

RESET FOR SUSTAINABLE URANIUM PRODUCTION

Positioned to become a meaningful domestic uranium
supplier in the USA at a time of accelerating demand



Summary

This Presentation contains summary information about the current activities of Peninsula Energy Limited (the “Company”) as at the date of this Presentation. The information in this Presentation is of a general nature and does not purport to be complete. This Presentation does not purport to contain all the information that an investor should consider when making an investment decision nor does it contain all the information which would be required in a disclosure document or prospectus prepared in accordance with the requirements of the *Corporations Act 2001* (Cth). It should be read in conjunction with the Company’s other periodic and continuous disclosure announcements lodged with the Australian Securities Exchange, which are available at <https://www.asx.com.au/>.

To the extent permitted by law, the Company, its representatives, affiliates, related bodies corporate, officers, employees, agents and advisers make no representation or warranty (express or implied) as to the currency, accuracy, reliability, relevance or completeness of the material contained in the Presentation and disclaim all responsibility and liability for the information (including, without limitation, liability for negligence). This Presentation is not intended to form the basis of any investment decision by a prospective investor, but simply to provide an overview to allow prospective investors to decide whether to carry out their own independent investigations and seek their own advice before making a decision whether to invest in the Company. In making an investment decision, investors must rely on their own examination of the Company including the merits and risks involved and should consult with their professional advisers – whether scientific, business, financial, tax or legal.

Past performance information given in this Presentation is given for illustrative purposes only and should not be relied upon as (and is not) an indication of future performance.

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Forward Looking Statements

The Presentation contains “forward-looking statements provided by or on behalf of the Company with respect to potential future matters. All statements other than those of historical facts included in the Presentation are forward-looking statements. Forward-looking statements may include, but are not limited to, statements regarding the Company’s ability to fund its operations, exploration and production targets, estimates of resources, timing of wellfield development, completion of central processing plant and associated infrastructure commissioning activities, timing of permit and license amendments, timing of uranium production, and rates of uranium extraction and recovery. Forward-looking statements are subject to risks, uncertainties and other factors, which could cause actual results to differ materially from future results expressed, projected or implied by such forward-looking statements. Such risks include, but are not limited to, uranium price volatility, currency fluctuations, increased production costs and variances in ore grade or recovery rates from those assumed in mining plans, as well as political and operational risks and governmental regulation and judicial outcomes. The Company does not undertake any obligation to release publicly any revisions to any “forward-looking statement” to reflect events or circumstances after the date of the Presentation, or to reflect the occurrence of unanticipated events, except as may be required under applicable laws or regulations (including the ASX Listing Rules). All persons should consider seeking appropriate professional advice in reviewing the Presentation and all other information with respect to the Company and evaluating the business, financial performance and operations of the Company. Neither the provision of the Presentation nor any information contained in the Presentation or subsequently communicated to any person in connection with the Presentation is, or should be taken as, constituting the giving of investment advice to any person.

The Company believes it has a reasonable basis for providing the forward-looking statements and production targets included in this Presentation.

JORC Compliance Statements

It is a requirement of the ASX Listing Rules that the reporting of ore reserves and mineral resources in Australia comply with the Joint Ore Reserves Committee’s Australasian Code for Reporting of Mineral Resources and Ore Reserves (“JORC Code”). Investors outside Australia should note that while ore reserve and mineral resource estimates of the Company in this document comply with the JORC Code (such JORC Code-compliant ore reserves and mineral resources being “Ore Reserves” and “Mineral Resources” respectively), they may not comply with the relevant guidelines in other countries and, in particular, do not comply with (i) National Instrument 43-101 (Standards of Disclosure for Mineral Projects) of the Canadian Securities Administrators (the “Canadian NI 43-101 Standards”); or (ii) Item 1300 of Regulation S-K, which governs disclosures of mineral reserves in registration statements filed with the United States Securities and Exchange Commission. Information contained in this document describing mineral deposits may not be comparable to similar information made public by companies subject to the reporting and disclosure requirements of Canadian or US securities laws. You should not assume that quantities reported as “resources” will be converted to reserves under the JORC Code or any other reporting regime or that Company will be able to legally and economically extract them.

This Presentation contains references to Mineral Resource estimates and exploration targets that have been extracted from the Company’s previous announcements. This Presentation also contains references to a production target which is based upon certain assumptions which have been extracted from previous Company ASX announcements as indicated below. The Company confirms that it is not aware of any new information or data that materially affects the information included in those ASX announcements, and in the case of estimates of Mineral Resources, that all material assumptions and technical parameters underpinning the estimates in the relevant ASX announcements continue to apply and have not materially changed.

The Company confirms that the form and context in which the Competent Persons’ findings are presented have not been materially modified from the original market announcements.

Mineral Resources

The detailed assumptions regarding the Company’s JORC compliant Mineral Resource estimates are disclosed in the Company’s ASX announcements released on 13 May 2024 and 23 October 2023.

Exploration Target

Information regarding the Company’s exploration target is disclosed in the Appendix 2 of the Company’s Presentation released to the ASX on 9 October 2023. The exploration target does not include areas of the existing Mineral Resource and the potential quantity and grade reported are conceptual only in nature. Insufficient exploration has been conducted to estimate a Mineral Resource and it is uncertain whether future exploration will lead to the estimation of a Mineral Resource in the defined areas.

Production Target

The production target contained in this Presentation is underpinned by wellfield designs containing measured and indicated resources (comprising 90% of the production target) and inferred resources (comprising 10% of the production target). The production target is based on the material assumptions set out in the Company's ASX announcements relating to previous production targets, released 15 August 2022, 31 August 2023, 23 October 2023 and 13 May 2024, and these material assumptions continue to apply and have not materially changed with the following modifications:

- Historical mine plan projections completed for the Ross and Kendrick Production Areas within the Lance Projects include Measured and Indicated resources, and based on historical experience at Lance, utilizes a resource conversion factor of 60% to convert Ross and Kendrick Area Inferred resources to Indicated or greater quality for use in forecasted production plans.
- The completion of the Lance CPP was delayed due to challenging weather conditions, supply chain issues, corrosion of piping and required permitting. This ultimately resulted in changes to the project's execution timeline. These delays negatively impacted the Company's ability to load uranium onto resin for elution during the commissioning and ramp-up phases due to insufficient resin storage capacity and the Company had to temporarily stop wellfield operations once the available resin loading capacity was reached. In September 2025, the CPP was fully constructed with commissioning commencing along with first yellowcake produced.
- The Company identified actual flow rates achieved during the start-up phase of production were below those assumed in the 2022 Definitive Feasibility Study and August 2023 Life of Mine plan and that wellfield design parameters would need to be reassessed. This resulted in the spacing between injection wells and production wells decreasing from an average of 100 feet in the August 2023 life of mine plan to 60 feet in the reset plan. Average wellfield flowrates of 12 GPM for Mine Unit 4 and beyond in the reset plan have been used, compared to 20 GPM used in the August 2023 Life of Mine Plan. Further testing and technical studies will be undertaken during the periods covered by this Presentation to determine optimal design criteria and assumptions.

Whilst the Company considers that all material assumptions underpinning the projected production and cash flows in this Presentation are based on reasonable grounds, there is no certainty that they will prove to be correct or that the outcomes indicated will be achieved.

There is a low level of geological confidence associated with Inferred mineral resources and there is no certainty that further exploration and delineation work will result in the determination of Indicated mineral resources or that the production target itself will be realized. Financial information contained in this announcement is preliminary in nature and is in-part based on low-level technical and economic assessments and is insufficient to support the estimation of reserves or to provide assurance of economic development.

In accordance with the relevant regulations governing the disclosure of mineral projects, readers are cautioned that mineable resources based on Inferred Resource material are considered too speculative geologically to enable them to be classified as reserves.

Given the uncertainties involved, investors should not make any investment decision based solely on this Presentation.

Disclaimers

The totals in tables may not add due to rounding.

The distribution of this Presentation in jurisdictions outside Australia may be restricted by law and any such restrictions should be observed. In particular, this Presentation may not be distributed or released in the United States. Any failure to comply with such restrictions may constitute a violation of applicable securities laws.

This Presentation does not constitute an offer to sell, or a solicitation of an offer to buy, any securities in the United States of America or in any other jurisdiction in which such an offer would be illegal. The offer and sale of the entitlements and New Shares referred to in this Presentation have not been, and will not be, registered under the U.S. Securities Act of 1933 ("Securities Act") and the entitlements may not be taken up by, and the New Shares may not be offered or sold to, any person in the United States of America unless the securities have been registered under the Securities Act (which Peninsula has no obligation to do or procure) or are taken up, offered or sold in a transaction exempt from, or not subject to, the registration requirements of the Securities Act and any other applicable securities laws.

Third party information

This Presentation contains data and information sourced from independent third parties and government sources, and the Company makes no representation, whether express or implied, as to the accuracy of such data or information.

