UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): **November 7, 2025**

ASP Isotopes Inc.

(Exact name of registrant as specified in its charter)

Delaware	001-41555	87-2618235
(State or other jurisdiction of incorporation)	(Commission File Number)	(IRS Employer Identification No.)

601 Pennsylvania Avenue NW, South Building, Suite 900 Washington, DC	20004
(Address of principal executive offices)	(Zip Code)

Registrant's telephone number, including area code: **(202) 756-2245**

Not Applicable
(Former name or former address, if changed since last report.)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

☐ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, par value $0.01	**ASPI**	**The Nasdaq Stock Market LLC**

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company ☒

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act ☐

Item 7.01. Regulation FD Disclosure.

On November 7, 2025, Quantum Leap Energy LLC ("QLE"), a wholly-owned subsidiary of ASP Isotopes Inc. (the "Company"), issued an investor presentation that provides an overview of QLE's business. A copy of the investor presentation is attached to this Current Report on Form 8-K as Exhibit 99.1 and is incorporated herein by reference.

Also on November 7, 2025, the Company announced that QLE has commenced an offering of QLE convertible promissory notes (the "QLE Notes") in a private placement to accredited investors and to certain non-U.S. persons in transactions outside of the United States in reliance on Regulation S under the Securities Act of 1933 (the "QLE Notes Offering"). QLE has entered into a definitive convertible note purchase agreement with certain investors for an initial closing of $64.3 million of QLE Notes that was led by American Ventures LLC, with the Company also making a significant investment in the QLE Notes. QLE may issue additional QLE Notes in subsequent closings to investors who are non-U.S. persons in transactions outside of the United States in reliance on Regulation S promulgated under the Securities Act of 1933, as amended (the "Securities Act"). A copy of the press release announcing the QLE Notes Offering is attached to this Current Report on Form 8-K as Exhibit 99.2 and is incorporated herein by reference.

The information in this Item 7.01, including Exhibits 99.1 and 99.2, shall not be deemed to be "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or otherwise subject to the liability of that section, and shall not be incorporated by reference into any registration statement or other document filed under the Securities Act, or the Exchange Act, except as shall be expressly set forth by specific reference in such filing.

Forward-Looking Statements

Statements contained herein or in Exhibits 99.1 and 99.2 to this Current Report on Form 8-K relating to future plans, results, performance, expectations, achievements and the like are considered "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. These forward-looking statements include, but are not limited to, QLE's ability to consummate the QLE Notes Offering; QLE's financial performance and its ability to generate sufficient revenue to achieve and sustain profitability; QLE's ability to obtain required regulatory approvals, complete its research and development activities and manufacture, market and sell the products that it may produce; QLE's ability to achieve success with new technological developments, including the development and deployment of SMRs and advanced nuclear reactors; the anticipated growth of QLE's target markets for HALEU, Lithium 6 and Lithium 7, and its ability to penetrate these markets; QLE's future capital requirements and sources and uses of cash; QLE's ability to obtain funding for its operations and future growth; the ability to recognize the anticipated benefits of acquisitions; QLE's inability to compete effectively; risks associated with the current economic environment; risks associated with QLE's international operations; geopolitical risk and changes in applicable laws or regulations; and QLE's inability to hire or retain skilled employees and the loss of any of its key personnel. These forward-looking statements involve known and unknown risks, uncertainties, and other factors, many of which may be beyond the QLE's control, that may cause actual results to differ materially from any future results, performance or achievements expressed or implied by any forward-looking statements.

All forward-looking statements speak only as of the date hereof. The Company and QLE undertake no obligation to revise or update any forward-looking statements except as may be required by applicable law.

Item 9.01. Financial Statements and Exhibits.

Exhibit No.	**Description**
99.1	Corporate Overview of Quantum Leap Energy LLC, dated October 2025.
99.2	Press Release, dated November 7, 2025.
104	Cover Page Interactive Date File (embedded within the Inline XBRL document)

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

ASP ISOTOPES INC.

Date: November 7, 2025	By:	*/s/ Donald G. Ainscow*
	Name:	Donald G. Ainscow
	Title:	Executive Vice President, General Counsel and Secretary


CORPORATE
OVERVIEW
QUANTUM LEAP ENERGY
1 | © ASP Isotopes Inc. / Quantum Leap Energy
Confidential and Proprietary
October 2025

Quantum Leap Energy:
Strong Momentum & Scalable Growth

Our mission is to address gaps in the nuclear fuel cycle, promote safe nuclear power, and enhance the sustainability of the nuclear fuel cycle for advanced nuclear reactors and fusion systems, as well as the existing nuclear fleet.

Highlights:

- Commercial momentum through partnerships for supply and funding.
- Experienced leadership and growing team with unique R&D expertise.
- Relying on demonstrated isotope separation, nuclear chemistry, and execution capability.
- Scalable modular approach to de-risk regulatory approval.
- Exclusive access to ASP Isotopes' 150+ team and infrastructure.

Roadmap:

- Commercial demonstration of enrichment, conversion, deconversion and waste treatment capability
- Engagement with regulators to accelerate timelines towards commercialization
- Expanding commercial agreements
- Establishment of US and UK research and development hubs, team build-out and expansion
- Ongoing development of corporate functions.

