Investor Presentation

5 June 2025

Silex Systems Limited (**Silex**) (**ASX:SLX; OTCQX:SILXY**) is pleased to provide the attached presentation to support upcoming Investor Relations activities. The presentation highlights recent developments in the commercialisation program for the third-generation laser-based SILEX uranium enrichment technology, being undertaken by US-based exclusive licensee of the SILEX uranium enrichment technology, Global Laser Enrichment (**GLE**). Also provided is an update on the key large-scale technology demonstration (**TRL-6**) continuing at GLE's Test Loop facility in Wilmington, NC.

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

"Silex represents a rare investment opportunity, providing multiple exposures to growing technology markets through the application of our proprietary SILEX laser-based enrichment technology. Our primary focus is the commercialisation of the SILEX technology for uranium enrichment, with a unique ability to help the US to re-establish domestic fuel production capacity for the growing global nuclear power industry, through our joint venture GLE. Silex currently holds a 51% interest in GLE, with Cameco Corporation, one of the world's leading uranium and nuclear fuel providers, currently holding a 49% interest.

"We are pleased with the progress being made in the large-scale Pilot Demonstration Project for the SILEX technology at GLE's Test Loop facility, which, absent any unforeseen delays, is expected to be completed by the end of the year. Completion of the large-scale technology demonstration remains subject to assessment by an independent engineering contractor that has been engaged by GLE on behalf of its joint venture owners.

"GLE also continues to make progress in other aspects of the commercialisation program, with the full application for a combined construction and operating license for the planned commercial plant in Paducah, Kentucky, due to be submitted to the US Nuclear Regulatory Commission in the coming weeks. In addition, preliminary TRL-7 activities (relating to full-scale maturation of plant production equipment) are being undertaken by GLE in a new classified manufacturing facility at its Wilmington headquarters, and at Silex's Lucas Heights facility in Sydney.

"GLE also stands to potentially benefit from President Trump's recent Executive Orders, which are aimed at strengthening the US nuclear energy sector. The Orders recognise the importance of expanding domestic conversion and enrichment capacity, priorities that align closely with GLE's capabilities and mission. GLE's proposed Paducah Laser Enrichment Facility is uniquely positioned to support both of these objectives, and contribute to US energy security," he added.

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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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 TRL-6 pilot demonstration program, nuclear fuel market conditions, industry and government support, project feasibility and commercial plant licensing, 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 'Quantum Silicon' for the emerging technology of silicon-based quantum computing. The 'Quantum Silicon' project remains dependent on the outcomes of the project, as well as the successful development of silicon quantum computing technology by third parties, and is therefore subject to various risks. Silex is also conducting early-stage research activities in its Medical Isotope Separation Technology (**MIST**) Project, which is also subject to various risks and outcomes. 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.

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, Quantum Silicon production, medical and other isotope separation projects, and any associated commercial prospects, including TRL-6 achievement 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.

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 global economic stresses, such as interest rates; inflation; tariffs; geopolitical risks, in particular relating to Russia's invasion of Ukraine and tensions between China and Taiwan, which may affect global supply chains; uncertainties related to the effects of climate change and mitigation efforts; the results of the GLE/SILEX uranium enrichment pilot demonstration (**TRL-6**) program; the market demand for natural uranium and enriched uranium; the outcome of the project for the production of Quantum 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 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; and the outcomes of various strategies and projects undertaken by the Company..

Next-Generation Laser Enrichment Technology

Investor Briefing Presentation | 5 June 2025

Dr Michael Goldsworthy
CEO/Managing Director

Silex Systems Limited
ASX: SLX
OTCQX: SILXY

Forward Looking Statements and Risk Factors

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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.

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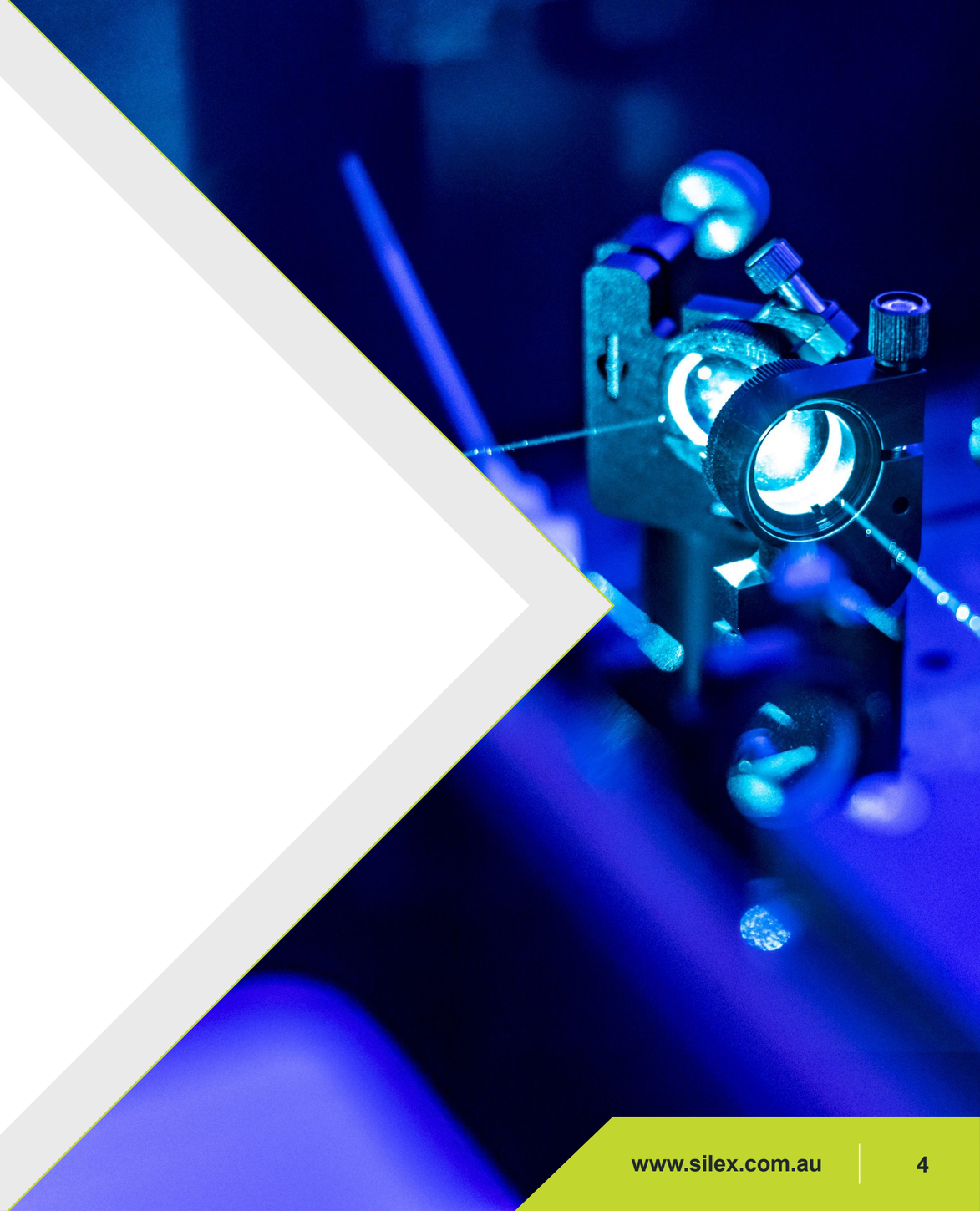
The release of this Presentation was authorised by the Board.

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).

Agenda

Investment Overview



Investment Highlights

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

1. **Unique, innovative third-generation laser-based SILEX[1] uranium enrichment technology** for uranium and nuclear fuel production in the US, classified by the US and Australian Governments
2. **Leveraged to global tailwinds,** including: nuclear energy growth and Net Zero targets; US Government actions to reinvigorate the US nuclear industrial base; and industry moves to spur a nuclear energy renaissance
3. **US-based nuclear fuel JV Global Laser Enrichment (GLE) – Silex (51%) and Cameco (49%)** – led by experienced, industry-leading management team
4. **Key large-scale technology demonstration in CY2025** – de-risking pathway to commercialisation, along with potentially significant US Government funding support
5. **2016 agreement between GLE and US DOE[2]** – exclusive access to valuable uranium tails inventories – up to 30-year 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 'free options' for Silex shareholders

1. SILEX: **S**eparation of **I**sotopes by **L**aser **EX**citation
2. DOE: US Department of Energy

Overview of GLE

- **GLE is a US-based JV between Silex (51%) and Cameco Corporation (49%), with ~100 employees and contractors**
- **Focused on the commercialisation of the SILEX uranium enrichment technology in the US, with sites in North Carolina and Kentucky[1]**

GLE focused on the pathway to commercialisation – key technology de-risking demonstration (TRL-6[2]) underway

Over US$550m invested in GLE over 20 years to progress the SILEX technology to TRL-6

GLE's 2016 agreement with the US DOE provides over 200,000 tonnes of legacy depleted tails inventories – feedstock for the PLEF natural UF_6 production project

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

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

Paducah Laser Enrichment Facility (PLEF)

