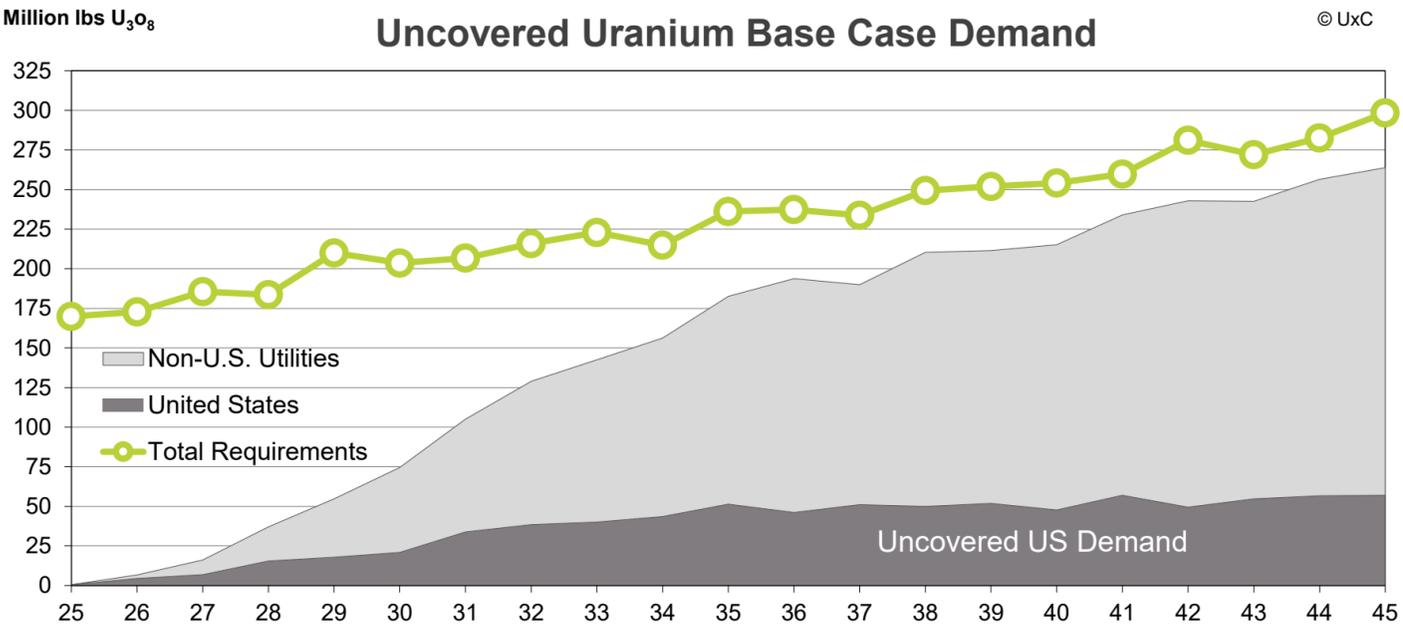
Enrichment purchased by owners and operators of U.S. civilian nuclear power reactors, 2014-2024



Source: US EIA Report – 2024 Uranium Marketing Annual Report, September 2025

- US currently imports ~95% of its uranium and ~80% of its enriched uranium requirements
- GLE has exclusive access to the largest uranium resource in the US – approximately 150 million pounds contained in depleted tails inventories contracted with the DOE
- PLEF UF₆ production utilising the DOE tails is expected to produce up to 5 million pounds per year of U₃O₈ equivalent and 2 million kilograms of conversion capacity per year
- PLEF UF₆ production project is expected to be the world's only 'above ground uranium mine' – ranking in the top 10 of today's global uranium projects

Emerging Nuclear Fuel Supply Opportunities for GLE



Source: UxC Uranium Market Outlook, Q3, 2025

Source: UxC Enrichment Market Outlook, Q3, 2025

- Forecast uncovered **US uranium demand** from 2030 is in excess of ~25 million lbs annually
- Forecast uncovered **US SWU demand** in 2028 is ~3 million SWU, rising to ~14 million SWU by 2035