Quantum Leap Energy: Today's Discussion

The Energy Bottleneck:

- An emerging geopolitical crisis.
- Unmet / increasing demand.
- Spiralling cost structures
- Dysfunctional supply chain

Our Technology:

- Multiple approaches.
- Higher Alpha.
- Fewer stages.
- Scalable and modular.

Commercial Partners:

- Fermi America
- TerraPower
- South African Nuclear Energy Corporation (Necsa)
- Capital commitment and regulatory advantages

Path to Revenue:

- Lithium-6 and Lithium-7
- Enriched Uranium:
  - High assay low enriched uranium (HALEU)
  - Low enriched uranium (LEU+)
  - Uranium hexafluoride (UF_6)

Our Expertise:

- Leadership team in place.
- Headcount build to ~60 pax through 2027.
- Access to ASP 150+ pax engineering bench.

Waste into Revenue:

- Recovery -> Revenue
- Depleted tail enrichment
- Accelerated beta decay

Energy Bottleneck:
An Emerging Crisis

We know electrification, data centers, and AI are pushing electricity demand beyond supply capacity.

Renewables have hit a plateau

Trapped by fossil fuel dependence

Distribution limits generation capacity

We believe nuclear power, realized through NextGen Fission and Fusion, is the only viable solution.

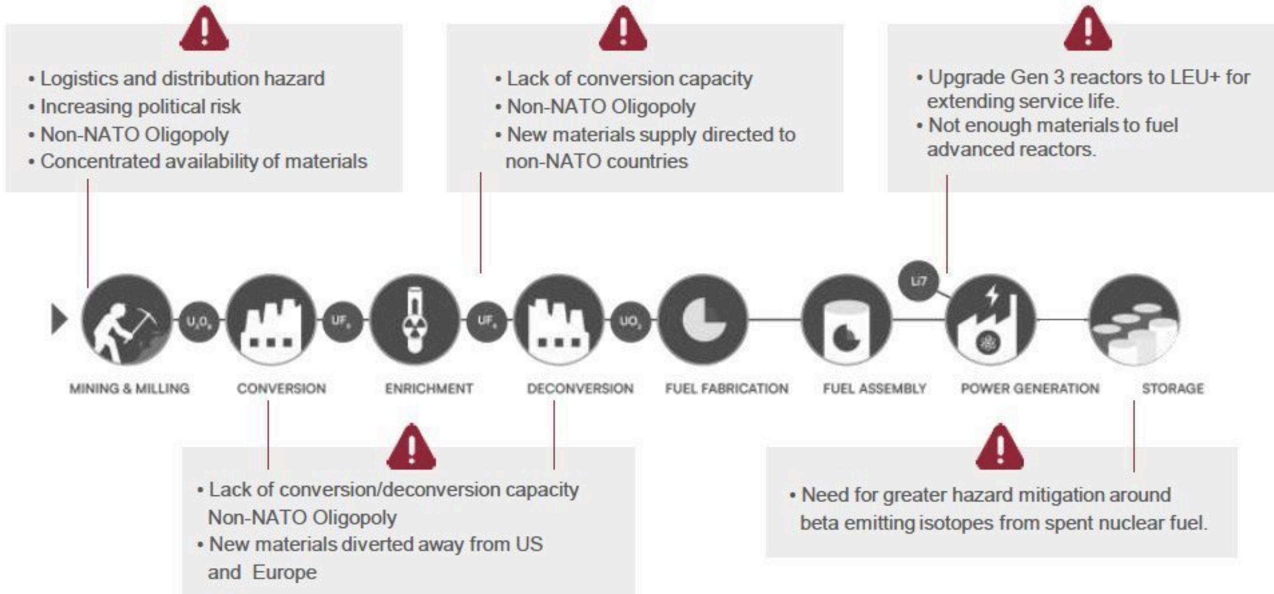
Reliable Baseload

Extreme Energy Density

Ultra-Low Carbon

Scalable Energy Security

Fission Fuel Cycle: Dysfunctional Across Major Stages

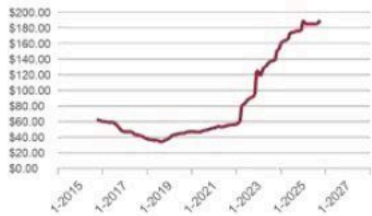


The Price of Dysfunction: Higher Costs, Increasing Geopolitical Risk

MINING/MILLING

~3x cost increase over 4 years

Metric: SpotSWU (US$/kg)



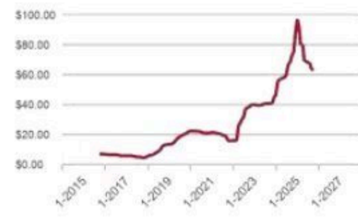
20% n = 2	80% n = 8

10 suppliers - 20% NATO

CONVERSION

~9x cost increase over 4 years

Metric: Conversion Price (US$/kgU)



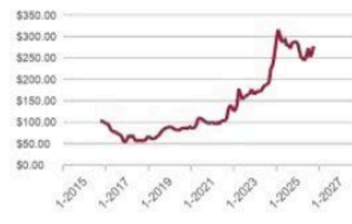
45% n = 2	55% n = 2

4 suppliers - 45% NATO

ENRICHMENT

~2x cost increase over 4 years

Metric: Enrichment Price (US$/SWU)