- 665-acre site strategically located adjacent the US DOE's former Paducah Gaseous Diffusion Plant (PGDP)
- PLEF site provides access to the PGDP cylinder yards, containing the ~200,000 tonnes of legacy tails inventories to be processed at the PLEF
- The tails processing project is expected to be equivalent to U_3O_8 production of up to 5 million lbs p.a. for up to 30 years (as UF_6) and 2 million kgs p.a. conversion capacity

GLE Headquarters / Test Loop demonstration facility

- Integrated large-scale Pilot Demonstration Facility (Test Loop) currently operating in Wilmington, NC
- Large-scale (TRL-6) enrichment testing underway – represents key technology de-risking milestone
- GLE's 70k sq ft HQ and classified manufacturing facility also based in Wilmington, NC

1. GLE's commercialisation path is dependent on several factors, including, but not limited to: technology demonstration outcomes, market conditions, licensing, industry and government support, and PLEF feasibility assessment, and other factors, and may vary according to differing scenarios
2. Technology Readiness Level 6 (TRL-6), as defined by DOE Technology Readiness Assessment Guide (G 413.3-4A)

The Paducah Laser Enrichment Facility (PLEF)

GLE's path to market focused on its unique ability to address the 'Triple Opportunity'

PLEF UF_6

Product: Natural Grade Uranium (as UF_6)

via enrichment of DOE inventories of depleted tails to produce natural UF_6 with U^{235} assay ~0.7% to support rising demand for uranium and conversion

Revenue potential

- Production of up to 5 million pounds (equivalent) natural grade uranium (as UF_6) 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 U^{235} assays of 3% to 5%
LEU+ includes U^{235} assays of 5% to 10%

Revenue potential

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

PLEF HALEU

Product: High Assay LEU (HALEU)

fuel for next generation advanced reactors, including small modular reactors (SMRs)
HALEU includes U^{235} assays up to 20%

Revenue potential

- Future HALEU market size and timing difficult to quantify until SMR market evolves

1. All estimates are subject to technology demonstration 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 nuclear fuel market conditions and other factors

The GLE value proposition for Silex Shareholders[1]

1) GLE Equity – Minimum 25%:

- Silex currently holds 51% – Cameco has a call Option to acquire an additional 26% at fair market value
- Option window opened 1 February 2023 – closes 30 months after successful TRL-6 demonstration
- Silex has a significant equity stake in GLE as a potential nuclear fuel supplier in either case

2) SILEX Technology Licence and Perpetual Royalty from GLE:

- Technology classified by Australian and US Governments, with no patent disclosures permitted
- Technology kept as Trade Secret under strictest security mandates → no sunset on IP
- Perpetual SILEX royalty of 7% to 12% on GLE's enrichment SWU revenues (could potentially reach, for example, ~US$90m p.a. based on ~8 MSWU PLEF operations at 7% royalty rate and current SWU price)

1. GLE's progress to commercialisation is dependent on several factors, including, but not limited to: technology demonstration outcomes, market conditions, licensing, industry and government support, PLEF feasibility assessment, and other factors, and may vary according to differing scenarios

Recent and upcoming catalysts for GLE / Silex

Recent highlights:

- GLE recently commenced the key technology de-risking large-scale demonstration tests (TRL-6) at its Wilmington, NC Test Loop facility – expected completion by end CY2025, subject to independent assessment by engineering contractor
- GLE completed purchase of a 665-acre site for the planned PLEF in November 2024
- *Prohibiting Russian Uranium Imports Act* passed by Congress May 2024 (now effective) – no waivers from 2028 to 2040
- DOE selected GLE as one of six awardees for the US$3.4bn Low Enriched Uranium (LEU) Enrichment Acquisition program in December 2024 – initial US$0.5m funded task awarded in April 2025 – bid for significant funding package currently under assessment by the DOE
- President Trump signed a series of Executive Orders in May 2025 – with the goal of re-establishing the US as the global leader in nuclear energy and advanced nuclear technology

Upcoming catalysts:

- Completion of key large-scale (TRL-6) Pilot Demonstration program expected by the end of CY2025 – key to technology de-risking
- Submission in mid-CY2025 by GLE of the full construction and operation licence application to the US NRC[1] for the PLEF multi-function commercial production plant planned for Paducah, KY
- Outcomes of funding applications to the DOE's nuclear fuel incentive programs expected in second half of CY2025, including: i) Innovative Technology Fund (up to US$24m); and ii) the LEU Enrichment Acquisition RFP (total funding pool: US$3.4bn)
- Continued progress towards commercialisation, including advancing technology maturation and manufacturing activities, as well as industry and commercial stakeholder engagement

