

LARGEST & DIVERSIFIED NORTH AMERICAN FOCUSED URANIUM COMPANY

Corporate Presentation – January 2023

URANIUM ENERGY CORP | NYSE AMERICAN: UEC | URANIUMENERGY.COM



Disclaimer

Statements contained in this presentation which are not historical facts are forward-looking statements that involve risks, uncertainties and other factors that could cause actual results to differ materially from those expressed or implied by such forward-looking statements. Factors that could cause such differences, without limiting the generality of the following, include: risks inherent in exploration activities; volatility and sensitivity to market prices for uranium; volatility and sensitivity to capital market fluctuations; the impact of exploration competition; the ability to raise funds through private or public equity financings; imprecision in resource and reserve estimates; environmental and safety risks including increased regulatory burdens; unexpected geological or hydrological conditions; a possible deterioration in political support for nuclear energy; changes in government regulations and policies, including trade laws and policies; demand for nuclear power; failure to obtain necessary permits and approvals from government authorities; weather and other natural phenomena; and other exploration, development, operating, financial market and regulatory risks. Although Uranium Energy Corp believes that the assumptions inherent in the forward-looking statements are reasonable, undue reliance should not be placed on these statements, which only apply as of the date of this release. Uranium Energy Corp. disclaims any intention or obligation to update or revise any forward-looking statement, whether as a result of new information, future event or otherwise.'

Mineral Resource Estimates: The mineral resource estimate has been prepared using industry accepted practice and conforms to the disclosure requirements of Subpart 1300 of Regulation S-K. Mineral reserve and mineral resource estimates are evaluated annually providing the opportunity to reassess the assumed conditions. Although all the technical and economic issues likely to influence the prospect of economic extraction of the resource are anticipated to be resolved under the stated assumed conditions, no assurance can be given that the estimated mineral resource will become proven or probable mineral reserves. All U.S. resources have been reviewed and approved for disclosure by Clyde L. Yancey, P.G., SME Registered Member, who is considered a Qualified Person under Subpart 1300 of Regulation S-K. All Canadian resources have been reviewed and approved for disclosure by Chris Hamel, P.Geo., who is considered a Qualified Person under Subpart 1300 of Regulation S-K.

Exploration Target: is a statement or estimate of the exploration potential of a mineral deposit in a defined geological setting where the statement or estimate, quoted as a range of tonnage and a range of grade (or quality), relates to mineralization for which there has been insufficient exploration to estimate a mineral resource.

Fastest Growing, 100% Unhedged Pure Play Uranium Company

\$570 Million Accretive Acquisitions Accretive acquisitions of Rosatom's Uranium One Americas, UEX and Rio Tinto's Roughrider

198.4 M Ibs. M&I 67.7 M Ibs. Inferred U₃O₈ Resources⁽¹⁾

Over 3x increase of total resources, 4x increase of production capacity

8.5 M Ibs. U₃O₈ Production Profile/ Year(2) The largest resource base of fully permitted, low-cost ISR projects of any U.S. based producer

\$110.5 Million Cash & Liquid Assets

Strong balance sheet, no debt⁽³⁾

5.8 M Ibs. Contracted Purchases Since Mar 2021⁽⁴⁾ Cumulative sales of 1.65M lbs. for \$21 Million in gross profit

Remaining 3.1 M lbs. contracted purchases at \$38/lb. average cost through to Dec $2025^{(5)}$





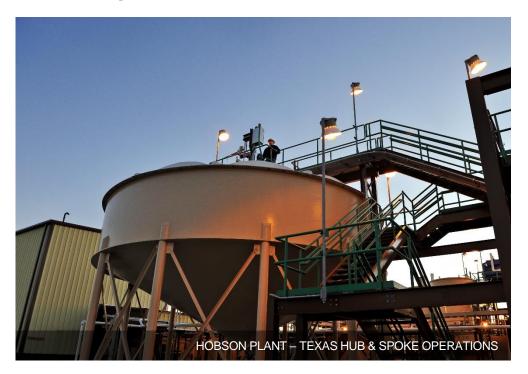
Refer to the appendix for a detailed breakdown of resources reported under S-K 1300, note the Disclaimer on Slide 2, and refer to the Company's technical reports on SEDAR and EDGAR
 Company press release dated Nov 17, 2022 (3) Company's press release dated Dec 19, 2022 (4)(5) Company's quarterly report for the period ended Oct 31, 2022