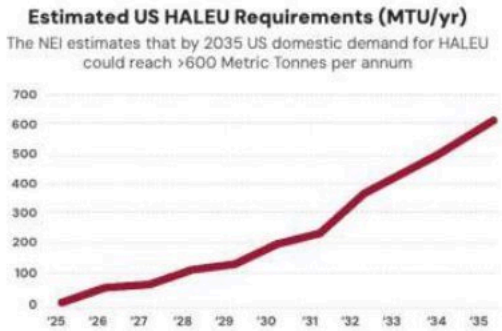


55% n = 3	45% n = 2

5 suppliers - 55% NATO

NATO Non-NATO

HALEU Demand: Next Wave In Nuclear Energy



The NEI estimates (above) that by 2035 US domestic demand for HALEU could reach >600 Metric Tons per annum.

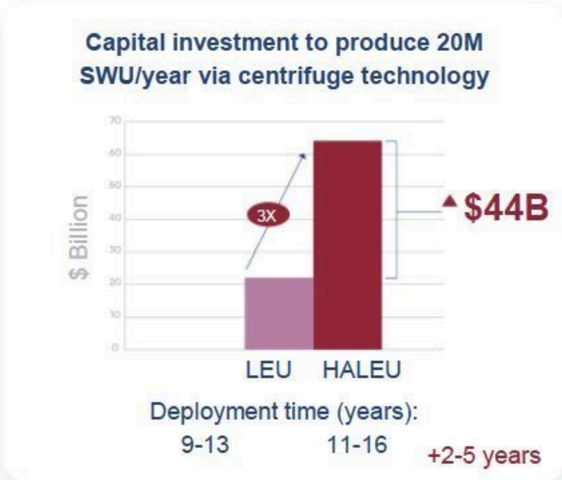
- Current commercial light water reactors use low-enriched uranium (LEU) fuel which has less than 5% U-235 content.
- Existing reactor fleets are evaluating transition to LEU+ (5 – 10% U-235)
- Many SMRs and advanced reactors will require High Assay Low Enriched Uranium (HALEU) with U-235 enrichment up to 19.75%.
- Currently, there is no commercial supplier of HALEU in the Western World. Without fuel these SMR's are unlikely to become a reality.
- Recently, TerraPower delayed the start-up of its Natrium reactor from 2028 by at least 2 years due to the lack of availability of HALEU.
- The U.S. government has made a multi-billion-dollar commitment to help commercialize HALEU-fueled advanced reactors.
- Many European and Asian countries are also in need of HALEU for SMRs.

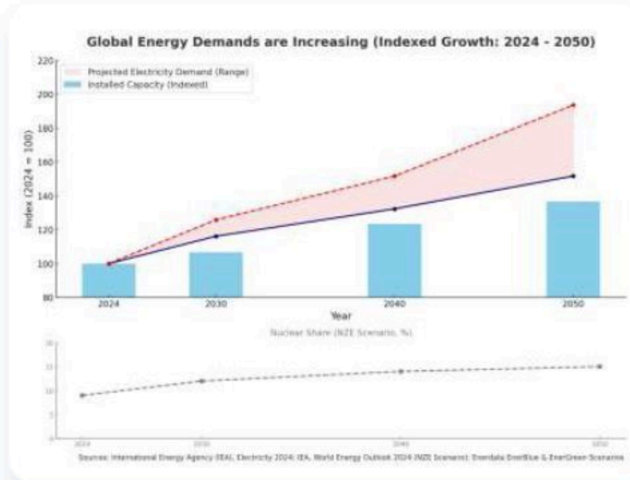
We believe we can solve the problems for the entire HALEU fuel line using our proprietary technologies.

In principle, Quantum Enrichment can separate isotopes of most elements, achieving desired enrichment in a single step.

The Cost of Inaction: Greater Capital Intensity and Timelines

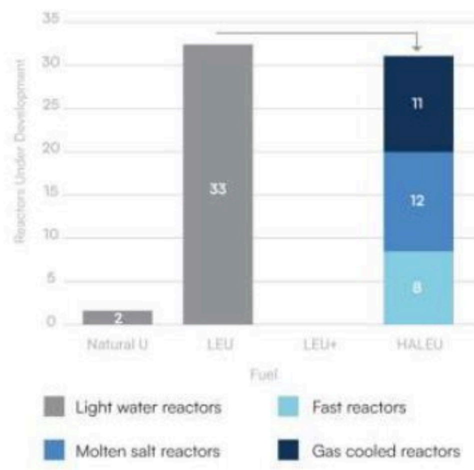
Producing HALEU with existing centrifugal technology will significantly raise production cost, require multiples of current capital investment and extend timelines exacerbating our ability to meet demand.





LEU Transition to HALEU: From Concentration to Competition

- **LEU+ upgrade for existing LWRs** expected to boost performance without major reactor modifications.
- **Higher enrichment, higher efficiency** enables longer fuel cycles, greater burnup, and reduced refuelling costs.
- **Lower waste, lower cost** leads to improved fuel utilization cuts waste volumes and operating expenses.
- **Bridge to advanced reactors** immediate pathway to next-gen performance using today's infrastructure.
- **De-risked, scalable opportunity** leverages existing global reactor fleet for rapid market adoption.
- **Supports existing nuclear fleet** extending the duration of fuel usage while reducing replacement frequency.