1. NRC: Nuclear Regulatory Commission

SILEX Uranium Enrichment Technology

Unique Third Generation Laser Technology

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

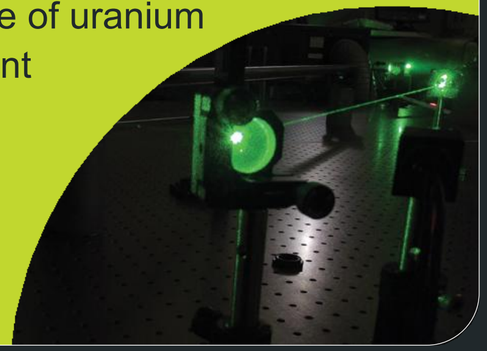
3rd Generation Technology

SILEX Laser

Higher efficiency and throughput

Anticipated to be lower cost

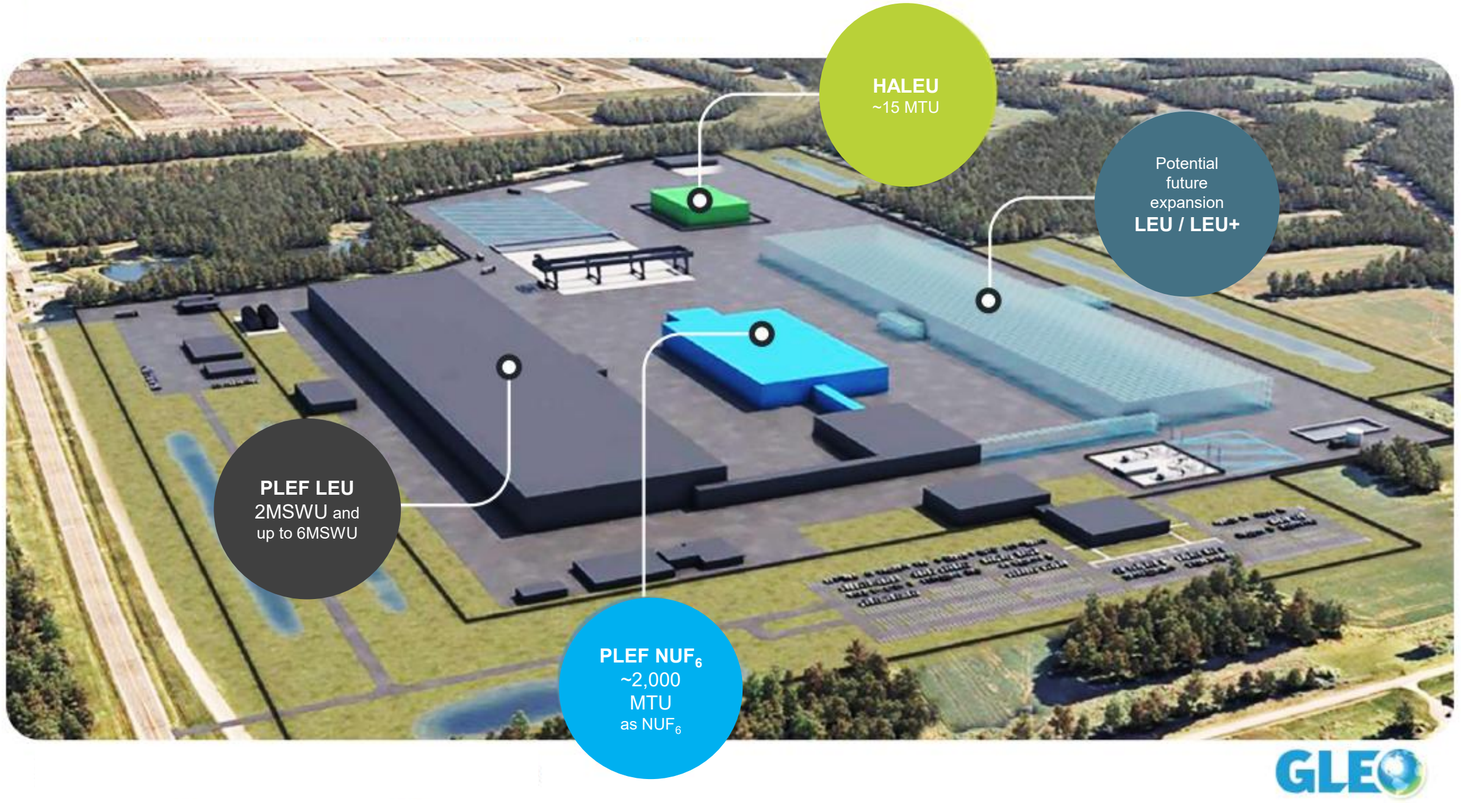
The future of uranium enrichment

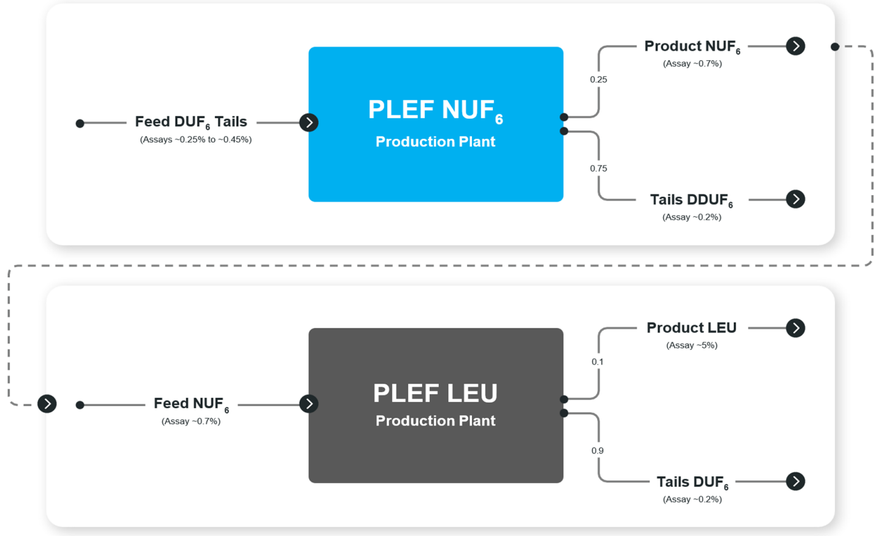


SILEX laser process → higher separation efficiency and throughput vs centrifuge technology

GLE's potential PLEF Commercial Plant Opportunities[1]

GLE – PLEF Potential Commercial Plant (conceptual only)





DUF_6: Depleted UF_6
$DDUF_6$: Double Depleted UF_6

1. Dependent on various factors, including, but not limited to: technology demonstration 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

Uranium Sector and Nuclear Fuel

The renaissance of the global nuclear industry

Nuclear power is a leading source of carbon-free base load electricity to achieve climate, energy, and national security objectives

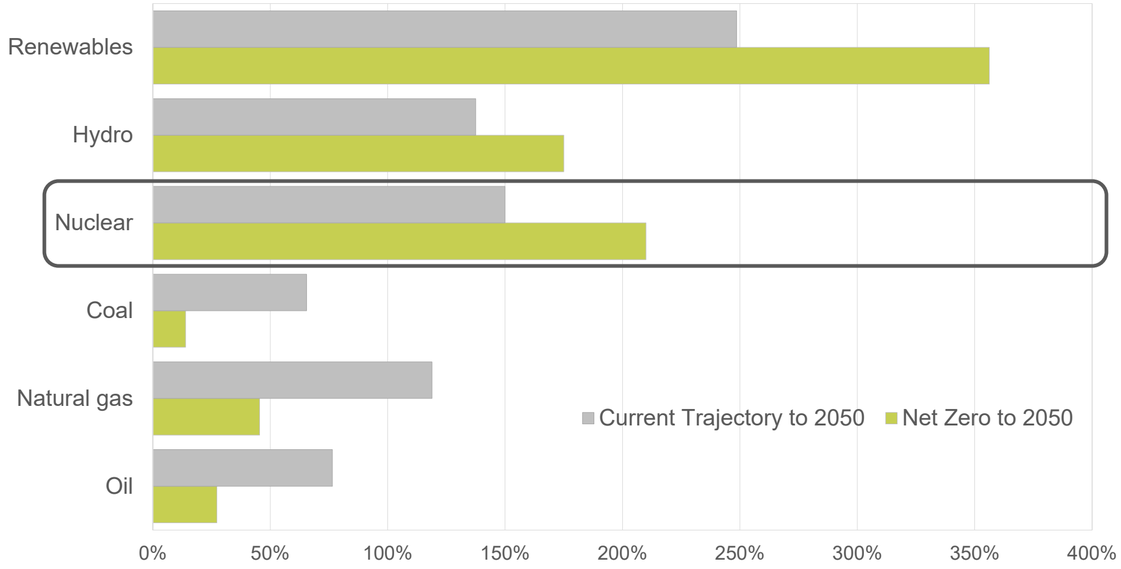
Nuclear Power Value Propositions

- Clean energy supporting Net Zero 2050 targets
- Advanced Reactors in development, including SMRs
- Low LCOE ~US$70/MWhr[1]
- 24/7 reliability and base load stability
- Highest Capacity Factor (> 93% in the US)
- Supporting Data Centres, AI, Crypto, EVs, and Hydrogen production

1. LCOE ~US$70/MWhr, IEA Projected Costs of Generating Electricity 2020 (LCOE = Levelised Cost of Electricity on an all-in costs basis)

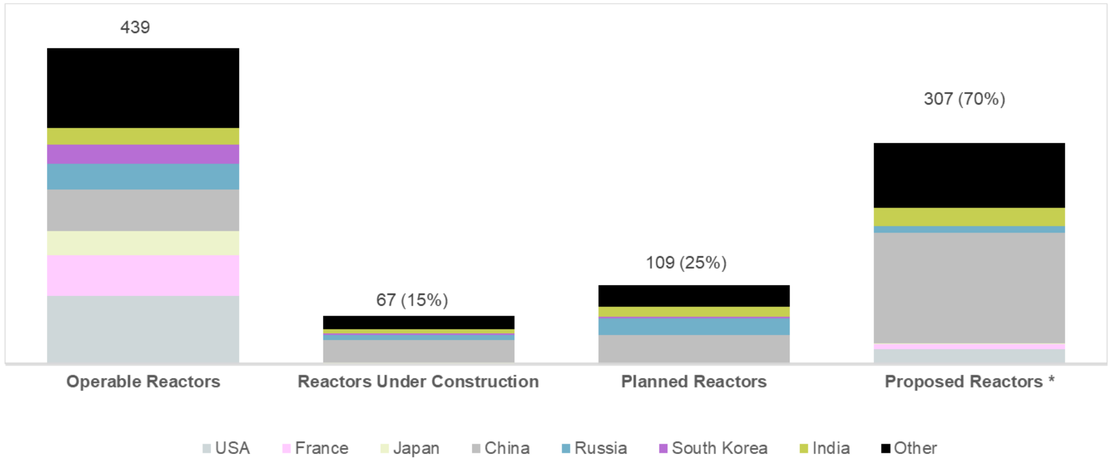
Significant nuclear power growth to achieve Net Zero by 2050

Growth in Primary Energy



Source: BP Energy Outlook 2024 Edition

World Nuclear Power Reactor Population

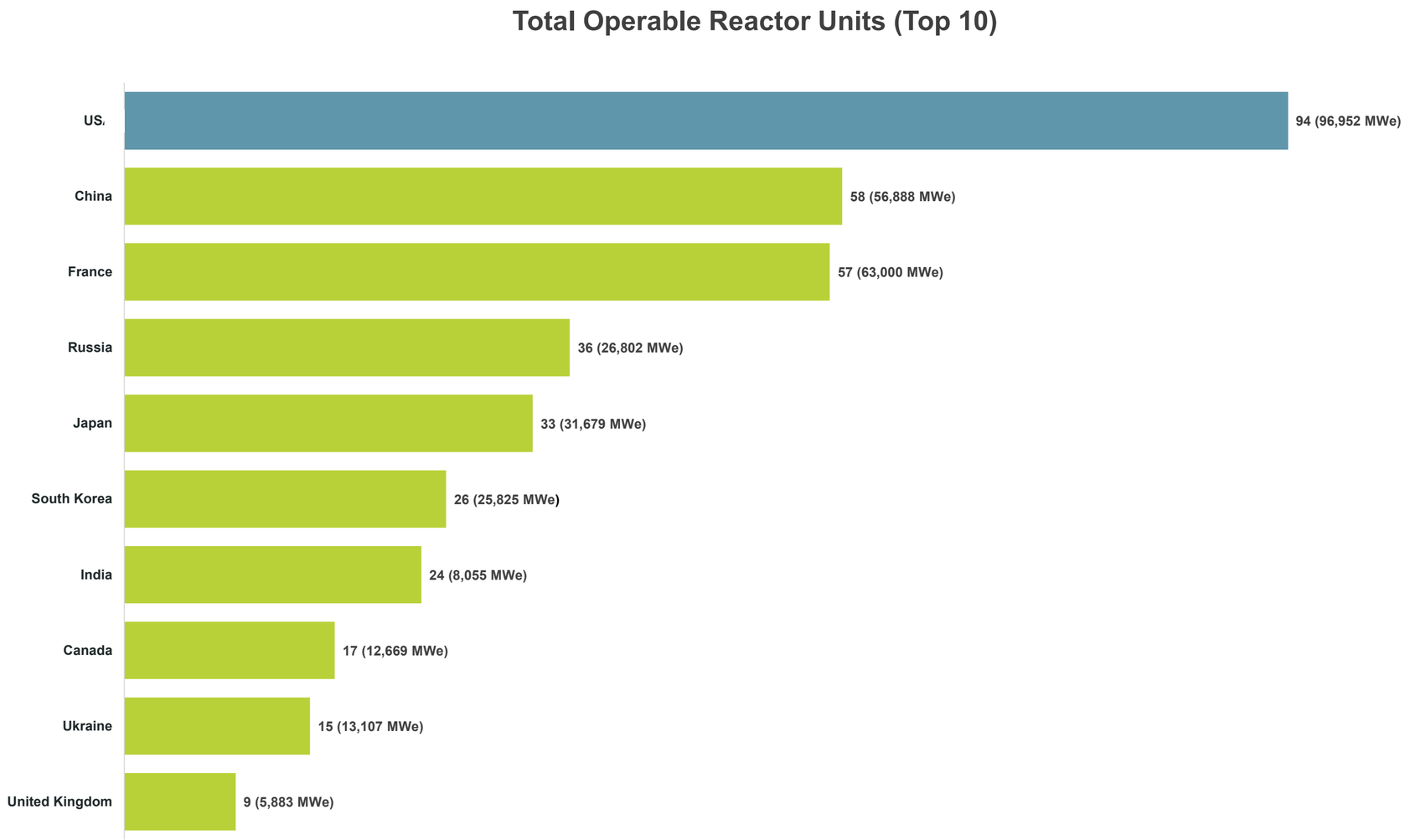


* Other Proposed Reactors include 26 proposed in Poland, 8 in Turkey and 7 in Ukraine