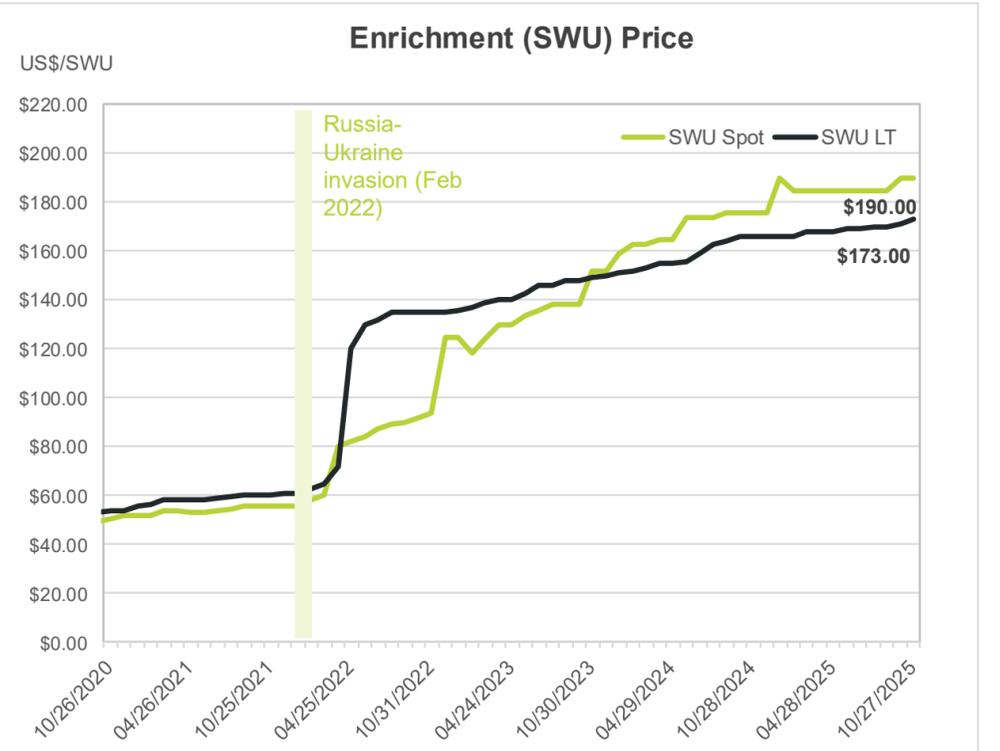
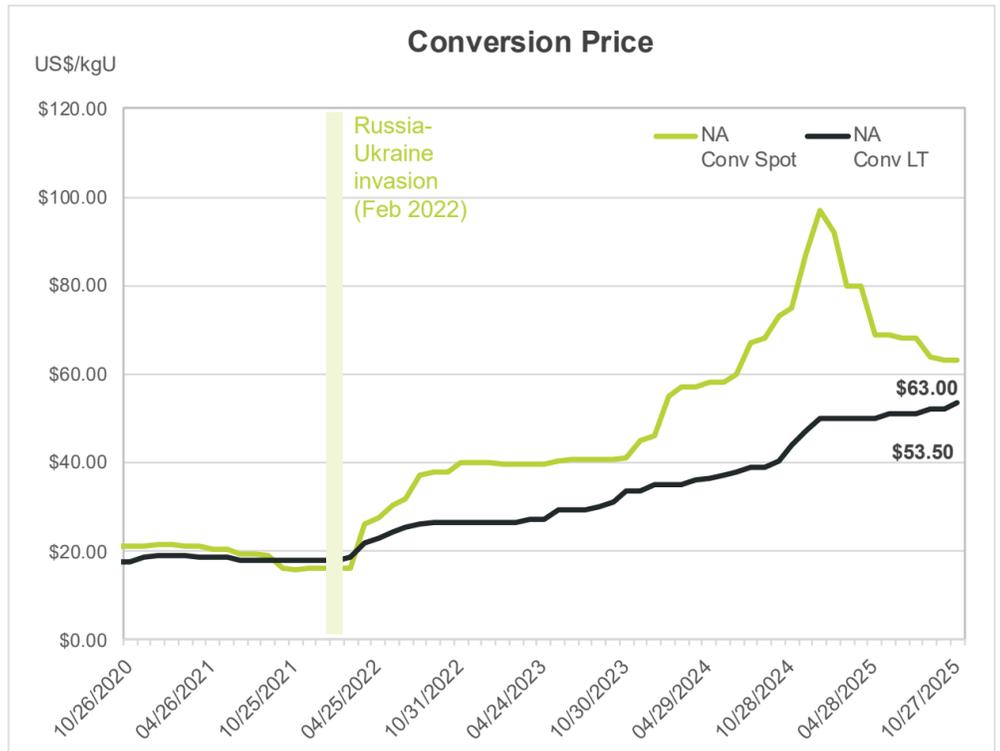
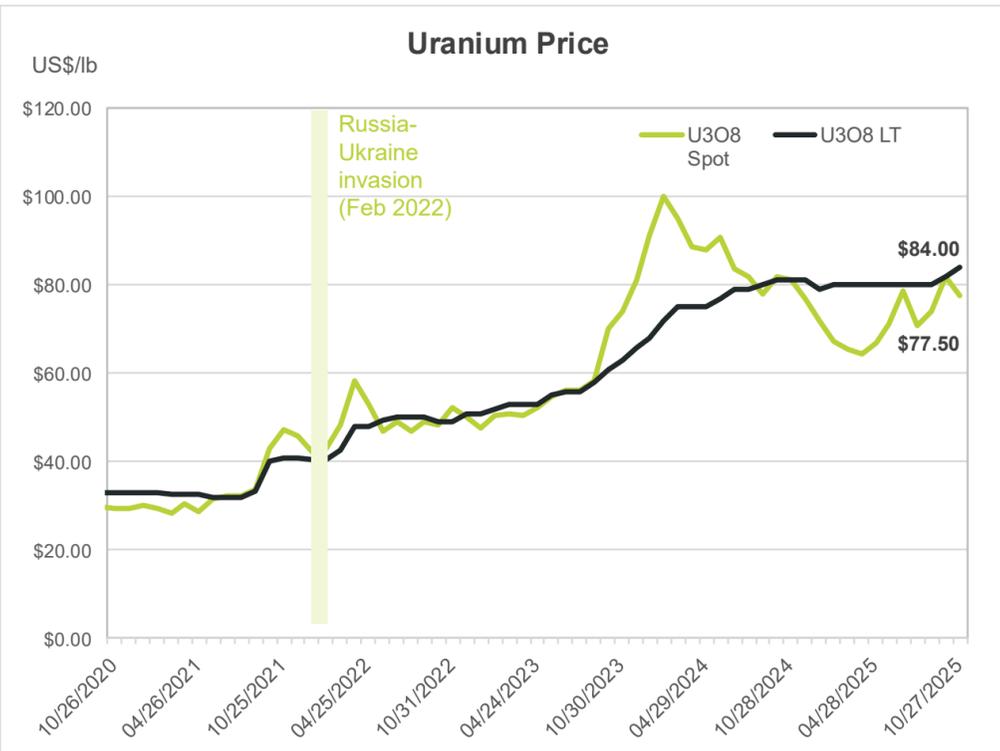
Significant nuclear fuel opportunities for GLE extend from 2030 – GLE’s target commercial operation date – particularly in the absence of Russian-sourced fuel