Our Products: Future-Ready Solutions

Commercial scale supply of critical materials lacking in the West.

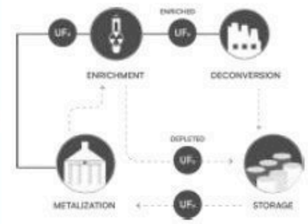
Key Trends:

- Upgrade of Generation 3 reactors to Generation 3+ via LEU+ introduction.
- Next Generation Nuclear is heading for commercial operation.
- First fusion tech expected by 2030.
- Gen 4 reactors likely after 2030.
- Molten salt reactors held back by limited heat-transfer material availability.

Potential Revenue: Recovery and Reuse

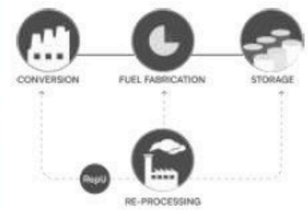
Depleted Uranium Tails Enrichment/Processing:

- Depleted uranium tails (dUF_6) are the by-product of uranium enrichment, with 0.2% - 0.3% U-235 content.
- Over 2 million metric tons have accumulated from decades of enrichment.
- Storage poses continued environmental liability.
- QLE intends to enrich tails to LEU+/HALEU, thus opening alternative uranium fuel sources to the world.



Accelerated Beta-Decay/Waste Treatment:

- We are developing a process that is designed to use selective laser excitation on long-lived isotopes such as cesium-137, strontium-90 and carbon-14 to accelerate beta-decay / decontamination for water-soluble nuclear waste, particularly radioactive waste from radioactive materials from nuclear power plants, radiopharmaceuticals, and military sources.
- QLE's first targeted isotope will be cesium-137, which decays into stable barium-137. The use of high-purity barium-137 is emerging as a critical enabler of ion-trap quantum computing, one of the leading approaches to building large-scale quantum machines.



Production Strategy: Diversified Portfolio Fast Tracking Commercialization

We intend to produce stable isotopes (lithium-6, lithium-7) first, to set the baseline for regulators, scale technology and generate revenue before moving onto LEU+ and HALEU.

Sooner → COMMERCIAL SUPPLY → Later

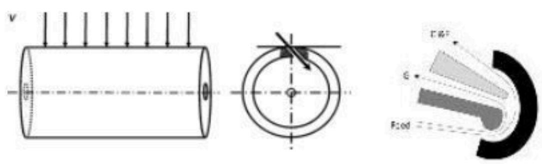
Product	Market Status	Application
Lithium-7	Limited commercial supply	pH control in most water moderated reactors Heat exchange fluid component (e.g. FLiBe, FLiNaK) in fluoride-based MSRs
Lithium-6	No commercial supply	Tritium breeding compound for fusion reactor fuel
Converted uranium	Limited commercial supply	Gas centrifuge driven enrichment feed material
Deconverted uranium	Limited commercial supply	Uranium oxide formation for fuel fabrication Uranium metallization for QE enrichment and fuel fabrication
LEU	Unmet demand	Existing reactor fuel
LEU+	Limited commercial supply	Limited Commercial Supply. Extended operating cycle reactor fuel for existing water reactors Advanced nuclear reactor fuel
HALEU	No commercial supply	No Commercial Supply. Advanced nuclear reactor fuel SMR reactor fuel
Waste treatment	New market entry	Accelerated beta-decay with selective laser excitation for certain water-soluble nuclear waste.
Tails-derived fuel	New market entry	Advanced nuclear reactor fuel SMR reactor fuel Existing reactor life extension fuel Existing reactor fuel

Enrichment Technologies: Nuclear Fuels

Aerodynamic Separation Process (ASP)

The Aerodynamic Separation Process utilizes gaseous separation via a stationary wall centrifuge paired with proprietary flow directors to separate isotopes of varying levels of atomic mass.

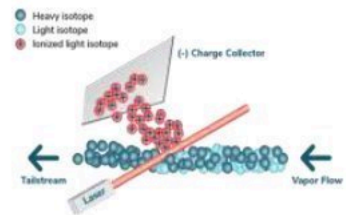
ASP is in commercial operation for stable isotopes, under development for energy isotopes.



Quantum Enrichment (QE)

Quantum Enrichment technology employs precisely tuned lasers and quantum mechanical principles to efficiently separate isotopes based on their unique transition energies, achieving high selectivity for most elements.

QE is in commercial operation for stable isotopes and under development for energy isotopes.

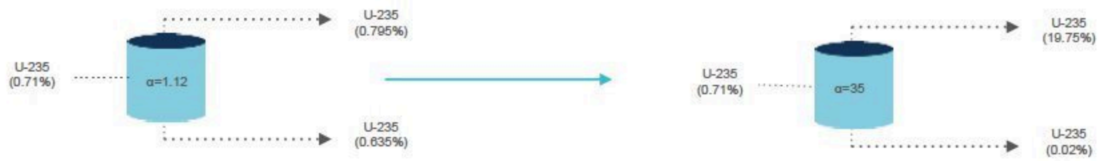


Our Technology: Comparatively Better

Delivering lower costs, modular flexibility, and superior efficiency to meet evolving nuclear fuel demands.