Competent Person Statement

The information in this Presentation that specifically relates to Exploration Targets, Exploration Results, Exploration Potential, Mineral Resources or Ore Reserves at the Lance Projects is based on information compiled by Mr Benjamin Schiffer. Mr Schiffer is a Registered Professional Member of the Society of Mining, Metallurgy and Exploration (Member ID #04170811). Mr Schiffer is a professional geologist and Environmental Department Manager employed by independent consultant Western Water Consultants, Inc. d/b/a WWC Engineering. Mr Schiffer has sufficient experience which is relevant to the style of mineralization and type of deposit under consideration and to the activity which he is undertaking as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Schiffer consents to the inclusion in the Presentation of the matters based on his information in the form and context in which it appears.

This Presentation was approved by the Board of Peninsula Energy Limited

Investment Highlights

EXECUTING A PRODUCTION RESET FOR A SUSTAINABLE FUTURE

US-based uranium producer with first dried yellowcake produced at the Lance Uranium Project in Wyoming in September 2025

Lance Project hosts the **largest uranium resource in Wyoming** (~58Mlbs U_3O_8)

Fully licensed ISR operation with a commissioned Central Processing Plant (CPP)

Near-term production 0.4Mlbs - 0.6Mlbs p.a. (CY2026 and CY2027)

Pathway to 2-3Mlbs p.a. through wellfield expansion and satellite feed

Uncontracted near-term production provides leverage to a strong uranium price environment



CORPORATE OVERVIEW¹

Share Price²
US\$0.36
(A\$0.515)

Market Cap²
US\$159M
(A\$230M)

Cash³
US\$31.8M

Debt⁴
US\$4.2M



Security code & description	Securities on Issue
PEN: Ordinary Shares	447,254,315
PENAAC: Option (Expiring 01-Oct-2028 / Ex \$0.45)	4,043,467
PENAAD: Option (Expiring 01-Oct-2028 / Ex \$0.60)	4,043,467
PENAAF: Warrants⁵ (Expiring 30-Sep-2030 / Ex \$0.45)	24,148,664
PENAV: Option (Expiring 26-Nov-2027 / Ex \$6.00)	205,000
PENAZ: Service Rights	2,715,608
PENAB: Performance Rights	7,128,571
PENAAE: Convertible Notes Convertible into ordinary shares of ~20.2m ²	

Note (1) Corporate information as at 7 April 2026

Note (2) Exchange Rate AUD:USD 0.6916

Note (3) Cash at 31-Dec-2025

Note (4) Debt at 7-April-2026

Note (5) 12.07m warrants only exercisable if PEN enters administration

Refreshed Board and Executive Leadership



Mr George Bauk

Managing Director / CEO

Mr Bauk has over 30 years of global experience in uranium, rare earths, gold, lithium, and graphite. He has led companies and major projects from exploration to production, raising over A\$750m in his career.



Mr David Coyne

Non-Executive Chairman

Mr Coyne has over 30 years of global experience in mining, oil & gas, and construction. A CPA, he has held senior roles in listed and private companies, including former Finance Director with Spartan Resources.



Mr Keith Bowes

Non-Executive Director

Mr Bowes, BSc (Chemical Engineering) and AICD graduate. 30 years' experience in metallurgy, mining, project development and governance, including global roles with Anglo American and BHP. He was most recently MD of Lotus Resources, leading the Kayelekera development.



Ms Tejal Magan

Non-Executive Director

Ms Magan, a Chartered Accountant with 15+ years' experience in capital markets, M&A, governance, and compliance, was until recently CFO and Joint Company Secretary of Spartan. She played a key role in Spartan's successful \$2.4B merger with Ramelius.



Mr Brian Booth

Non-Executive Director

Mr Booth is an experienced mining executive, who brings over 35 years of experience across the mineral exploration and mining sectors with major and junior mining companies.



Mr Jitu Bhudia

Chief Financial Officer

Mr Bhudia is a Chartered Accountant and a seasoned CFO with over 25 years of experience in ASX-listed companies, bringing extensive expertise in capital management, debt and equity financing and corporate governance.



Mr Willie Bezuidenhout

VP Corporate Development

Mr Bezuidenhout is an accomplished Chartered Accountant with a strong strategic focus having previously held the position of Interim CFO at Peninsula Energy.



Mr Jonathan Whyte

Company Secretary

Mr Whyte is a Chartered Accountant and has extensive corporate, company secretarial and financial accounting experience across a number of listed and unlisted resource sector companies.

Site Leadership Team – Deep In-Country ISR Experience



Mr David Hofeling

GM Operations

Mr Hofeling has over 30 years' experience in operational management and finance specific to the mining industry. Mr Hofeling's most recent assignment at Rio Tinto lead the finance team at a \$5 billion smelter project. Prior to this, Mr Hofeling was responsible for financial oversight including global finance, governance, compliance, tax optimisation and risk management at other numerous domestic and international copper, gold and nickel projects.



Mr Ken Milmine

VP OH&S, Approvals

Mr Milmine has almost 30 years of regulatory, environmental, health and safety experience in the mining industry including gold, molybdenum, coal, and uranium extraction in Idaho and Wyoming. Mr Milmine has managed uranium specific health, safety, and environmental regulatory programs through his previous experience with Cameco, Energy Metals, and Uranium One. Mr Milmine joined Strata in August of 2021.



Mr Ralph Knode

CEO – Strata Energy Inc

Mr Knode has over 40 years of experience in uranium exploration, evaluation, construction, and operations across North America, Kazakhstan, and Australia. Mr Knode held senior roles at Uranium One and Cameco subsidiaries and has been directly involved in launching or operating five In Situ Recovery projects on three continents.



Mr Jeramy Spicer

Production Manager

Mr Spicer has over 30 years of production and management experience in multiple chemical industries including sodium percarbonate, lactic acid, and soda ash. Mr Spicer's experience also includes production planning, optimisation along with budget development and tracking.



Mr Brian Pile

VP Operations and Development

Mr Pile has over 25 years of professional experience, having worked directly on ISR projects in US states Nebraska and Wyoming, and in Kazakhstan (JV Inkai). As a consultant prior to joining Strata/Peninsula, Mr Pile worked on mining, water treatment, and environmental projects throughout western US. Mr Pile has worked directly on constructing and commissioning five major ISR projects.



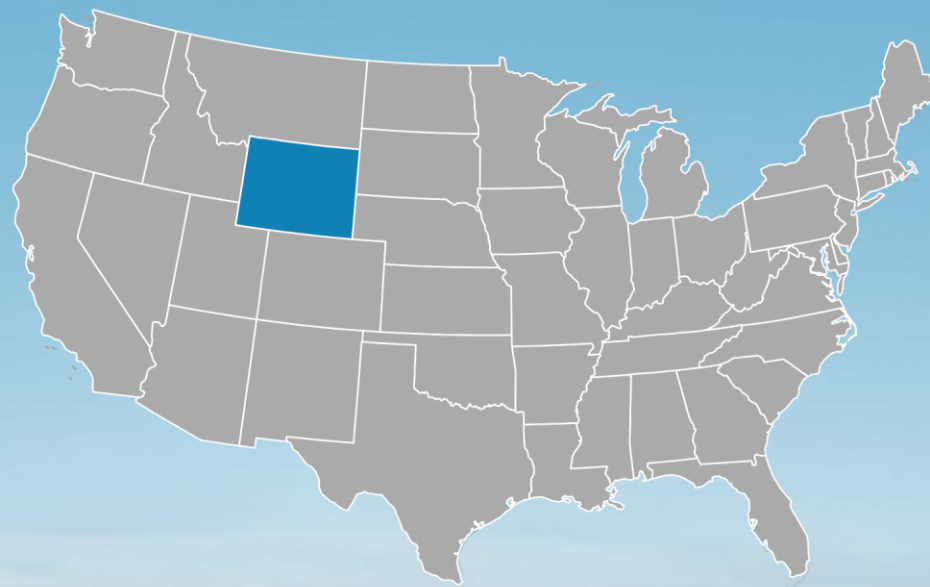
Mr Jesse Self

Geology Manager

Mr Self has over 13 years of uranium-specific geology experience in Wyoming, having worked as a geologist for both Ur-Energy Inc. and Strata. Mr Self's ISR-specific experience includes geology management services from development and delineation drilling to wellfield design and construction, drilling supervisor, wellfield operations, geophysical logging, and reclamation.