For personal use only

Favourable Nuclear Fuel Market Price Trends



For personal use only



- Global nuclear fuel markets tightening and bifurcating in response to Russia’s invasion of Ukraine and nuclear fuel sanctions and prohibitions
- Uranium term price rises (~100%) reflect the significant concerns over looming supply shortfalls in the open market as Russian-sourced nuclear fuel is excluded
- Conversion term prices have steadily increased by ~190% since the Russian invasion of Ukraine in February 2022
- Enrichment (SWU) term prices have also increased by ~170% since February 2022, reflecting a potential global enrichment shortfall without Russian supply

Additional Growth Opportunities for Silex

Silex Q-Si Production Project for Quantum Computing

- Quantum Silicon (Q-Si) Production Project announced in August 2023 is being undertaken with partners, Silicon Quantum Computing Pty Ltd (SQC) and UNSW Sydney (UNSW) to establish the first commercial Q-Si Production Plant module
- Project leverages the successful pilot demonstration of 'Zero-Spin Silicon' production – up to ~99.998% enriched silicon-28 (Si-28)
- 3.5-year Project (total ~\$16m) awarded \$5.1m funding from the *Defence Trailblazer Program* (partnership between The University of Adelaide and UNSW) supported by the Australian Government, and \$4.35m from initial offtake partner, SQC
- First production module anticipated to be commissioned in mid-2026 – may produce up to 20kg of enriched Si-28 annually, which will be converted to multiple product forms of Q-Si for potential customers in the global quantum computing industry, including:
 1. **Quantum Silicon gas** – for chemical vapour deposition (CVD) – the primary process used for quantum chip fabrication
 2. **Quantum Silicon solid** – for molecular beam epitaxy (MBE) – the alternative process used for quantum chip fabrication
- A new emerging opportunity also is being explored – using enriched Si-28 in advanced conventional silicon chips – potential to overcome power density and thermal overload issues, with Si-28-based nano-wires ('heat pipes') being developed by designers and nano-fabricators of hyperscale chips being deployed for AI, cloud computing, and data centre applications

Silex Q-Si Production Project for Quantum Computing



For personal use only



Silex Q-Si Production Module – Lucas Heights, NSW

MIST Project for Medical Isotopes



MIST Project aiming to develop a process to enrich ytterbium-176 (Yb-176) for production of lutetium-177 (Lu-177):

- Lu-177-based radiotherapy represents a breakthrough development for the diagnosis and treatment of some aggressive metastatic cancers (initially approved for prostate cancer therapy in the US, UK, and EU)
- Known as targeted beta therapy, the Lu-177 radiopharmaceutical seeks out and selectively destroys cancer cells throughout the human body with little collateral tissue damage

MIST Project:

- MIST Project commenced in 2023 to develop SILEX technology to enrich Yb-176 to high purity – helping to replace the now disrupted supply chain (Yb-176 previously sourced from Russia)
- Stage 1 – Proof-of-Concept – was successfully completed in December 2023
- Stage 2 – Technology Validation – continues and aims to validate the enrichment process at prototype scale
- Potential to apply MIST to other medical isotopes and radiopharmaceuticals currently undergoing clinical trials and in development around the world
- MIST Project may provide further diversification of the SILEX technology across multiple markets, subject to technology development program outcomes, market conditions, and other factors



For personal use only

Summary

Summary

- Silex represents unique leverage into the nuclear fuel supply chain, with significant potential value through equity ownership in GLE (currently 51%), in addition to perpetual royalty flows under the SILEX uranium enrichment technology licence
- GLE's path to market is underpinned by the PLEF Project for cost effective production of natural uranium (in the form of UF_6) and the significant value of conversion contained in DOE's legacy depleted UF_6 tails inventories
- The *'Triple Opportunity'* includes potential to add SILEX production capacity to produce LEU, LEU+, and HALEU at the PLEF, helping to alleviate Western dependence on Russian-sourced nuclear fuel
- Silex and GLE stand to benefit from significant global tailwinds spurring the nuclear renaissance, and strong US Government support
- Key de-risking milestone – TRL-6 Pilot Demonstration - successfully completed in October 2025, with independent validation

Significant Additional Opportunities – Summary

- Q-Si Production Project progressing with construction of the first Q-Si production module – establishing a sovereign capability and secure supply chain in support of the emerging global silicon quantum computing industry
- MIST Project focused on process validation, initially for enrichment of Yb-176, used to produce Lu-177 – a breakthrough in nuclear medicine cancer treatment – Project remains at early stage

As at 30 September 2025, the Company had cash and term deposit holdings of ~\$210m and no corporate debt (following August 2025 equity raise)



Thank you

For personal use only