UEC Wins Award from the U.S. Department of Energy to Supply 300,000 lbs. U_3O_8 at \$59.50/lb. to the Strategic Uranium Reserve

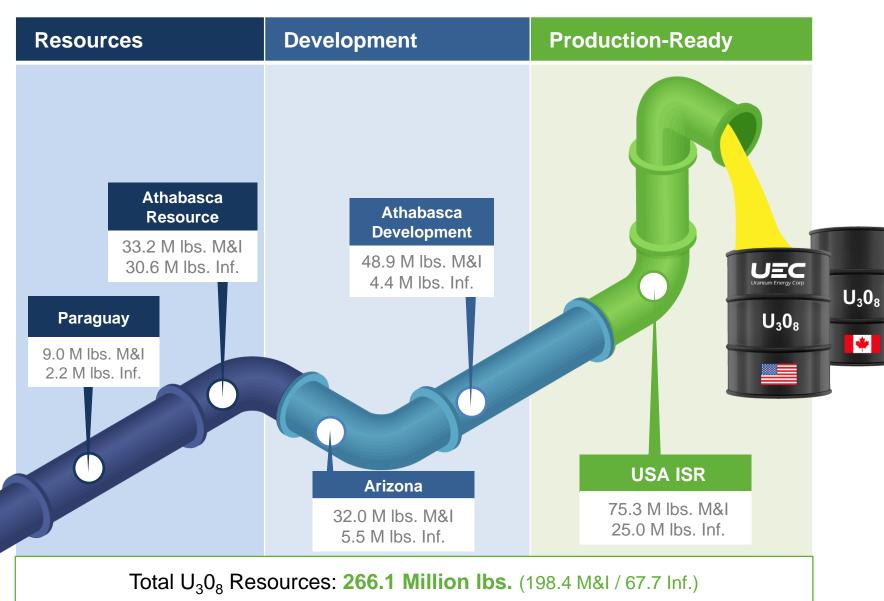
- The U.S. Strategic Uranium Reserve was originally designed as a 10-year, \$1.5 billion program
- Plan to help revitalize the domestic uranium and conversion industry
- The award is part of the initial \$75 million authorized by Congress in 2020 to advance the U.S. Government's goal of supporting America's nuclear fuel supply chain
- The delivery will be made in the first quarter of 2023

UEC U.S. domestic production pipeline with permitted TX and WY assets





Extensive Production Pipeline





Wyoming Hub & Spoke ISR Portfolio



Texas Hub & Spoke ISR Portfolio

- Multiple Production Hub Strategy
- Broad portfolio of grass roots and resource-stage projects to feed production pipeline
- Current S-K 1300 resources will increase in 2023 with completion of upcoming technical review of Roughrider and Kiggavik projects.



Physical Uranium Portfolio

Majority of drummed uranium purchased at spot prices below most producers' mining costs

 Bolsters UEC balance sheet as uranium prices appreciate and generates profits

Provides strategic inventory to support M&A activities and responsiveness to sales opportunities



5.8 M lbs.

U.S. Warehoused Uranium Purchased & Contracted at ~\$38 Ib. with Deliveries into 2025 Total program sales through Oct 31, 2022 = 1.65 M lbs., \$21M gross profit

Remaining 3.1 M lbs. contracted purchases at \$38/lb. average cost through to Dec 2025

Awarded a \$17.85M contract to supply 300,000 lbs. of U.S. origin uranium at \$59.50/lb. to DOE-NNSA