The Top Uranium Jurisdiction in the USA

LANCE IS STRATEGICALLY POSITIONED TO BECOME A CORNERSTONE URANIUM PRODUCER TO CLOSE THE URANIUM SUPPLY GAP



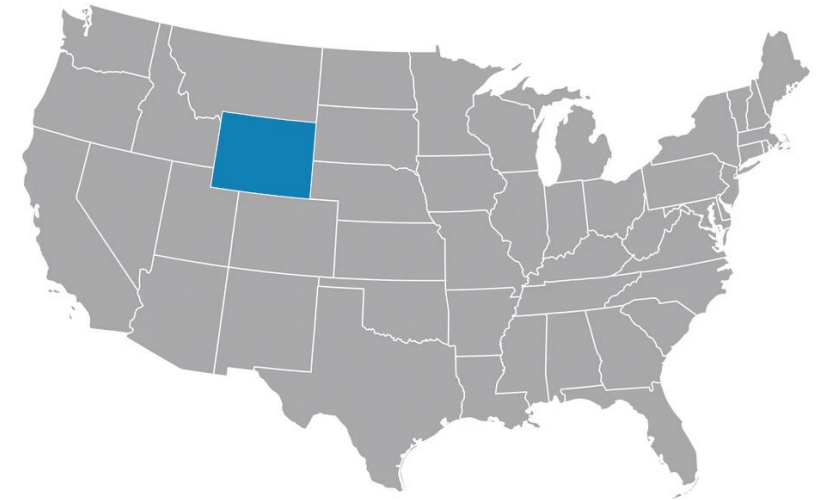
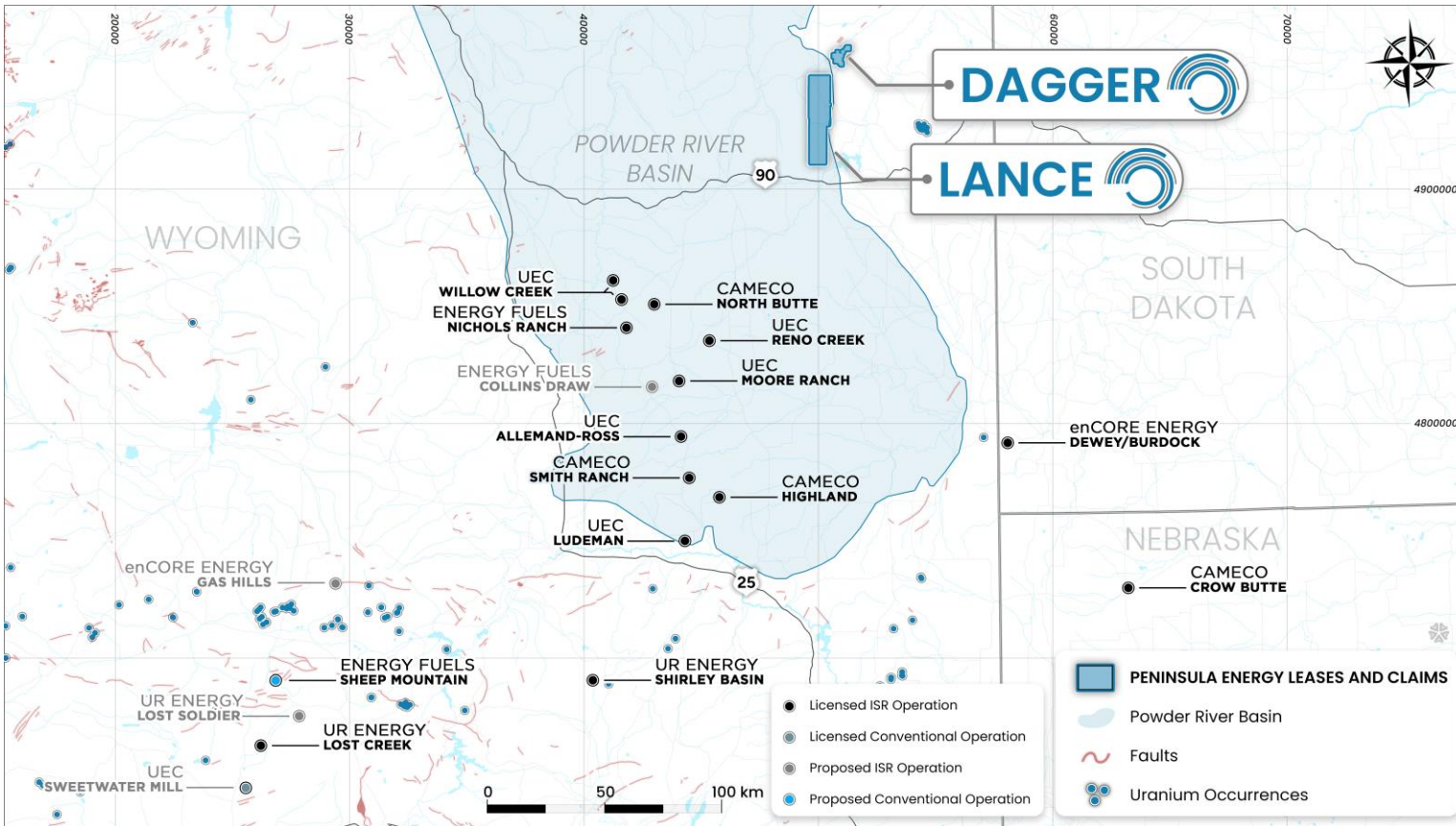
Wyoming, USA

Lance Project

Central Processing Plant, fully licensed for production up to 3Mlbs U₃O₈ p.a.



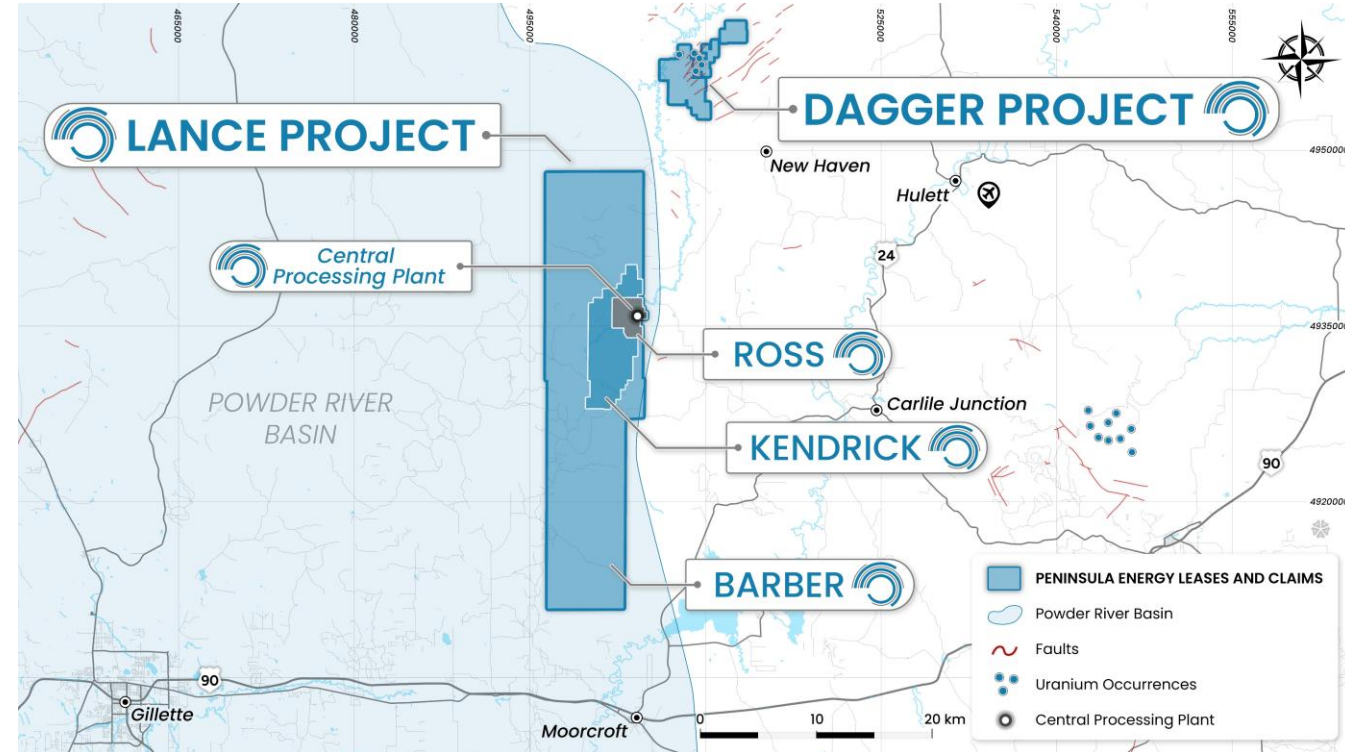
Key Asset – Lance Uranium Project, USA



- **Location:** Powder River Basin, Wyoming – premier US ISR jurisdiction
- **Ownership:** 100% Peninsula Energy (via 100% owned US subsidiary Strata Energy Inc.)
- **Mining Method:** In-Situ Recovery (low-pH)
- **Status:** Ramping up production