Source: World Nuclear Association, May 2025

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

Conventional Large-Scale Operable Reactors

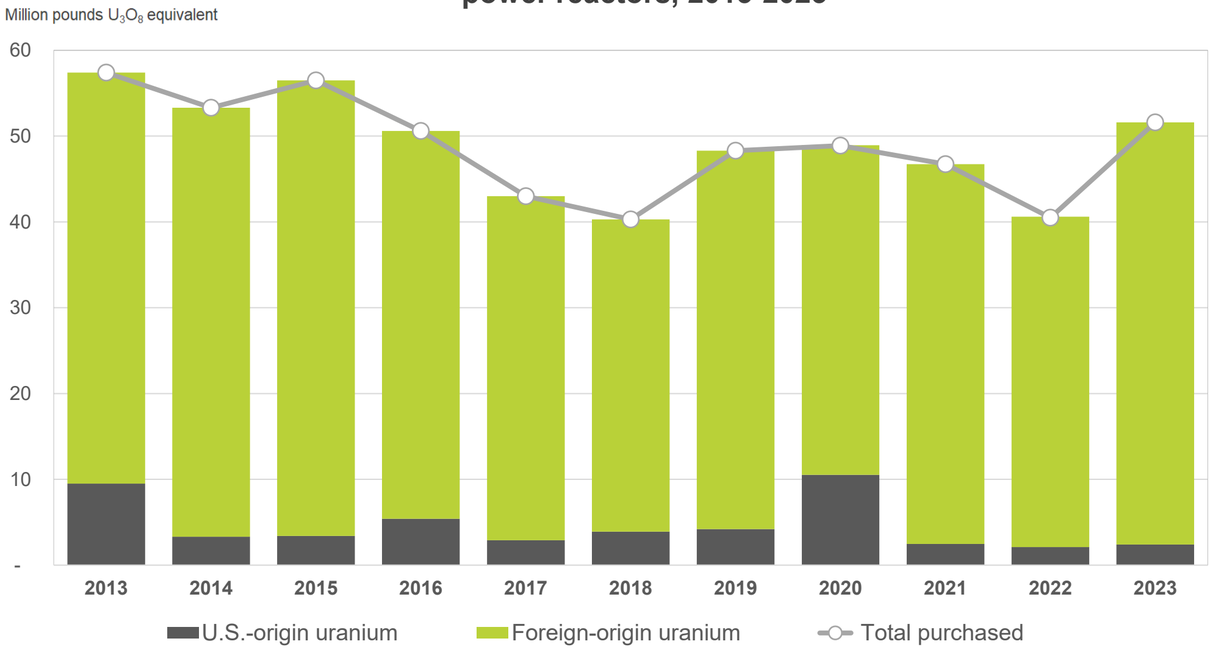


- 439 Operable Reactors Power Worldwide
- Nuclear supplies ~10% of global electricity
- US witnessing nuclear renaissance, with significant private and public sector support

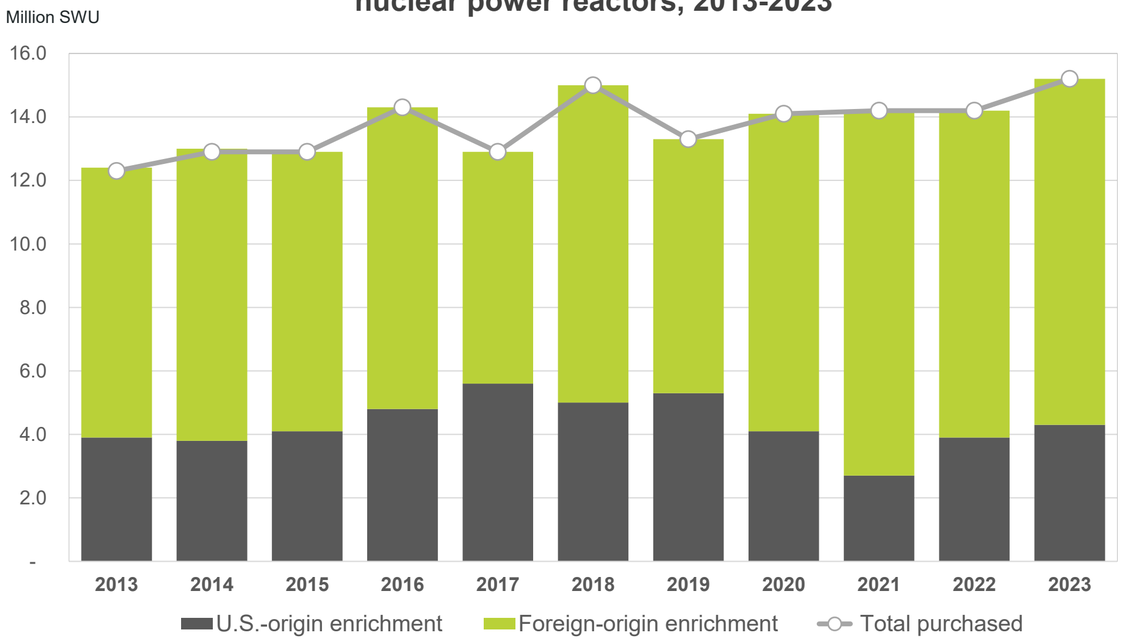
Source: World Nuclear Association, May 2025

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

Uranium purchased by owners and operators of U.S. civilian nuclear power reactors, 2013-2023



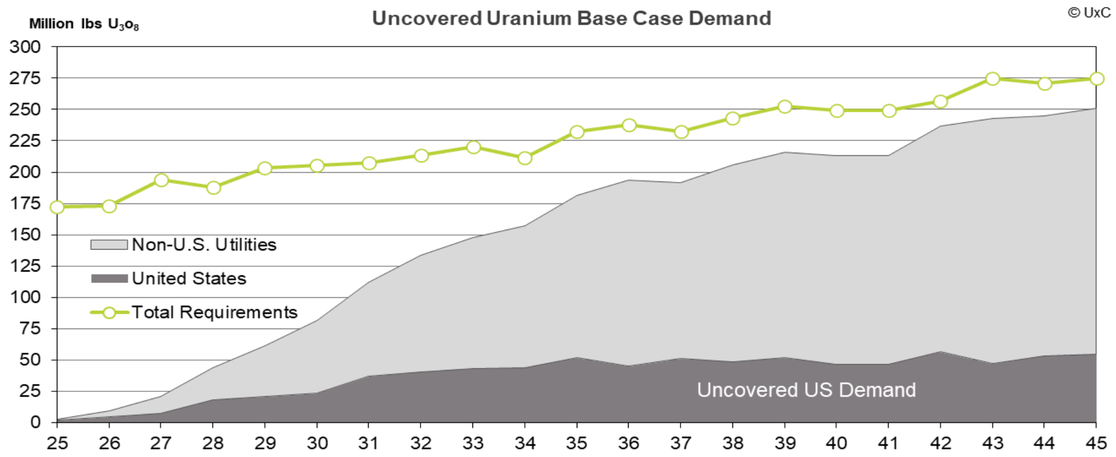
Enrichment purchased by owners and operators of U.S. civilian nuclear power reactors, 2013-2023



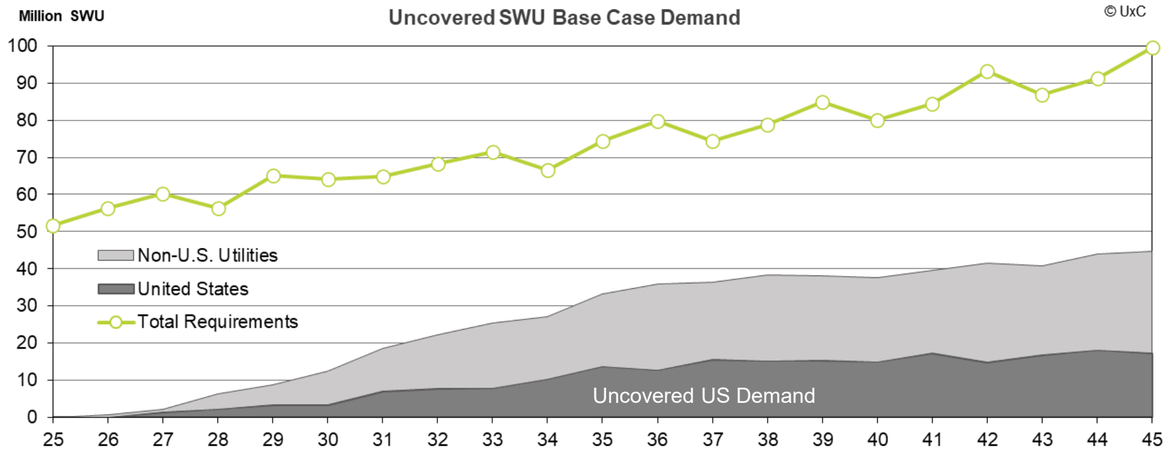
Source: US EIA Report – 2023 *Uranium Marketing Annual Report*, June 2024