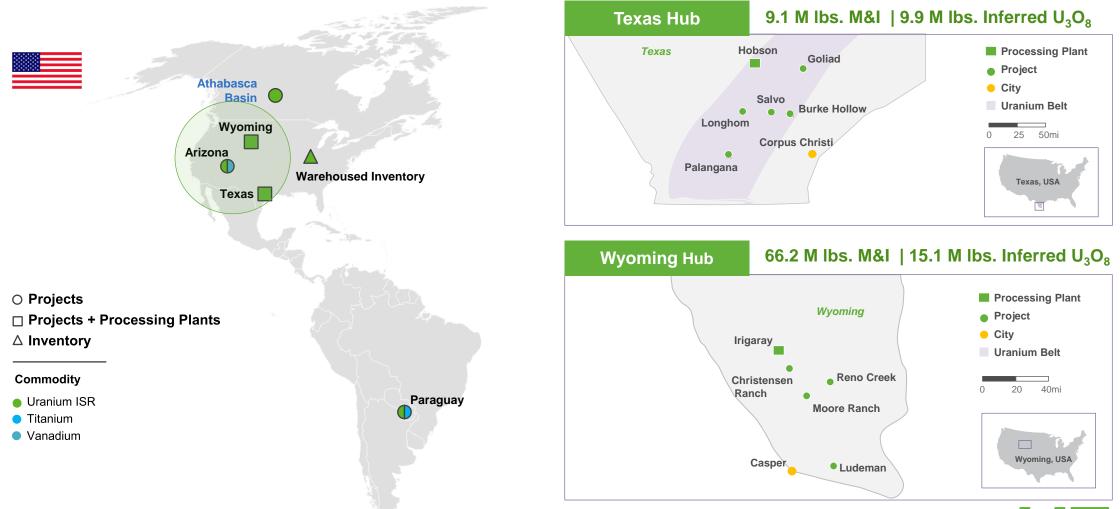
As of Dec 16, 2022, Physical holding included 866,000 lbs. of inventory

See UEC news releases dated Dec 19, Dec 20, 2022 and the Company's quarterly report for the period ended Oct 31, 2022



U.S. ISR Production Platform

7 Fully Permitted Projects in Texas and Wyoming

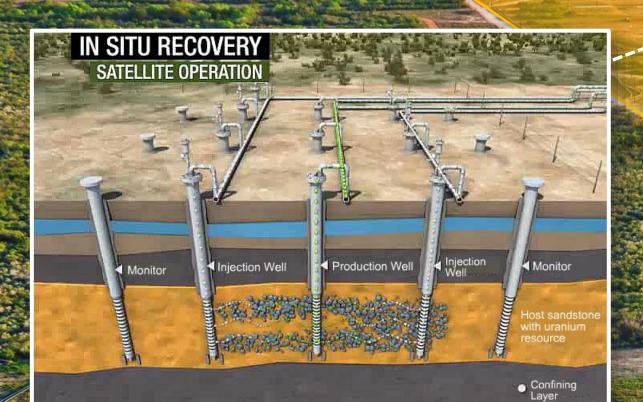


technical reports on SEDAR and EDGAR

(1) Refer to the appendix for a detailed breakdown of resources reported under S-K 1300, note the Disclaimer on Slide 2, and refer to the Company's