Lance – Strong Fundamentals, Significant Potential

- **58Mlbs U₃O₈ of JORC (2012) Lance Resources**
Globally significant resource & largest in Wyoming
- **Initial focus on Ross Production Area**
Comprising Mine Units 1-4 (MU 1-4), with estimated remaining resources of 6.4Mlbs of U₃O₈
- **Production Reset Plan**
Implemented in August 2025 based on switch to low-pH operations from MU-3 and MU-4 onwards
- **Commissioning & Operational Ramp-Up**
Progressing well with focus on new wellfield design in MU-4 = 60% of forecast production in CY2026/27
- **Long-term growth pipeline**
Kendrick Development Area (19.8Mlbs U₃O₈) and Barber Exploration Project (31.9Mlbs U₃O₈)



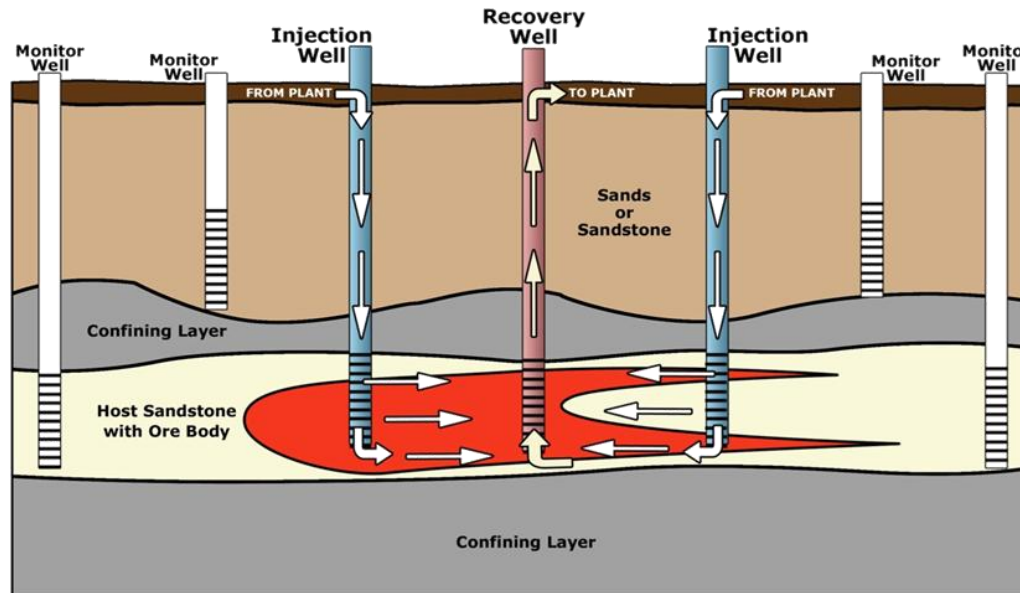
Lance is one of the largest ISR uranium projects in the USA and the only one currently licensed for industry leading low pH ISR extraction methodology.

1 - Please refer to ASX announcement 13 May 2024 – Mineral Resource increases 19.6% within current Lance Life of Mine plan area. Peninsula confirms that it is not aware of any information or data that materially affects the information included in these announcements and that all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements.
2 - Barber has not been included in previous LOM models

ISR Mining – Low-Cost, Scalable Production

Underground extraction using wells, not open pits or tunnels

- Proven ISR mining method widely used in Wyoming. 52% of global uranium production from ISR mining in CY2024 (World Nuclear Association – World Uranium Mining Production)
- Low capital intensity and minimal surface disturbance
- Scalable wellfield development supports staged growth
- Low pH ISR uses acidic solutions (sub pH 2.0 S.U.) to dissolve uranium from orebodies.



Central Processing Plant – A Major De-Risking Milestone

The CPP provides operational independence and scalability

- **US\$79m invested:** Fully constructed and licensed CPP including Phase 1
- **Nameplate capacity:** 2Mlbs per annum of dry yellowcake
- **Licensed capacity:** Up to 3Mlbs per annum
- **Commissioning** underway of new resin elution, precipitation, filtration and product drying circuits
- **Growth potential:** Capable of receiving feed from satellite projects such as Barber or Dagger or third parties



Production Reset Plan

United Rentals

DESIGN
TANKS

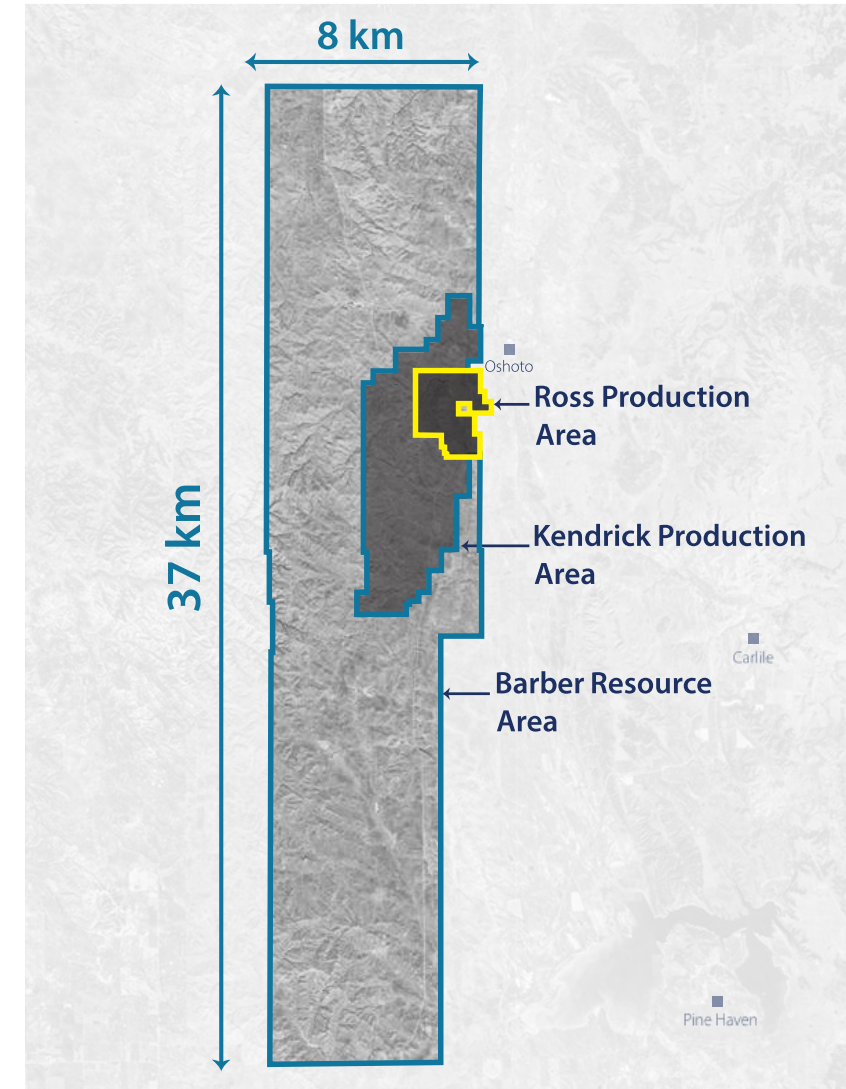
S-65

WYOMING RENTALS

Transitioning from Commissioning to Commercial Production

- **First dried yellowcake produced in September 2025**
Significant milestone on commissioning pathway
- **Comprehensive review by new leadership**
Full re-evaluation of near-term production schedule, wellfield development, CAPEX & OPEX completed
- **Active wellfield development**
Active wellfield development across MU-3 and MU-4 following switch to low-pH operations
- **MU-4 underpins near-term production outlook**
MU-4 accounts for 60% of the Company's production forecast for CY2026 of 0.4-0.5Mlbs of U_3O_8

Production Reset Plan is focused on the Ross Production Area, with the progressive acidification of Header Houses in MU-4 commencing in December 2025



Progress Update

- 8 drill rigs working to develop new Mining Unit-4 (MU-4), 50% complete
- MU-3 and MU-4 are the first wellfields at Lance specifically designed for the low-pH in-situ recovery method
- MU-4 HH-14 and 16 completed and acidification commenced
- MU-4 HH-15 under construction, HH17-19 development underway

Optimising Wellfield Pattern Design

Header House pattern design has been modified

- Reduced production wells from 45 to 30
- Reduced spacing between injection and production wells from 80 to 60 feet
- Reduced time of commencement of acidification to production to 2-3 months compared to MU-3
- Modified pattern design to take into consideration any low flow areas observed during testing