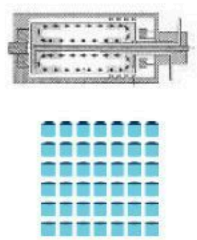
	Centrifugation	Our Technology
Capital cost	Higher.	Lower
Operating cost	Comparable.	Comparable > Lower
Flexible scaling	Large-scale, site-specific construction.	Modular allowing rapid construction and deployment
Production capacity	Complex adaptation for specific needs.	Minimal adjustment to meet specific requirements.
Flexible design	Non-adaptive, legacy approach.	Ongoing optimization with technology upgrades
Footprint	Decentralization increases hazardous transport risk.	Co-location with fabrication enhances security.
Energy costs	Expansive facilities prevent economies of scale.	Smaller footprint likely to reduce energy costs.
Process to market	Deferred production until all modules are operational.	Commercial production via each commissioned module.
Stages	More	Fewer
Selectivity (α*)	$1.05 < \alpha < 1.15$	$\alpha \geq 1.17$, $\alpha \geq 50$

Our Technology: Fewer Stages; Higher Alpha



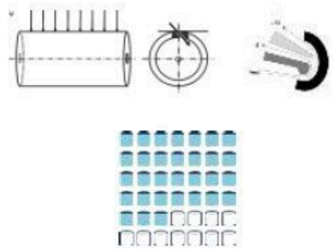
Stages > 42	Alpha = 1.12

Incumbent Centrifuges



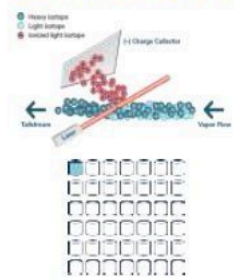
Stages > 31	Alpha = 1.17

Aerodynamic Separation



Stages > 1	Alpha= 25 -125

Quantum Enrichment



QUANTUM LEAP ENERGY

Our Technology: Applied Isotope Enrichment

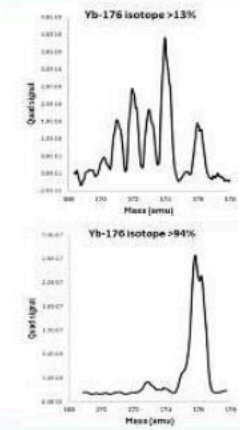
Proven Applications

- Lithium
- Ytterbium

Commercial Target for Lithium Separation

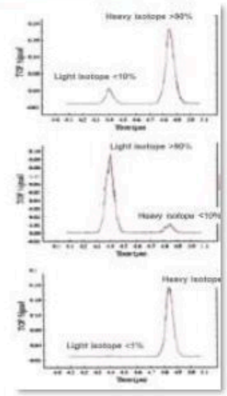
- We believe we can use the QE for the isotopic enrichment of lithium metal to produce lithium-6 and lithium-7 and HALEU.
- We believe we can use this proven technology on various feed sources from depleted uranium, natural uranium and even spent reactor fuel to produce fuel.
- We plan to produce enriched uranium of various grades of enrichment including LEU, LEU+ and HALEU.

Ytterbium QE Enrichment



α ≈ 107

Lithium QE Enrichment



α ≈ 112

External Validation: Capital Commitments and Supply Agreements

FERMI AMERICA

HALEU

Funding via JV

- Memorandum of Understanding (MOU) for a JV in United States to produce HALEU.
- Co-founded by Rick Perry (former U.S. Energy Secretary & Texas Governor).
- Planning an 11 GW data centre with NRC approval for 4 AP1000 reactors.

TerraPower

HALEU

Loan Commitments

- Loan agreement for a multiple advance term loan of up to $22 million to partially finance a proposed uranium enrichment facility at Pelindaba, South Africa.
- HALEU supply agreement for initial loading of TerraPower's Natrium project in Wyoming during the 2027/28 timeframe.
- Long-term HALEU supply agreement for 10-year supply of HALEU.

necsa

We're in your world

HALEU

Funding via JV

- MOU for a JV in South Africa.
- Pelindaba is an IAEA compliant facility with licenses to process uranium and lithium.
- First test bench is ready for commissioning pending regulatory approval.

Our Team: Expertise in Engineering, Finance, and Strategic Growth

EXECUTIVE

Ryno Pretorius, Ph.D. | Chief Executive Officer

- CEO since May 2025; 15+ years in chemical engineering & technology scale-up
- Former project engineer at Brimstone (2024-25) and Magreathea Metals (2023-24)
- Founder & CEO of Free Radical Process Design (2015-23)
- Co-founder & CEO of Rare Earth Refiners (2019-25), developed Direct Dry Fluorination process.
- Early career at Necsa, expertise in nuclear fuel supply chain
- Holds B.Eng, M.Eng, and Ph.D. in chemical engineering from University of Pretoria