7 URANIUM ENERGY CORP | NYSE AMERICAN: UEC | URANIUMENERGY.COM

In-Situ Recovery (ISR) Overview Low Cost & Environmentally Friendly



Watch how the In Situ Recovery (ISR) Technology works

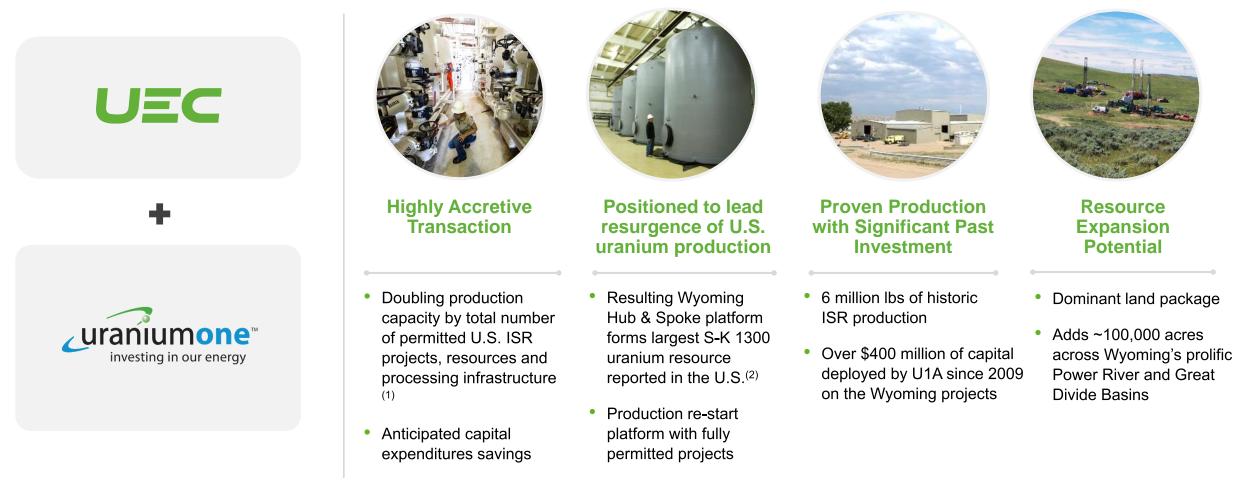
Click Here

UEC Acquires Uranium One Americas for \$112 Million Cash

Transformative Acquisition

Creating America's Leading Uranium Mining Company

UEC



⁽¹⁾ See news release dated Apr 5, 2022. ⁽²⁾ Refer to the appendix for a detailed breakdown of resources reported under S-K 1300, note the Disclaimer on Slide 2, and refer to the Company's technical reports on SEDAR and EDGAR

9 URANIUM ENERGY CORP | NYSE AMERICAN: UEC | URANIUMENERGY.COM

Texas & Wyoming Hub & Spoke Platform *Fully Permitted*



Uranium ProjectsProcessing Plants



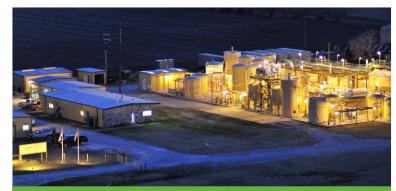
Wyoming Hub & Spoke ISR Portfolio

Irigaray Processing Plant Licensed Production Capacity of 2.5 M lbs./year

> 7 satellite projects (4 Permitted)

66.2 M lbs. M&l 15.1 M lbs. Inferred U_3O_8 resources

The largest S-K 1300 uranium resource summary completed and filed to date in the U.S.



Texas Hub & Spoke ISR Portfolio

Hobson Processing Plant Licensed Production Capacity of 4 M lbs./year

> 5 satellite projects (3 Permitted)

9.1 M lbs. M&I 9.9 M lbs. Inferred U_3O_8 resources

Burke Hollow ISR Project - the newest & largest ISR wellfield being developed in the U.S.



10 URANIUM ENERGY CORP | NYSE AMERICAN: UEC | URANIUMENERGY.COM

(1) Refer to the appendix for a detailed breakdown of resources reported under S-K 1300, note the Disclaimer on Slide 2, and refer to the Company's technical reports on SEDAR and EDGAR



Irigaray

One of the largest ISR central processing facilities in the U.S.



UEC

Reno Creek ISR Project

The largest permitted, preconstruction ISR uranium project in the U.S.

Irigaray & Christensen Ranch

Licensed Capacity of 2.5 M lbs. Per Year

15.5 M lbs. M&I and 0.14 M lbs. Inferred U_3O_8 Resources⁽¹⁾

- One of the largest ISR central processing facilities in the U.S.
- Plant and infrastructure production ready four fully installed wellfields on standby
- Resin Processing Agreement in place with 3rd party at Irigaray through 2024







Header House MU7



Christensen Satellite Plant



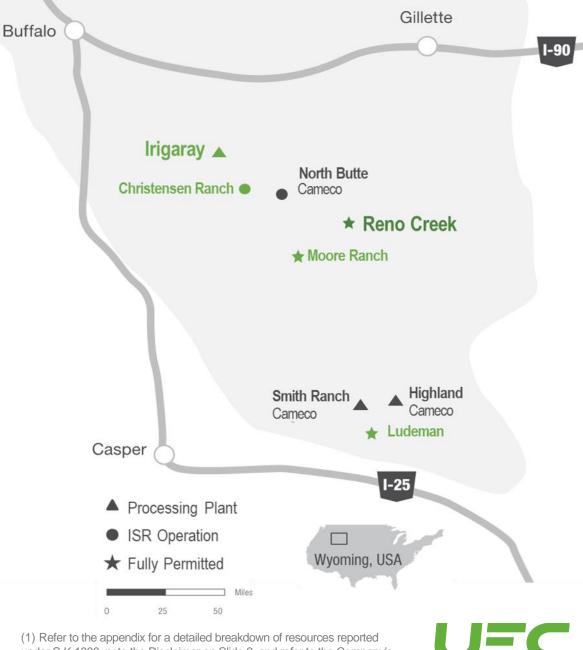
(1) Refer to the appendix for a detailed breakdown of resources reported under S-K 1300, note the Disclaimer on Slide 2, and refer to the Company's technical reports on SEDAR and EDGAR

Reno Creek ISR Project

The largest permitted, pre-construction ISR uranium project in the U.S.