Transitioning from commissioning to sustainable commercial production

Commissioning

Operations CY2025

Focus on acidification of wellfields

Ramp-Up

400,000 – 600,000lbs pa

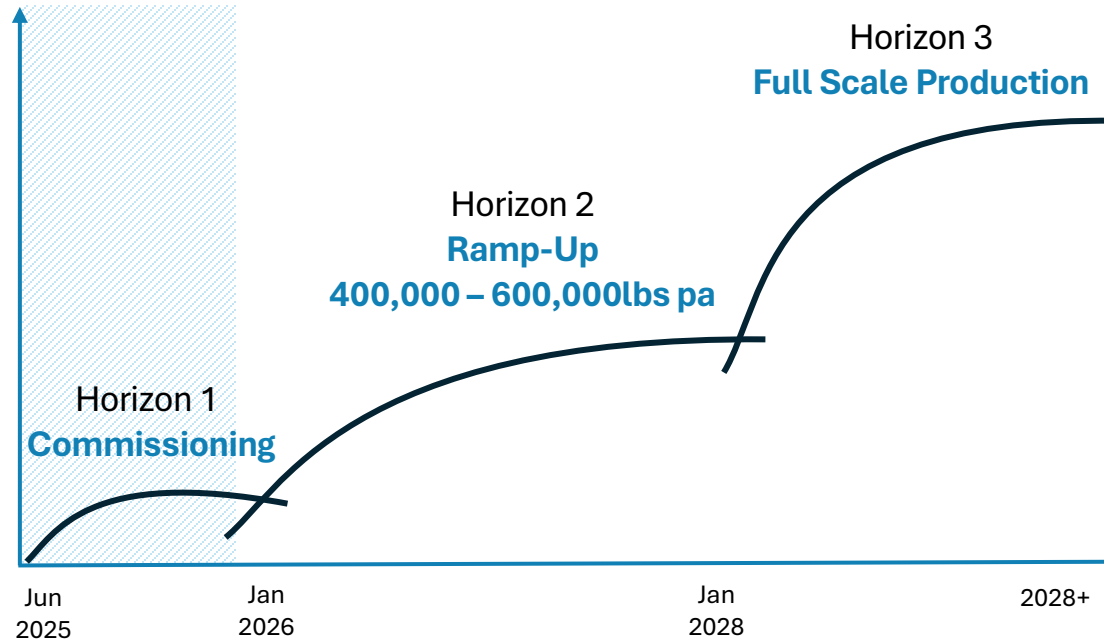
Production CY2026 & CY2027

From January 2026 to December 2027

1,000,000 – 1,400,000lbs

Expected inventory of uranium remaining recoverable under pattern from operating wellfields within MU-1, 3 and 4

At end 31 December 2027



Period	Target Production	Key Drivers
2025	Commissioning	Acidification, CPP start-up
2026	0.4–0.5Mlbs	MU-3 & MU-4 production
2027	0.5–0.6Mlbs	Optimization and stability
2028+	1–3Mlbs	Kendrick + satellite feed

Production to

~0.6Mlbs p.a. fully funded

Cash¹

~US\$31.8M

Debt¹

~US\$12.6M

Fully leveraged to capitalise on spot price over next two years with no commitments in place

One contract in place for 600,000lbs

- 100,000lbs per annum 2028 – 2033 (post ramp-up)
- Blend of base price (escalated) plus market price
- Take or pay commitments remain in place

Horizon 2 (2026 – 2027) – Production

- No contracts in place for the next two years
- Production available for delivery into US market

Horizon 3 (2028+) - Production

- Contracted for 600,000lbs in total between 2028 – 2033

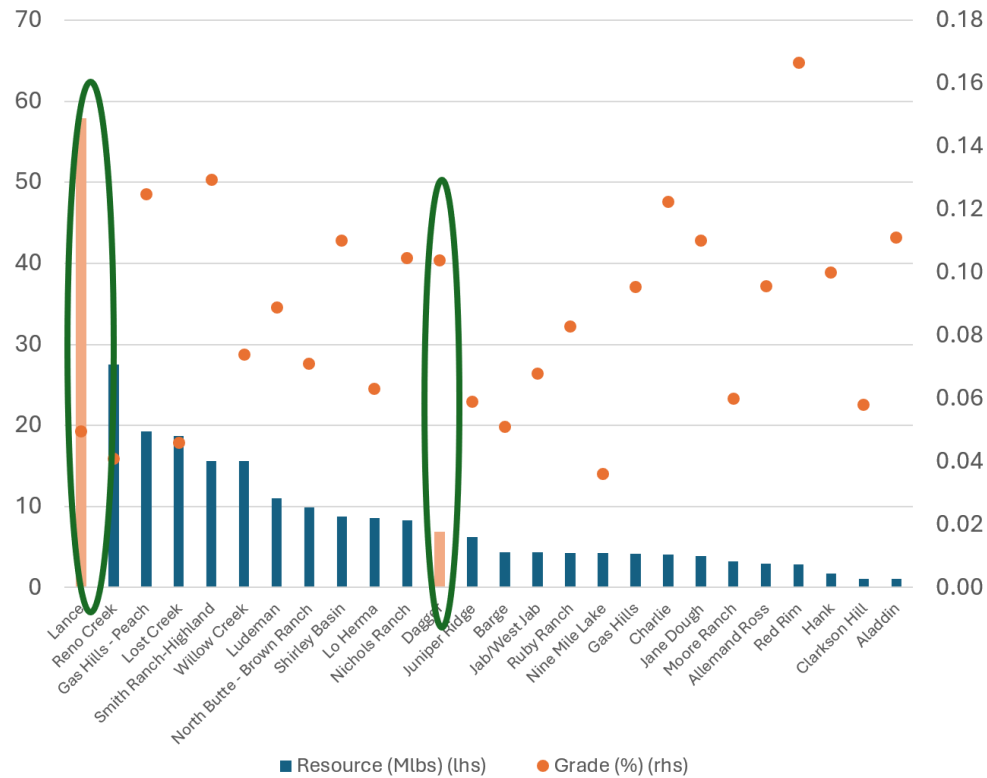


Future Growth

Lance – Already Very Large, But Still Lots of Potential to Grow

Largest known ISR project in Wyoming, USA

Exploration Target of 104 – 163 MLbs U₃O₈ based on a combination of past exploration results and proposed exploration programmes²



Refer to Appendix 3 for mineral resource and grade details of deposits referenced in diagram above

Permit Area	Tonnage (Mt)	Grade (ppm U ₃ O ₈)	U ₃ O ₈ million lbs
Ross			
Measured	1.5	510	1.7
Indicated	3.1	460	3.1
Inferred	1.5	450	1.5
Total	6.1	470	6.4
Kendrick			
Measured	1.2	540	1.4
Indicated	5.4	580	6.9
Inferred	10.2	510	11.5
Total	16.8	530	19.8
Barber			
Measured	0.7	480	0.7
Indicated	2.5	430	2.4
Inferred	26.6	490	28.7
Total	29.8	480	31.9
Total			
Measured	3.3	510	3.8
Indicated	11.0	510	12.4
Inferred	38.3	490	41.7
Total Lance	52.6	500	58.0

1) JORC table included in an announcement to the ASX released on 13 May 2024: "Mineral Resource Increases 19.6% within Current Life of Mine Plan Area". Peninsula confirms that it is not aware of any new information or data that materially affects the information included in this announcement and that all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

2) Please note that in accordance with Clause 17 of the JORC (2012) Code, the potential quantity and grade of the "Exploration Target" in this presentation must be considered conceptual in nature as there has been insufficient exploration to define a Mineral Resource and it is uncertain if further exploration will result in the determination of a Mineral Resource. Refer Appendix 2.

Regional and Satellite Growth Pipeline

Kendrick

- Fully-permitted
- Next sequential development area
- Optimisation studies underway