- US currently imports ~95% of its uranium and ~70% of its enriched uranium requirements (including ~65% of its conversion 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 UF_6 production utilising the DOE tails is expected to produce up to 5 million pounds per year of U_3O_8 equivalent and 2 million kilograms of conversion capacity per year
- PLEF UF_6 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*, Q1, 2025



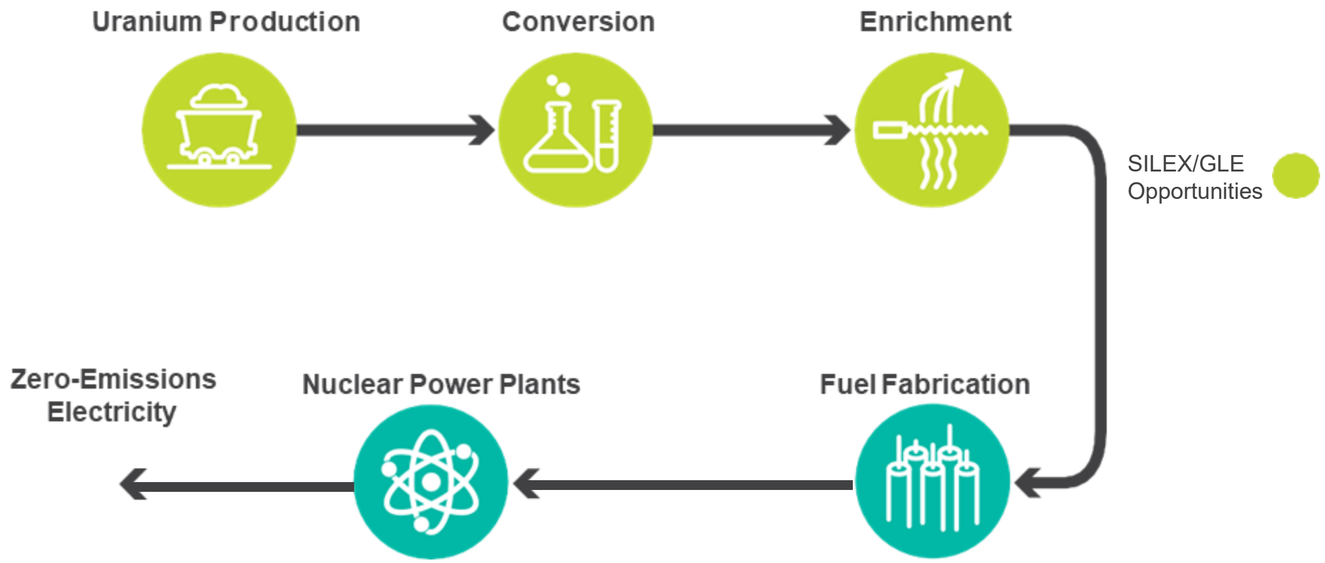
Source: UxC *Enrichment Market Outlook*, Q1, 2025

- 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 ~13 million SWU by 2035

Significant nuclear fuel opportunities for GLE extend from 2030 – GLE's target commercial operation date

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

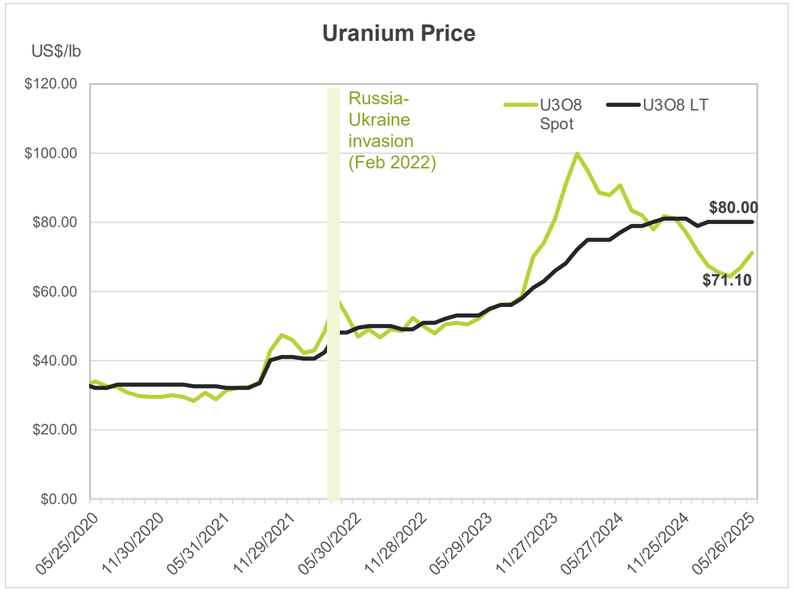
US and EU Nuclear Fuel Requirements Supplied by Russia

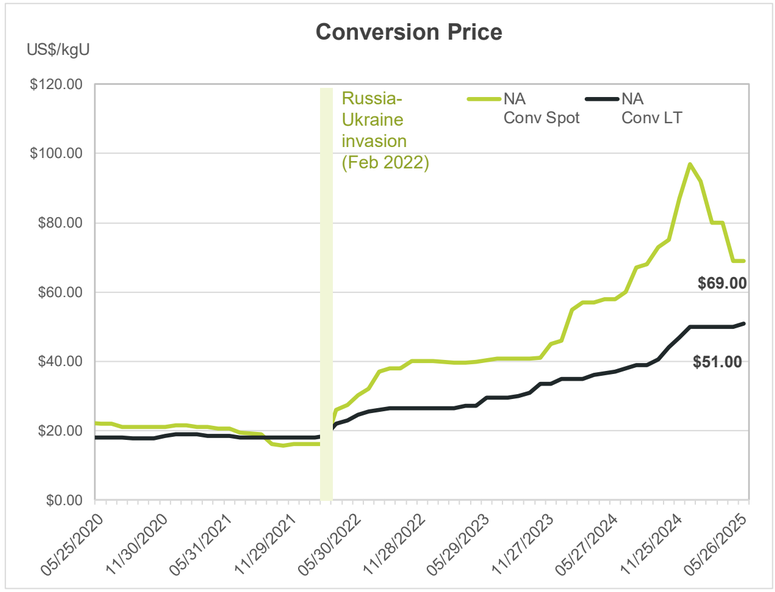
	Russian Share of Global Production Capacity[1]	EU Nuclear Fuel Supplied by Russia[2]	US Nuclear Fuel Supplied by Russia[1,3]
Uranium (U_3O_8)	~14%	~23%	~12%
Conversion	~22%	~27%	~18%
Enrichment (SWU)	~44%	~38%	~27%

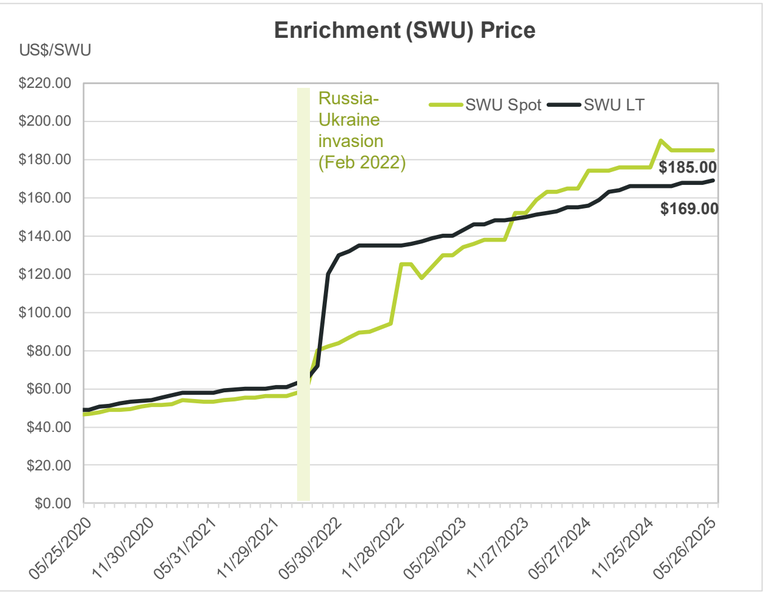
- Major concerns regarding Western reliance on Russian-supplied nuclear fuel entrenched over the last two decades
- Significant shift away from Russian sourcing, with nuclear fuel sanctions and prohibitions imposed across Western countries and the open market[4]
- Open market currently accounts for ~65% of global enriched uranium fuel demand
- US is the largest market for nuclear fuel, with ~25% of worldwide generation of nuclear power