Michael Cunniffe | Chief Financial Officer

- CFO since October 2025
- Former Managing Director at Danforth Advisors (2023–2025), advising companies including ASP Isotopes
- CFO at Axovia Therapeutics (2021–2022), focused on gene therapy for ciliopathies
- Previous finance leadership roles at ATAI Life Sciences, Neurogene, and Seqirus.
- Holds a Master's in Finance from London Business School
- Currently pursuing a Master's in Cell & Gene Therapy at UCL

MANAGEMENT

Brian Mphahlele | VP of Regulatory Affairs and Business Development

- Regulatory Negotiations and Agreements
- New Business and Product Development
- IP Strategy
- Company Strategy
- Bilateral Agreements

Inbanathan Govender, PhD | Global Head of Engineering

- EPC Contract Management
- Fluorination and hazardous chemical expert
- Engineering Management and Technical
- Quality Assurance

Our Board & Advisors: Strategic Global Energy & Technology Experts

NON-EMPLOYEE DIRECTORS:

Michael Gorley, Ph.D.

- Director of Fusion Technology Division, UK Atomic Energy Authority ("UKAEA")
- Former Chief Technologist and Materials Group Leader
- Ph.D. in Materials Science, Oxford University

Ralph L. Hunter, Jr.

- 35+ years in nuclear power generation
- Former CEO of Orion Nuclear Energy; Chair of the US Civil Nuclear Trade Advisory Committee ("CINTAC")
- Holds B.Eng & M.Eng in Nuclear Engineering

Duncan Moore, Ph.D.

- Partner at East-West Capital Partners, focusing in the Healthcare Industry in Asia
- Former pharmaceutical analyst at Morgan Stanley
- M.Phil. and Ph.D. from the University of Cambridge

Hendrik Strydom, Ph.D.

- Co-developed the isotope separation technology, known as ASP
- Former Chief Technologist and Materials Group Leader
- BSc- Hons (Physics & Maths), MSc (Physics) and PhD (Physics)

STRATEGIC ADVISORS:

Philip Crouse, Ph.D. | Global Research Coordinator, Scientific Advisor

- Commercial Research Director
- Technology Scale-up Strategy and Coordination,
- Profit-Optimized Research Coordination

Walter Fourie, PhD | Engineering Commercialization Manager

- Technology Scale-up Strategy and Coordination,
- Research Commercialization Strategy
- Techno-Economic Business Case Assessment

Our Future: Expected Company Development Roadmap

Investment Phases:

Invest (2025–2027): Significant investment in plant as path to revenue.

Deliver (2028–2029): Prove and scale

Accelerate (2030–2031): Compound growth

Plant Types & Focus:

Demonstration Plants: South Africa, UK, US

Commercial Plants: South Africa, UK, US

Waste Treatment: Canada, US

Conversion/Deconversion: US

Product Revenues:

Initial revenue from Lithium in 2027/2028

Waste treatment revenue to commence in 2028

UF_6 revenues to follow in 2029

Self-sustaining operations from Q2 2031

Anticipated Development Activities: Activation Post Funding

Focus: Infrastructure, funding, early partnerships

Revenue: Anticipated in 2027; increasing through 2028.

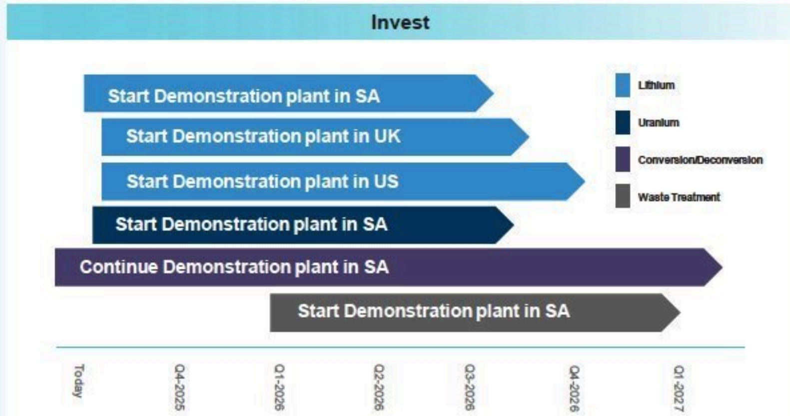
Investment: Post funding rapid pathway to public capital.

Production: Gradual ramp up scaling to nameplate within 12 quarters.

Headcount: ~60 across SA, UK, US by 2027

Key Products: Lithium (demo & commercial), HALEU (bench plant), UF_6 development, Waste treatment advancement ongoing.

Projected project phasing



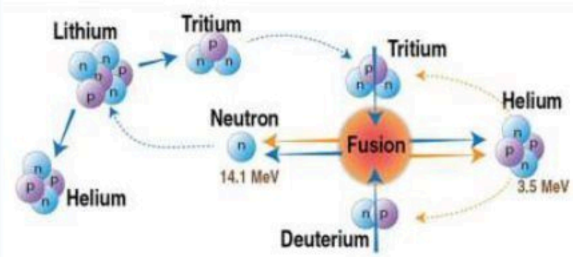
In Summary

- Electrical demand surge driving the resurgence of nuclear power
- We believe nuclear energy is the only scalable, low-carbon baseload solution.
- Nuclear supply-chain is at risk; undersupply in conversion and enrichment
- Addressing shortfall with incumbent technology is cost prohibitive
- QLE offers two enrichment technologies and supply-chain expertise
- Modular plants allow rapid, construction expansion and adaptation
- Derisking while scaling; developing less regulated products to commercialization first
- QLE is supported by ASP Isotopes 150+ staff by EPC and license agreement