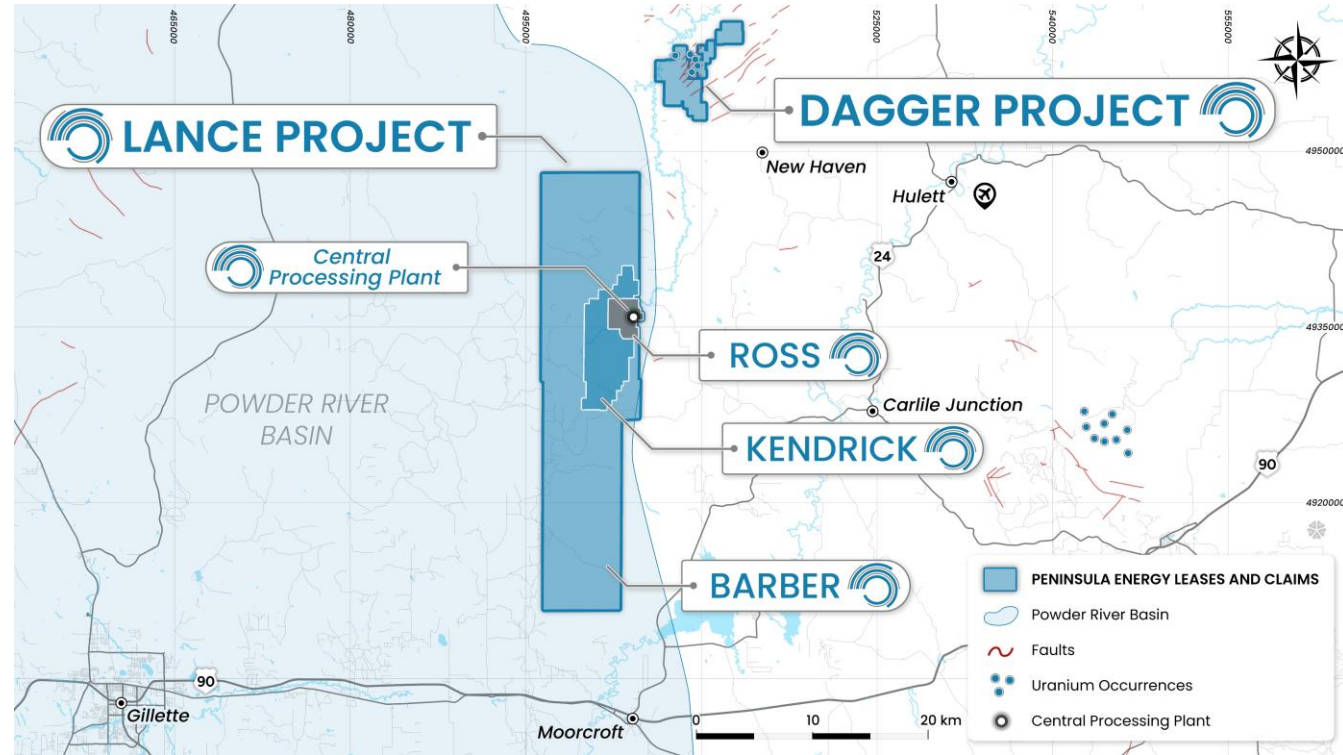
Barber

- Large, under-delineated inferred resource
- Potential future satellite operation

Dagger

- Higher-grade resource (6.9Mlbs @ 1,037ppm)
- Satellite ISR opportunity
- Further exploration
- Scoping Study underway

These projects provide long-term growth optionality.



Kendrick Development Area

The next sequential production area, with an estimated resource of 19.8Mlbs U₃O₈ – Permit to Mine and Source Materials Licence received.

Barber Exploration Project

Significant upside in production growth and life of mine extension adjacent to Lance, with an estimated Resource of 31.9Mlbs¹ U₃O₈.

Kendrick is the next sequential production area following production at the Ross Area

Project Area is fully permitted to commence mining operations, with all approvals received from Wyoming Department of Environmental Quality (WDEQ) and EPA

Project Area spans approximately 7,992 acres

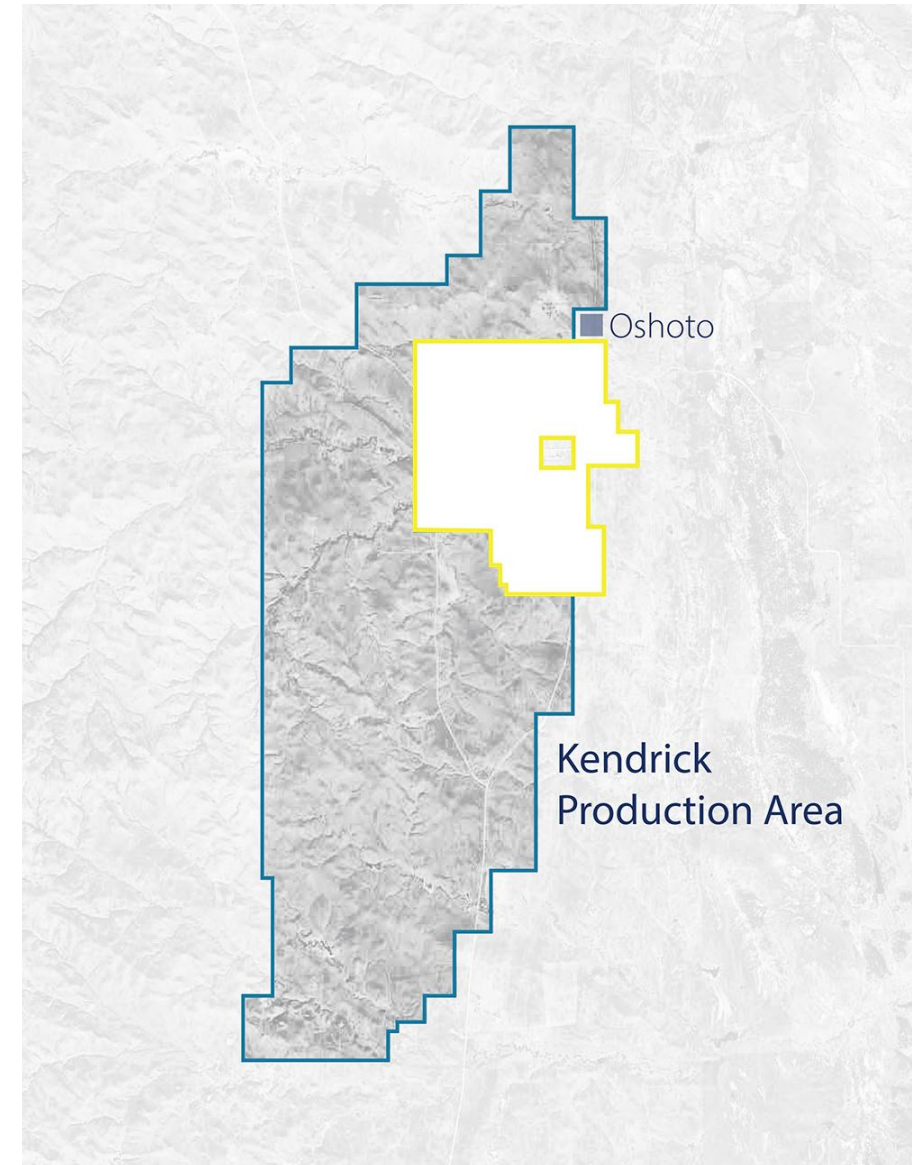
Next Steps

- Optimisation study commenced
- Further delineation and exploration drilling
- Workstreams will feed into updated production guidance from 2028

Classification	Tonnes (Mtonnes)	Average Grade (ppm)	U ₃ O ₈ Metal (Mlbs)
Measured	1.2	540	1.4
Indicated	5.4	580	6.9
Inferred	10.2	510	11.5
Total	16.8	530	19.8

Please refer to ASX Announcement 13 May 2024 Mineral Resource Increases 19.6% within Current Lance Life of Mine Plan Area

Peninsula confirms that it is not aware of any information or data that materially affects the information included in these announcements and that all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements.

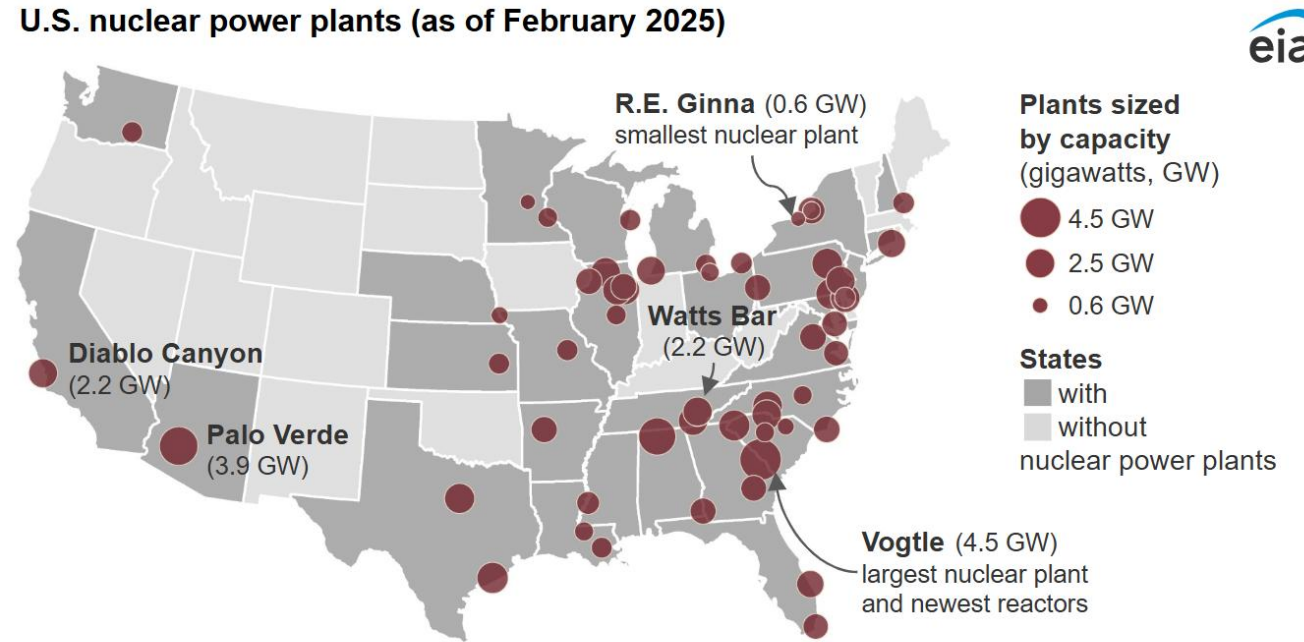


The Strategic Context

Right place, Right time to be a domestic US uranium producer...