1. UxC, various sources 2024
2. Euratom Supply Agency Annual Report 2023, published August 2024
3. EIA, 2023 Uranium Marketing Annual Report, June 2024
4. Open market comprises North America, Europe, Northeast Asia, and various other parts of the world

Favourable Nuclear Fuel Market Price Trends





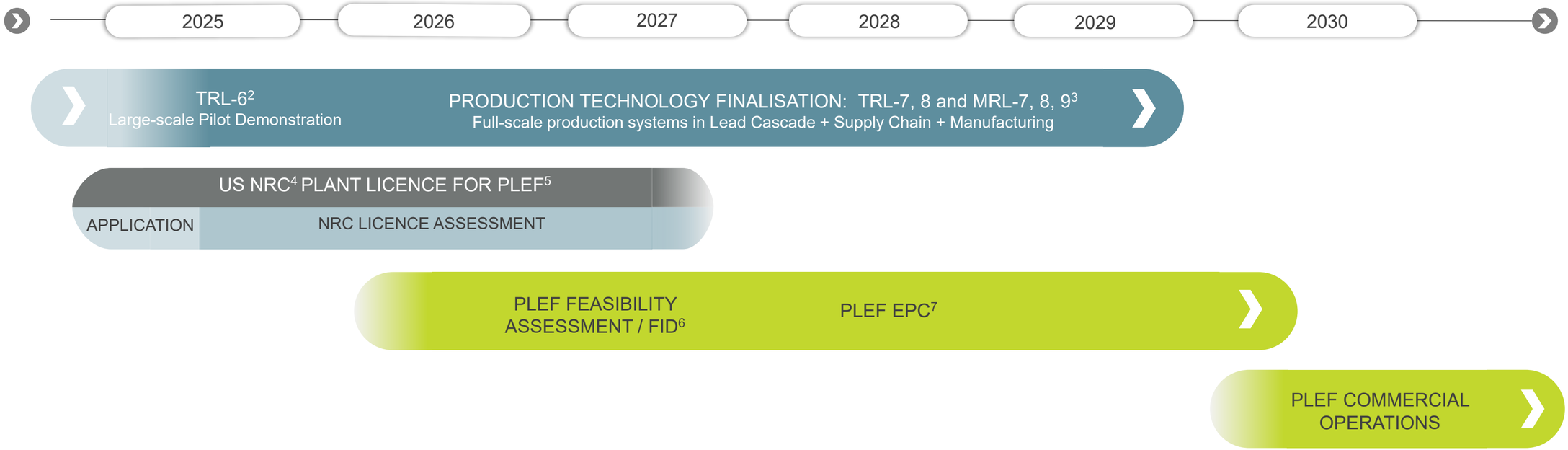


- Global nuclear fuel markets tightening and bifurcating in response to Russia's invasion of Ukraine and nuclear fuel sanctions and prohibitions
- Uranium term price rises (~100%) reflect the significant concerns over looming supply shortfalls in the open market as Russian-sourced nuclear fuel is excluded
- Conversion term prices have steadily increased by over 150% since the Russian invasion of Ukraine in February 2022
- Enrichment (SWU) term prices have also increased by over 150% since February 2022, reflecting a potential global enrichment shortfall without Russian supply

Source: UxC

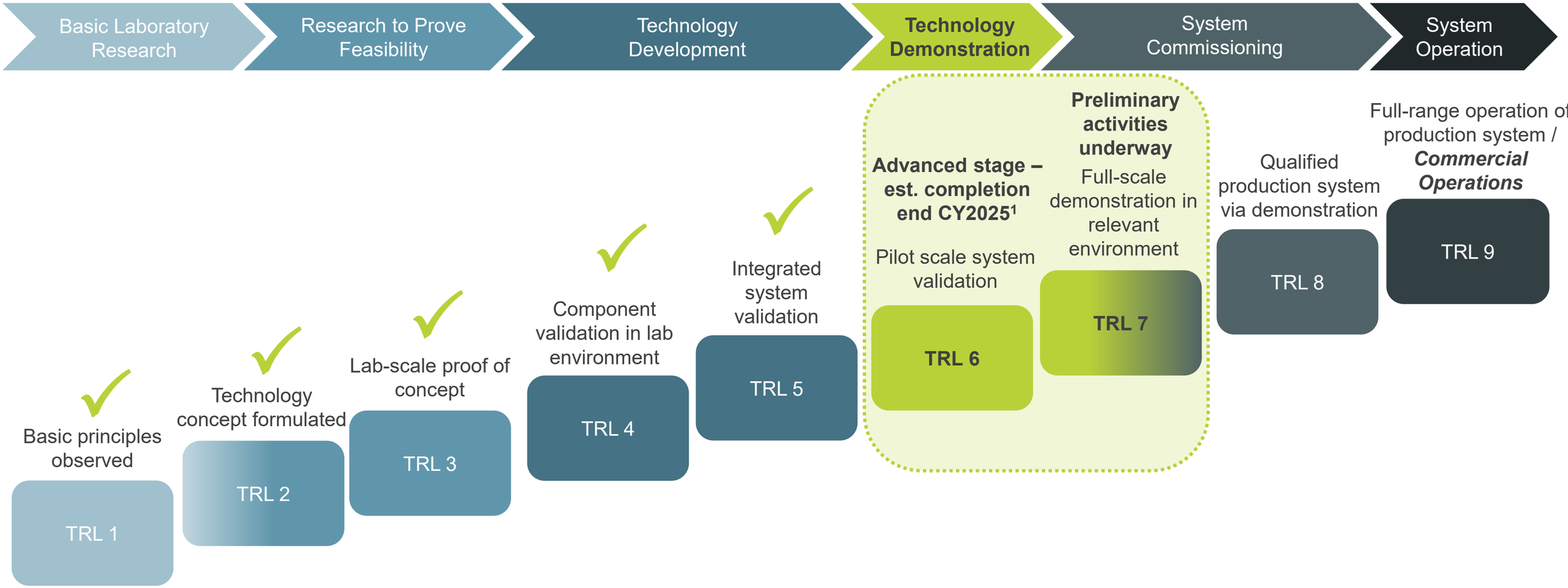
GLE’s Commercialisation Plan

GLE's Target Timeline for Commercialisation of SILEX technology[1]



1. Target timeline subject to technology demonstration outcomes, market conditions, licensing, industry and government support, PLEF feasibility assessment, 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

Technology Readiness Level (TRL) Framework



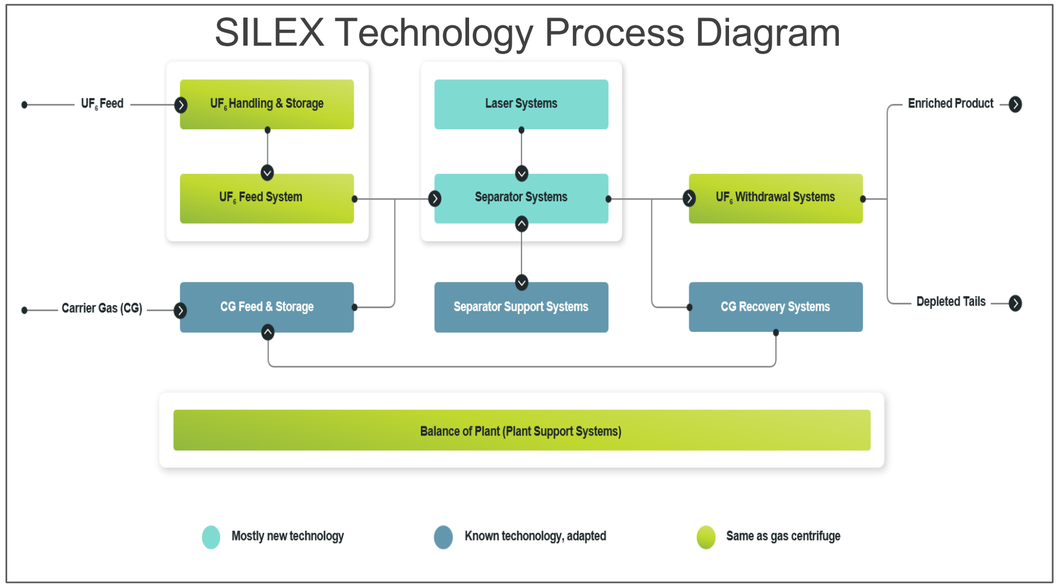
Source: US Department of Energy Technology Readiness Assessment Guide (G413.3-4A)

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

Status of SILEX Technology Pilot Demonstration Project

Key large-scale technology de-risking demonstration expected to be completed by end of CY2025[1]:

- Pilot Demonstration Facility operational in Q3 2024 after US NRC completed inspection of Test Loop facility and operations
- Preliminary testing commenced Q4 2024 – triggered several operational and engineering modifications to the Test Loop
- Commencement of large-scale (TRL-6) enrichment tests in May 2025 – with iterative testing and data accumulation ongoing
- GLE aims to complete Pilot Demonstration Project, including submission of an independent assessment report, by the end of CY2025
- Timing of completion of the Pilot Demonstration Project will be determined by the engineering contractor engaged to conduct the independent assessment on behalf of GLE's owners