APPENDIX

Controlling Next Generation Markets: Lithium-6

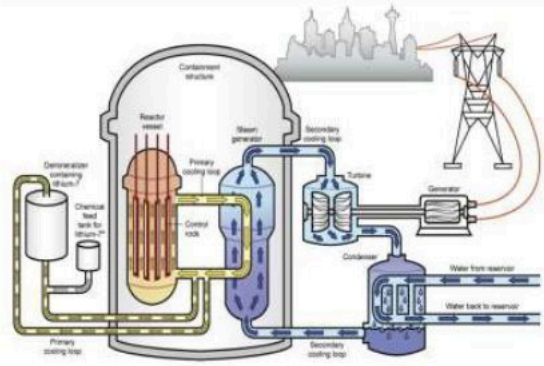
- In fusion reactors, lithium-6 is a crucial component for breeding tritium, which is used as fuel in fusion reactions.
- Fusion Reactors have the potential to be the next generation of clean renewable reactors.
- Enriched lithium-6 is a usable by-product of our lithium-7 enrichment. This allows for better monetization of lithium.
- We believe a $30m demand for lithium-6 opens if commercial fusion is achieved.



Entering New Markets: Lithium-7

- 99.95% lithium-7 is used to regulate the pH of cooling water in existing and advanced PWRs.
- Lithium-7 is favored for this application due to its low neutron absorption cross-section, meaning it doesn't interfere with the nuclear reaction.
- We can utilize lithium-7 production for Research and Development of at-scale laser technologies to produce HALEU
- Lithium-7 will likely be the first domestic US and UK production facilities.
- Less regulated industry to R&D our laser enrichment technologies at scale.
- Molten salt reactors utilizing FLiBe requires isotopically pure lithium-7 for successful operation.
- 15 – 60 tonnes of FLiBe containing lithium-7 is required per MSR reactor, with an estimate market value of \$500m - \$1.5bn

No Lithium-7 means No Cooling



HALEU Reactors: The Next Wave In Nuclear Energy

The world is moving to next generation nuclear reactors, requiring HALEU including Fast Reactors and SMRs.

The US DOE has already committed billions of dollars to Advanced Reactor Design Program (ARDP) to facilitate and accelerate development of advanced reactors.

- Modular, smaller size (50 MWe to 300 MWe) reactors allowing greater flexibility in deployment.
- Designed for production-line manufacturing rather than conventional custom-built capital projects.
- Limited on-site preparation to substantially reduce lengthy construction times.
- Simplicity of design, enhanced safety features, economics and quality afforded by factory production, and more flexibility (financing, siting, sizing, and end-use applications).
- Can provide power for applications where large plants are not needed or sites lack infrastructure to support a large unit (e.g. smaller electrical markets, isolated areas, smaller grids, sites with limited water and acreage, or unique industrial applications).

TerraPower's Natrium

OKLO's Aurora Powerhouse

Rolls-Royce's SMR

X-Energy's Xe-100

Seaborg Nuclear

Company History

September 2021

ASPI incorporated in Delaware

Raised $4 million in pre-seed funding

Received appropriate permits from the non-proliferation council of South Africa for ASPI to acquire Klydon's Plant

October 2021

ASPI wins competitive auction for Klydon Large-scale Plant assets

Raises an additional $6 million and commenced procurement of components

July 2022

Acquisition of the Small-Scale Plant enrichment facility from Klydon

November 2022

ASPI Initial public offering (NASDAQ) raising $5 million

4Q 2023

Formation of Quantum Leap Energy focused on nuclear fuels

Entered into 2 MOUs with US Small Modular Reactor companies for production of HALEU

February 2024

ASPI announces planned spin-out of QLE and raises >$20m in a convertible note financing

October 2024

ASPI demonstrates enrichment of Ytterbium-176 during commissioning phase of the first Quantum Enrichment plant

ASPI enters into formal term sheet with TerraPower, LLC for the construction of a HALEU production facility

November 2024

MOU with the South African Nuclear Energy Corporation (Necsa) to collaborate on the research, development and construction of an Advanced Nuclear Fuel Production Facility

May 2025

Ryno Pretorius appointed as CEO

October 2025

Michael Cunniffe appointed as CFO

Quantum Leap Energy LLC Announces Private Placement of Convertible Notes Led by American Ventures LLC

WASHINGTON, Nov. 7, 2025 (GLOBE NEWSWIRE) – Quantum Leap Energy LLC (“QLE”), a wholly-owned subsidiary of ASP Isotopes Inc. NASDAQ: ASPI (“ASP Isotopes” or “ASPI” or the “Company”), an advanced materials company focused on developing technologies and processes for the production of isotopes for multiple industries, today announced that QLE has commenced an offering of QLE’s convertible notes in a private placement to accredited investors and certain non-U.S. persons. QLE has entered into a definitive convertible note purchase agreement with certain investors for an initial closing of US$64.3 million aggregate principal amount of QLE’s convertible notes (the "Notes").