- Mature, stable domestic nuclear market
- Current reactor fleet of 94-gigawatt large scale reactors consume ~50Mlbs of uranium per annum
- Less than 10% of uranium consumed in the US is domestically sourced
- Trump Executive Order to quadruple US nuclear power capacity to 400GW which will require ~200Mlbs of uranium per annum
- Bipartisan support to rebuild domestic uranium and nuclear fuel supply chains
- Structural global supply deficit expected to widen into the next decade
- **Domestic uranium production is strategically critical — and scarce**

U.S. nuclear power plants (as of February 2025)



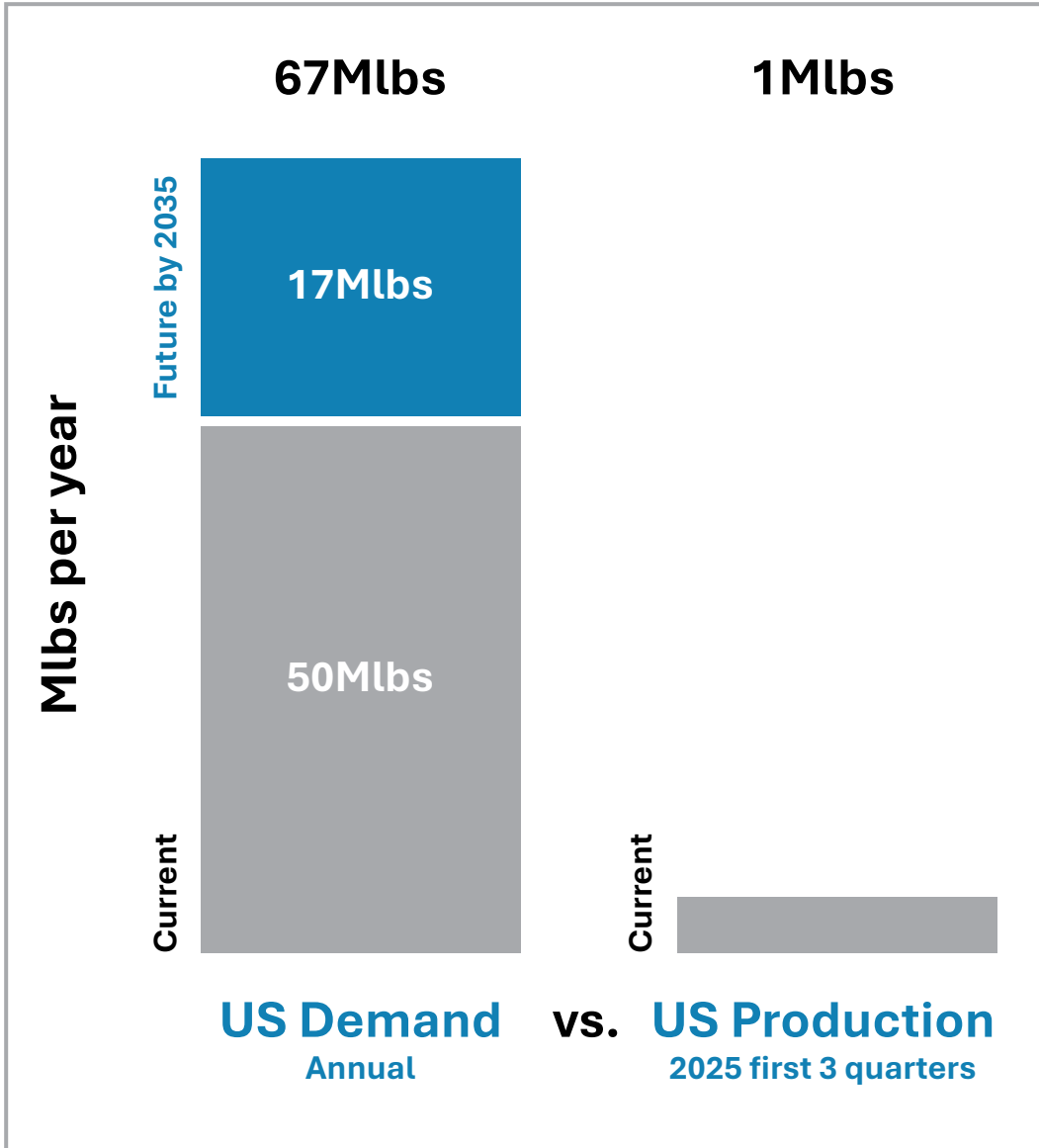
The US operates 94 nuclear reactors across 54 plants, generating about 20% of the nation's electricity

Source: US Energy Information Administration

Uranium – A key to US energy security

- US annual demand 50Mlbs vs 1Mlbs domestic production
- From 2020-2024, the US imported 94% of its yellowcake – including 45% from Russia, Kazakhstan and Uzbekistan
- Q4 2024 saw the highest US uranium concentrate production in six years, driven by operations located in Wyoming, Texas, and Utah
- Strengthening uranium price recently moved above US\$100/lb, currently at US\$85/lb (TradeTech Uranium Spot Price)

Figure 1 TradeTech Uranium Spot Price, 1996-2026



US boosting the Domestic Supply Chain

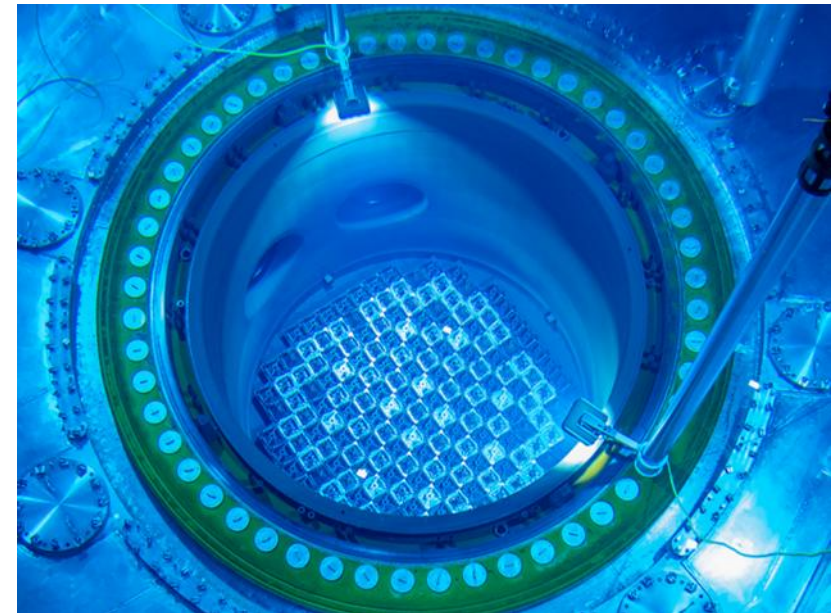
- Uranium added to Critical Minerals List – Department of Energy has in October 2025 added Uranium to the Critical Minerals list
- US ban on Russian sourced uranium – unlocked US\$2.72 billion of Department of Energy funding to support domestic enrichment (what about the yellowcake?)
- Policy settings driving new nuclear deployment – accelerated nuclear technology development and removal of regulatory red tape

Trump Executive Order 14300

- Trump Energy EO 14300 to quadruple nuclear generating capacity by 2050, 100GW to 400GW that converts to 50Mlbs to 200Mlbs (That's more yellowcake required)

Positive Long-Term Fundamentals

- WNA forecasts demand growth – from 175 million lbs of U_3O_8 equivalent p.a. (2025) annually to 391 million lbs by 2040 (World Nuclear Association 2025 World Nuclear Fuel Report)