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

GLE's Commercialisation Activities for the SILEX technology

Paducah, KY site acquisition and commercial plant licensing activities[1]:

- GLE acquired a 665-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
- In December 2024, GLE submitted an Environmental Report to the US NRC in support of site licensing for the planned PLEF
- GLE plans to submit the Safety Analysis Report in mid-CY2025, which will complete the licence application to the NRC
- Activities on the PLEF site continue, with site characterisation work ongoing in support of the licence application

PLEF site, Paducah, KY

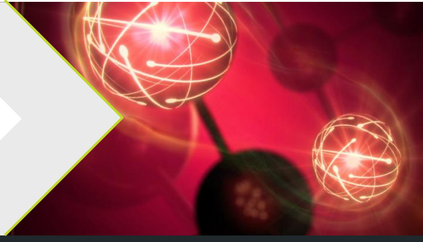
1. GLE's progress to commercialisation is dependent on several factors, including, but not limited to: technology demonstration outcomes, market conditions, licensing, industry and government support, PLEF feasibility assessment, and other factors, and may vary according to differing scenarios

GLE’s Commercialisation Activities for the SILEX technology

GLE HQ and classified manufacturing facility in Wilmington, NC:

GLE HQ and Classified Manufacturing Facility – Wilmington, NC

US support for GLE's commercialisation activities



- **Key US legislation supports nuclear power as a critical energy source:**

Inflation Reduction Act (2022)

- US$700m in support for the DOE's HALEU Availability Program
- GLE submitted a response to a US$80m funding opportunity in support of technology innovation in March 2025
- Outcome of GLE's submission for a share of the US$80m in funding is expected in the coming months

Nuclear Fuel Security Act (2023)

- Substantial support for new nuclear fuel capacity – DOE released the LEU RFP in July 2024
- GLE selected as an awardee in December 2024
- Maximum aggregate funding for all awardees of US$3.4bn
- GLE awarded its initial US$0.5m funded task order in April 2025

Prohibiting Russian Uranium Imports Act (2024)

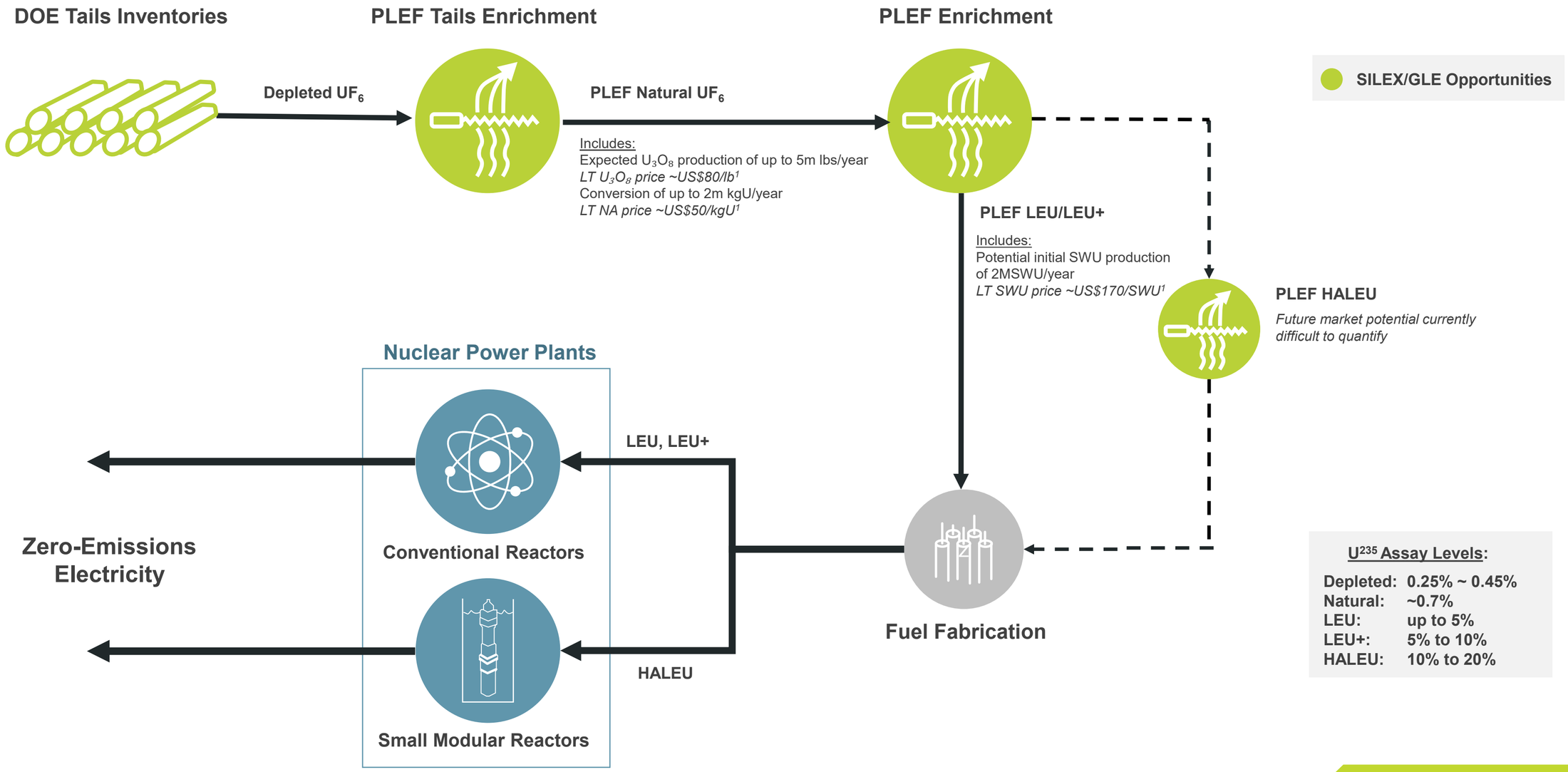
- Effective from mid-August 2024 (with waivers available to eligible entities to 2027)
- No imports permitted from 2028 until at least 2040
- Russia imposed reciprocal export restrictions in November 2024

ADVANCE Act (2024)

- Accelerating Deployment of Versatile, Advanced Nuclear for Clean Energy Act (ADVANCE Act)
- Provides support and guidance to the US NRC in anticipation of a surge in nuclear regulation demand
- GLE expects to be a beneficiary of a faster NRC licensing process

- **Four new Executive Orders signed by President Trump in May 2025** – seek to initiate a new nuclear renaissance and the quadrupling of nuclear energy in the US by 2050 – from 100 GW to 400 GW
- **GLE has signed Letters of Intent (LOIs) with key US nuclear utilities** – Constellation Energy Generation, Duke Energy, Dominion Energy, and another undisclosed entity to support GLE's commercialisation activities

Nuclear fuel opportunities for GLE and the SILEX technology



U^{235} Assay Levels:

Depleted:	0.25% ~ 0.45%
Natural:	~0.7%
LEU:	up to 5%
LEU+:	5% to 10%
HALEU:	10% to 20%

1. UxC, May 2025

PLEF UF_6 Production Opportunity

(Natural UF_6 production from DOE tails)

Aim to commence initial commercial operations ahead of original 2030 target[1]

Akin to a 'Tier 1' Uranium Resource[2]

Based on the expected low cost and longevity of production

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

Equivalent U_3O_8 Production

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

Potential UF_6 production allows GLE to capture Conversion value in revenue

Feed and Product is UF_6 (current term conversion value ~US$50/kg)

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 demonstration 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

Additional Growth Opportunities for Silex

Quantum Silicon for Quantum Computing

Additional growth opportunity transitioning to commercial production

Quantum Computing, Artificial Intelligence, and Quantum Silicon

Global race to develop the world's first Quantum Computers:

- Quantum Computing (QC) will be many times more powerful than today's conventional computers and will support the emerging world of Artificial Intelligence (AI)
- QC and AI will create transformational technological advances in complex global industries, including defence, aerospace, finance, healthcare, and logistics
- Governments and corporations around the world (including Intel, Google, IBM, Microsoft, and Amazon) are vying for leadership in this emerging strategic industry, which will underpin future national security and cybersecurity platforms
- Australia has been at the forefront of global efforts to develop and commercialise QC, and this sector, and its associated technology ecosystem, is a key Australian Government policy priority
- Development of Quantum Technologies is also a key plank (under 'Pillar 2') of the AUKUS Trilateral Security Partnership between Australia, the United Kingdom, and the US

Silicon Quantum Computing is a leading contender:

- Silicon-based QC is well placed to leverage the existing global silicon semiconductor nano-fabrication industry, uniquely capitalising on more than 60 years of development and manufacturing capability
- Silicon QC is reliant on the use of highly enriched Si-28, currently high-cost and in limited supply (the main source of supply from Russia is now largely disrupted)
- A reliable supply chain for enriched silicon needs to be established to support timely commercialisation of quantum computing in the Western world