The issuance of Notes pursuant to the offering will result in the automatic conversion of QLE’s outstanding convertible promissory notes originally issued in March 2024 and June 2024 (together, the “2024 Convertible Notes”), pursuant to their terms.

The Notes will be unsecured and may be convertible into common equity securities of QLE, prior to maturity, and upon the occurrence of certain events, including an initial public offering, direct listing or a future equity financing, in each case at a price per share equal to the lower of 80% of the per share price in the applicable transaction or the per share value of one share of QLE’s common equity based on a set valuation cap.

The Notes will mature on the fifth anniversary of the initial closing, unless converted in accordance with their terms prior to such date. QLE may not repay the Notes prior to maturity, unless a change of control transaction occurs.

QLE intends to use the net proceeds from the offering to build and develop laser enrichment production facilities, as well as for general corporate purposes. Neither QLE nor the Company will receive any proceeds from the automatic conversion of the 2024 Convertible Notes into Notes.

The offering was led by ASPI and American Ventures LLC, with capital contributions from both Eric Trump and Donald Trump Jr. The initial closing of the offering is expected to be on or about November 10, 2025, subject to satisfaction of customary closing conditions.

The Notes are being offered to institutional investors that qualify as “accredited investors” (within the meaning of Rule 501(a) of the United States Securities Act of 1933, as amended (the "Securities Act")) or investors that are not a person in the United States or a U.S. Person (within the meaning of Rule 902(k) of Regulation S promulgated under the Securities Act). The Notes and the common equity securities of QLE deliverable upon conversion of the Notes (if any) have not been and will not be registered under the Securities Act or any other applicable securities laws, and may not be sold or otherwise transferred in the United States except under an exemption from, or in a transaction not subject to, the registration requirements of the Securities Act and in compliance with any other applicable securities laws.

QLE may issue additional Notes in subsequent closings to investors who are non-U.S. persons in transactions outside of the United States in reliance on Regulation S under the Securities Act.

Canaccord Genuity acted as placement agent in the United States and Ocean Wall Limited acted as placement agent outside the United States.

This press release shall not constitute an offer to sell or a solicitation of an offer to purchase any securities, nor shall there be a sale of the securities in any state or jurisdiction in which such an offer, solicitation or sale would be unlawful.

About ASP Isotopes Inc.

ASP Isotopes Inc. is a development stage advanced materials company dedicated to the development of technology and processes to produce isotopes for use in multiple industries. The Company employs proprietary technology, the Aerodynamic Separation Process ("ASP technology"). The Company's initial focus is on producing and commercializing highly enriched isotopes for the healthcare and technology industries. The Company also plans to enrich isotopes for the nuclear energy sector using Quantum Enrichment technology that the Company is developing. The Company has isotope enrichment facilities in Pretoria, South Africa, dedicated to the enrichment of isotopes of elements with a low atomic mass (light isotopes).

There is a growing demand for isotopes such as Silicon-28, which will enable quantum computing, and Molybdenum-100, Molybdenum-98, Zinc-68, Ytterbium-176, and Nickel-64 for new, emerging healthcare applications, as well as Chlorine-37, Lithium-6, and Uranium-235 for green energy applications. We believe the ASP technology (Aerodynamic Separation Process) is ideal for enriching low and heavy atomic mass molecules. For more information, please visit www.aspisotopes.com.

Forward Looking Statements

This press release may contain "forward-looking statements" within the meaning of the safe harbor provisions of the U.S. Private Securities Litigation Reform Act of 1995. Forward-looking statements are neither historical facts nor assurances of future performance. Instead, they are based only on our current beliefs, expectations, and assumptions regarding the future of our business, future plans and strategies, projections, anticipated events and trends, the economy, and other future conditions. Forward-looking statements can be identified by words such as "believes," "plans," "anticipates," "expects," "estimates," "projects," "will," "may," "might," and words of a similar nature. Because forward-looking statements relate to the future, they are subject to inherent uncertainties, risks, and changes in circumstances that are difficult to predict and many of which are outside of our control. Our actual results, financial condition, and events may differ materially from those indicated in the forward-looking statements based upon a number of factors. Forward-looking statements are not a guarantee of future performance or developments. You are strongly cautioned that reliance on any forward-looking statements involves known and unknown risks and uncertainties. Therefore, you should not rely on any of these forward-looking statements. There are many important factors that could cause our actual results and financial condition to differ materially from those indicated in the forward-looking statements, including, but not limited to: risks and uncertainties related to the Company's proposed offering of convertible notes of Quantum Leap Energy LLC, or factors that result in changes to the Company's anticipated results of operations related to its products and technologies. These and other risks and uncertainties are described more fully in Part I, Item 1A. "Risk Factors" of the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2024 and any amendments thereto, and in the Company's subsequent reports and filings with the U.S. Securities and Exchange Commission. Any forward-looking statement made by us in this press release is based only on information currently available to us and speaks only as of the date on which it is made. We undertake no obligation to publicly update any forward-looking statement, whether as a result of new information, future developments or otherwise. No information in this press release should be interpreted as an indication of future success, revenues, results of operation, or stock price. All forward-looking statements herein are qualified by reference to the cautionary statements set forth herein and should not be relied upon.

Contacts

Jason Assad– Investor relations

Email: JAssad@ASPIsotopes.com