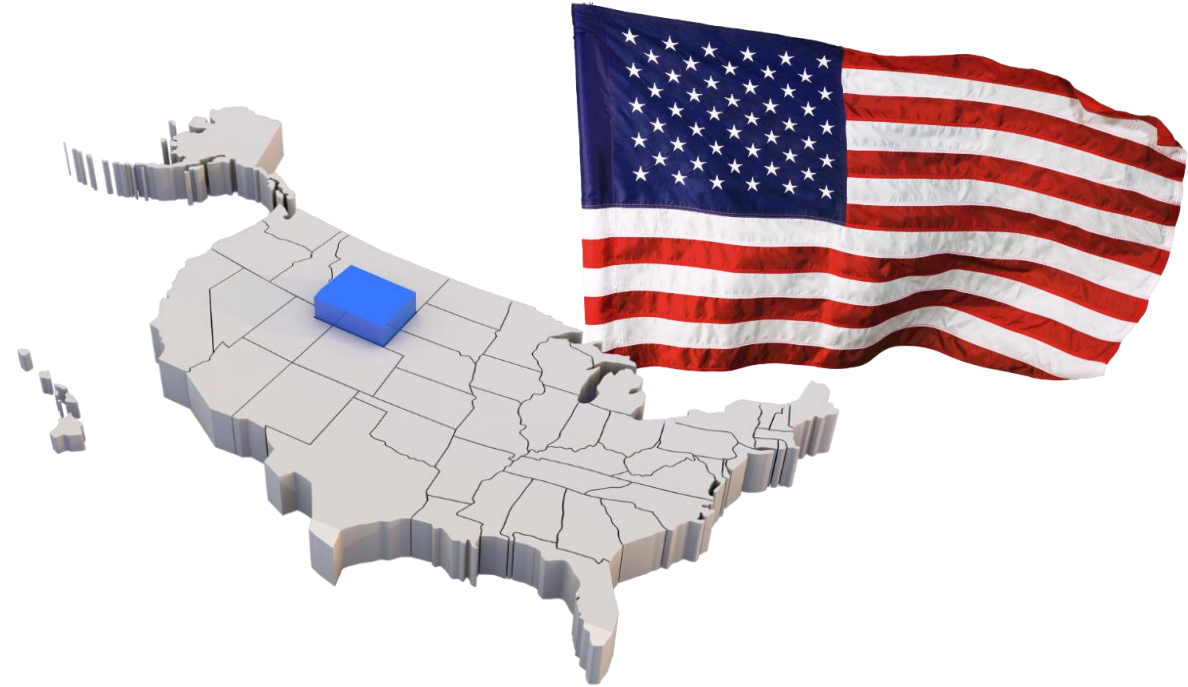


Summary



Summary – Why Peninsula Re-rates

- ✓ Exposure to scarce domestic US uranium production
- ✓ Transition from alkaline ISR production to industry leading low pH ISR production
- ✓ Clear pathway to growing production
- ✓ Uncontracted uranium leveraged to strong pricing
- ✓ Strong policy and energy security tailwinds



PEN is positioned to become a meaningful domestic uranium supplier in the U.S at a time of accelerating demand and constrained supply. With production underway, infrastructure in place, and a scalable growth pathway, the Company offers investors direct leverage to the uranium market and US energy security.

Key Investment Takeaways

ASX-listed uranium producer with established operations in USA

Globally significant resource of 58Mlbs¹ at Lance with exploration upside **plus 6.9Mlbs at Dagger**

Fully constructed Central Processing Plant currently in commissioning, with nameplate capacity to produce **2Mlbs p.a. dry yellowcake**

Production Reset Plan successfully implemented and delivering

The only uranium ISR in the USA licensed for low pH chemistry

Experienced leadership with clear focus, **targeting consistent performance**

1 - Please refer to ASX announcement 13 May 2024 – Mineral Resource increases 19.6% within current Lance Life of Mine plan area



Appendices

Lance Project Resource Estimate as at 31 December 2023¹

Classification	Tonnes (million)	Grade (ppm U ₃ O ₈)	U ₃ O ₈ Metal (Mlbs)
Measured	3.3	510	3.8
Indicated	11.0	510	12.4
Inferred	38.3	490	41.7
Total	52.6	500	58

Dagger Resource Estimate as at 23 October 2023²

Classification	Tonnes (million)	Grade (ppm U ₃ O ₈)	U ₃ O ₈ Metal (Mlbs)
Inferred	3.0	1,037	6.9
Total	3.0	1,037	6.9

Note: (1) Updated Lance Projects Mineral Resource Estimate and JORC Table 1 included in an announcement “Mineral Resource Increases 19.6% within the Lance LOM Plan Area” released to the ASX on 13 May 2024;. (2) ASX Announcement released on 23 October 2023: “Peninsula Establishes Significant New Uranium Development Project”.

Peninsula confirms that it is not aware of any information or data that materially affects the information included in these announcements and that all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person’s findings are presented have not been materially modified from the original market announcements.

Exploration Target¹

The Lance Project covers a significant proportion of the Powder River Basin. Cretaceous sandstones of Wyoming, which are believed to represent an Exploration Target of between 104Mlbs and 163Mlbs eU₃O₈

Lance Project Exploration Target (excluding the existing JORC (2012) Code Compliant Resource)²

Exploration Target	Tonnes (million)		Grade (ppm eU ₃ O ₈)		eU ₃ O ₈ (Mlbs)	
	From	To	From	To	From	To
Range	118	145	426	530	104	163
Total	118	145	426	530	104	163

Note: (1) Please note that in accordance with Clause 17 of the JORC (2012) Code, the potential quantity and grade of the "Exploration Target" in this Presentation must be considered conceptual in nature as there has been insufficient exploration to define a Mineral Resource and it is uncertain if further exploration will result in the determination of a Mineral Resource.

Note (2) : Detailed information with regard to the Exploration Target including the Basis of the Exploration Target, Exploration results underpinning the Exploration Target, Proposed Exploration Programs and Activities designed to test the validity of the Exploration Target and the Basis of the Grade and Tonnage Range is included in Appendix 2 of the Presentation released to ASX on 9 October 2023. Peninsula confirms that it is not aware of any new information or data that materially affects the information included in this Presentation and that all material assumptions and technical parameters underpinning the exploration target continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

Appendix 3 – Resource references

		Measured MLBS	Measured Grade	Indicated MLBS	Inferred Grade	Inferred MLBS	Inferred Grade		Source
Cameco	North Butte - Brown Ranch	1.1	0.08	8.4	0.07	0.4	0.07		
	Smith Ranch-Highland	7.9	0.1	0.05	17	7.7	0.05	2024 mineral reserves and resources	https://www.cameco.com/sites/default/files/documents/2024-mineral-reserves-and-resources.pdf
	Gas Hills - Peach	1.7	0.11	11.6	0.15	6	0.08		
	Ruby Ranch			4.1	0.08	0.2	0.14		
UEC	Reno Creek	12.9	0.043	13.1	0.039	1.5	0.039		
	Willow Creek	0	0	15.5	0.74	0.14	0.068		
	Moore Ranch	3.2	0.06	0	0	0.043	0.047		
	Nine Mile Lake	0	0	0	0	4.3	0.036		
	Allemand Ross	0.42	0.085	0.042	0.066	2.5	0.098		https://www.sec.gov/Archives/edgar/data/1334933/000143774922022435/ex_423213.htm
	Charlie	0	0	3.1	0.123	0.99	0.12	S-K 1300 Technical Report Summary Wyoming ISR Hub and Spoke Project	https://www.uraniumenergy.com/projects/wyoming/
	Clarkson Hill	0	0	0	0	1.1	0.058		
	Red Rim	0	0	1.4	0.17	1.5	0.163		
	Ludeman	5	0.094	4.7	0.088	1.3	0.073		
	Barge	0	0	4.4	0.051	0	0		
	Jab/West Jab	2.3	0.072	0.39	0.077	1.7	0.06		
Ur-Energy	Lost Creek	8.4	0.049	4.2	0.044	6.1	0.043	Lost Creek ISR Uranium Property, Sweetwater County, Wyoming, USA	https://d1io3yog0oux5.cloudfront.net/_6fb08984f6450fb3553d43a0c92c5ddd/urenergy/db/697/5519/file/20231231+Lost+Creek+TRS+v3+%283.1%29_REDUCED+SIZE.pdf
	Shirley Basin	7.5	0.275	1.3	0.118	0	0	Shirley Basin ISR Uranium Project Carbon County, Wyoming, USA	https://d1io3yog0oux5.cloudfront.net/_6fb08984f6450fb3553d43a0c92c5ddd/urenergy/db/697/5523/file/20231231+SB+TRS+as+amended.pdf
Energy Fuels	Nichols Ranch	Combined M+I resources		7	0.106	1.3	0.097		https://energyfuels.com/wp-content/uploads/2025/01/SLR-Energy-Fuels-Nichols-Ranch-FINAL-Technical-Report-Amended-8-Feb-2023.pdf
	Jane Dough	0	0	3.6	0.11	0.3	0.11		
	Hank	0	0	0.9	0.1	0.8	0.1		
enCore	Gas Hills	1	0.1	2.8	0.1	0.4	0.05	Technical Report on the Gas Hills Uranium Project Fremont and Natrona Counties, Wyoming, USA	https://encoreuranium.com/wp-content/uploads/2025/05/2025_2_4-Technical-Report-Gas-Hills_FINAL_ROpt.pdf
	Juniper Ridge (non-isr)	0	0	6	0.058	0.2	0.085	Juniper Ridge Uranium Project Carbon County, Wyoming, USA	https://encoreuranium.com/wp-content/uploads/2023/06/JUNIPER-RIDGE-URANIUM-PROJECT-Final-6-13-2017-AMENDED-AND-RESTATED.pdf
	Aladdin	0	0	1	0.11	0.1	0.12	Technical Report on the Aladdin Uranium Project Crook County, Wyoming	https://encoreuranium.com/wp-content/uploads/2023/06/FinalAladdin43-101.pdf
American Uranium	Lo Herma	0	0	2.78	0.063	5.79	0.063	December 2024 Press Release	https://wcsecure.weblink.com.au/pdf/GTR/02895186.pdf



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