Quantum Silicon (Q-Si) for Quantum Computing

Q-Si Production Project

Front-end process

SILEX silicon enrichment

Back-end process

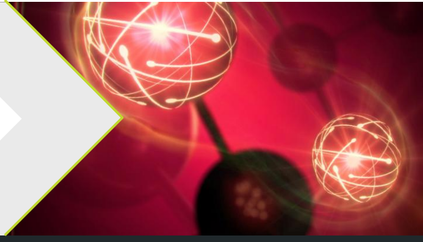
Raw Silicon

SILEX Enrichment

Pure Q-Si

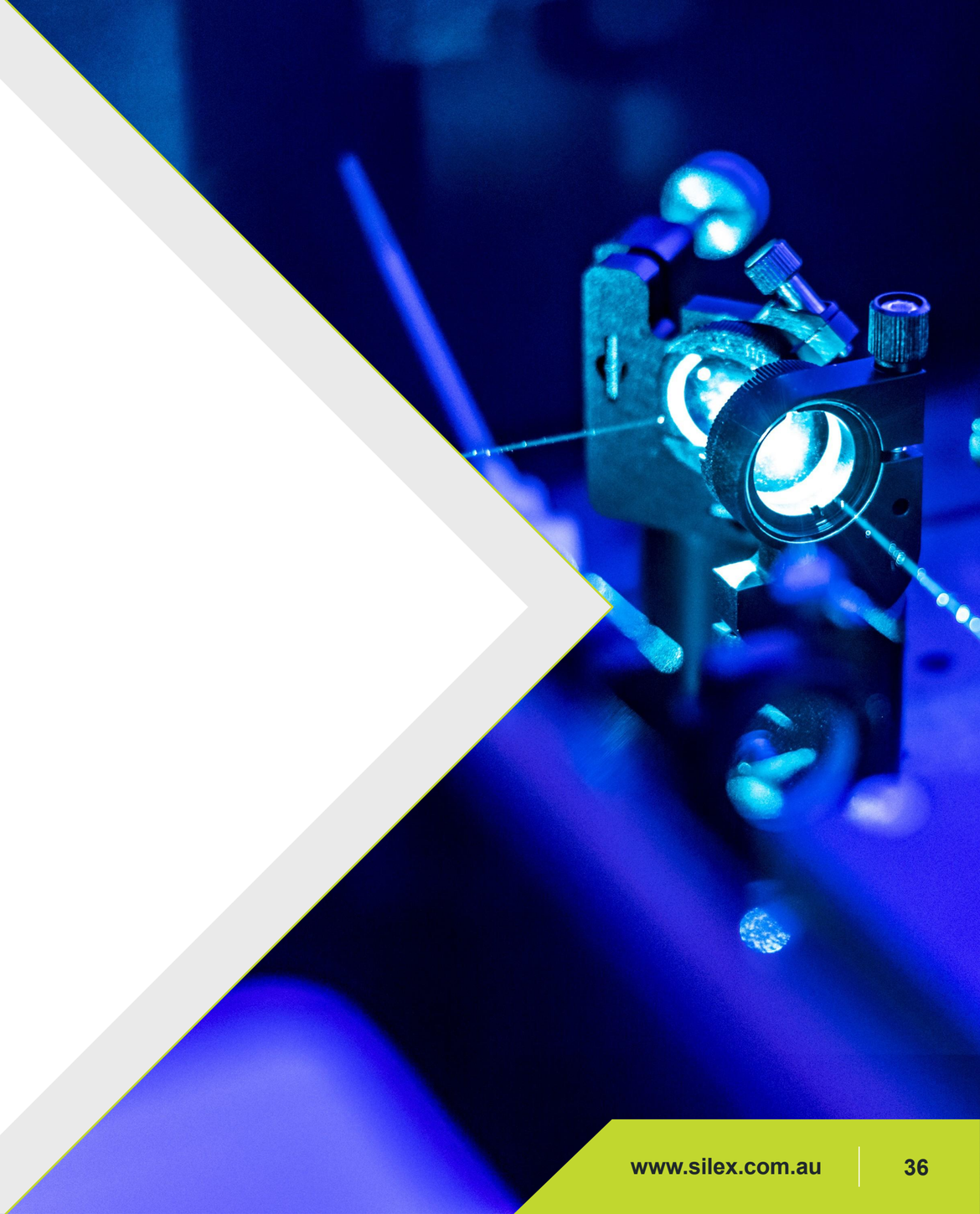
Q-Si Quantum Chips

Silex Q-Si Production Project



- 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 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 produce up to 20kg of enriched silicon annually (in the form of Zero-Spin Silicon), 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 center applications

Medical Isotope Separation Technology (MIST) Project



MIST Project

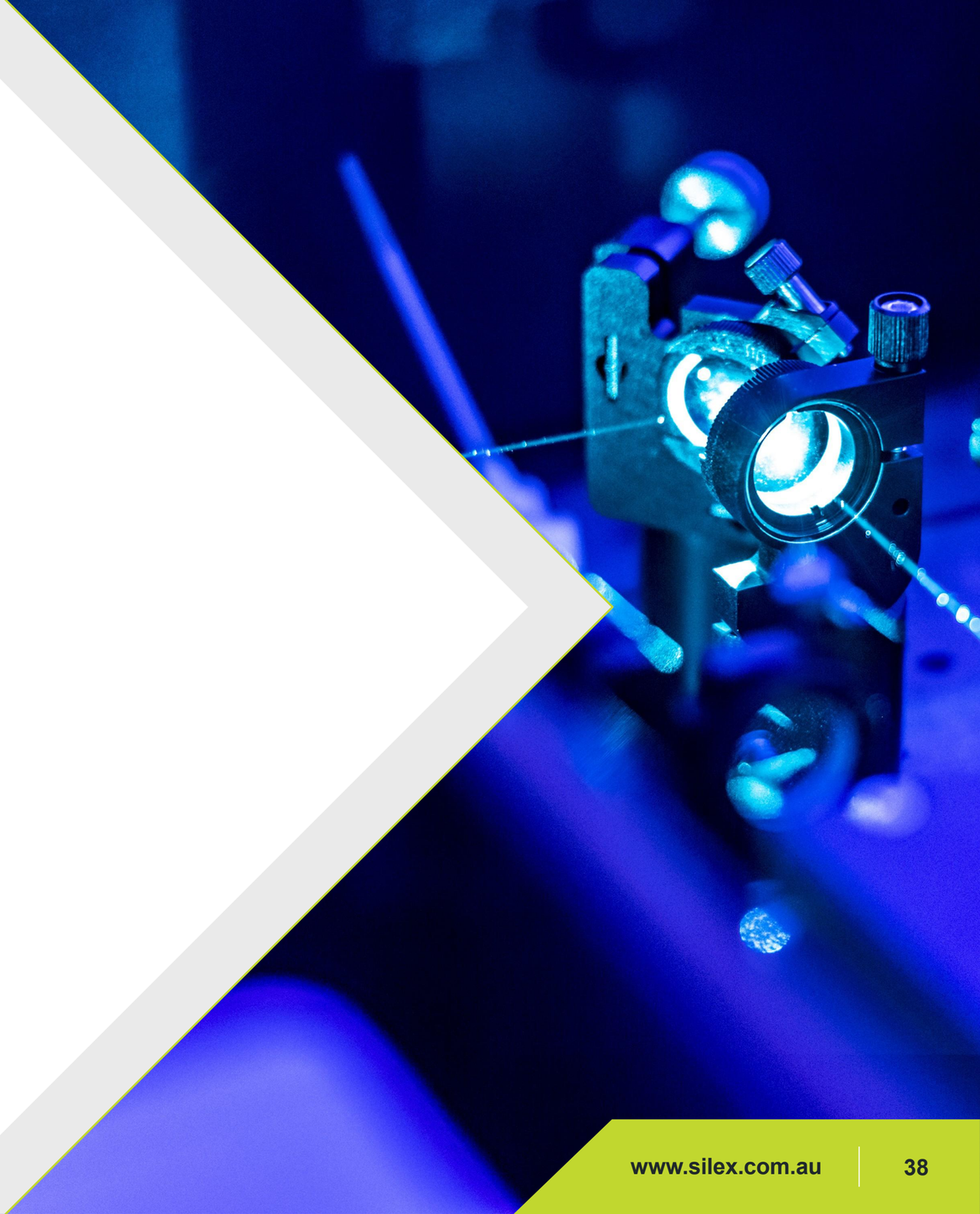
MIST Project aiming to develop a process to enrich ytterbium-176 (Yb-176) for production of lutetium-177 (Lu-177):

- 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 or no 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 has been sourced from Russia)
- In December 2023, Stage 1 of the Project – Proof-of-Concept – was successfully completed
- Stage 2 – Technology Validation – is ongoing and aims to validate the enrichment process at prototype scale
- Potential to apply MIST to other medical isotopes currently undergoing clinical trials and in development around the world
- Engagement continues with potential customers and development partners in global radiopharmaceutical industry
- MIST Project may provide further diversification of the SILEX technology across multiple markets, subject to technology development program outcomes, market conditions, and other factors

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 potential perpetual royalty flows under the SILEX uranium enrichment technology licence
- GLE's path to market is underpinned by the PLEF UF_6 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 Commercial Plant, 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
- TRL-6 enrichment testing is underway – focus now on iterative testing and optimisation of enrichment performance
- TRL-6 Pilot Demonstration Project expected to be completed by the end of CY2025, subject to independent assessment

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 31 December 2024, the Company had cash and term deposit holdings of $93.1m and no corporate debt

Thank you