26 M lbs. M&I | 1.5 M lbs. Inferred $U_3O_8^{(1)}$

- 45 miles by road from Irigaray Central Processing Plant
- Licensed for 2 M lbs./year
- Significant CAPEX savings expected
- Considerable ISR exploration and expansion potential
- Production permits in place



13 URANIUM ENERGY CORP | NYSE AMERICAN: UEC | URANIUMENERGY.COM

(1) Refer to the appendix for a detailed breakdown of resources reported under S-K 1300, note the Disclaimer on Slide 2, and refer to the Company's technical reports on SEDAR and EDGAR







Hobson is fully licensed and permitted



The Processing Plant has 4 M lbs. /year Licensed Production Capacity





Burke Hollow ISR Project, South Texas

The Newest & Largest ISR Wellfield Being Developed in the U.S.

2022 Production Area Development & Plans:

- Completed the installation of 106 monitor wells for Production Area Authorization 1 ("PAA-1")
- Transitioning into additional exploration and delineation drilling within the 19,336-acre Project to define additional production areas
- Baseline sampling of all production area monitor wells and a production area pump test are complete
- Permitting activities to include baseline sampling of all PA-1 monitor wells, pump tests and preparation of the final authorization to begin production

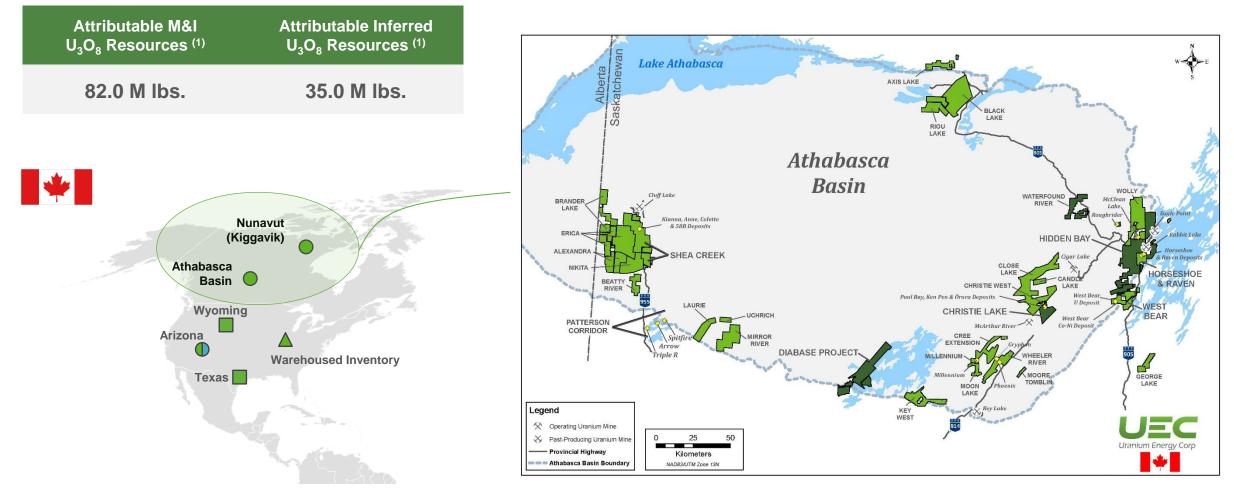


See news releases dated Nov 17, 2022, July 27, Jan 26, Apr 14, 2022, and Oct 28, 2021



Scaling Up in Canada's High-Grade Athabasca Basin

After Cameco and Orano, UEC now controls the largest diversified resource base, hosted in multiple assets in Canada's Athabasca and Thelon Basins



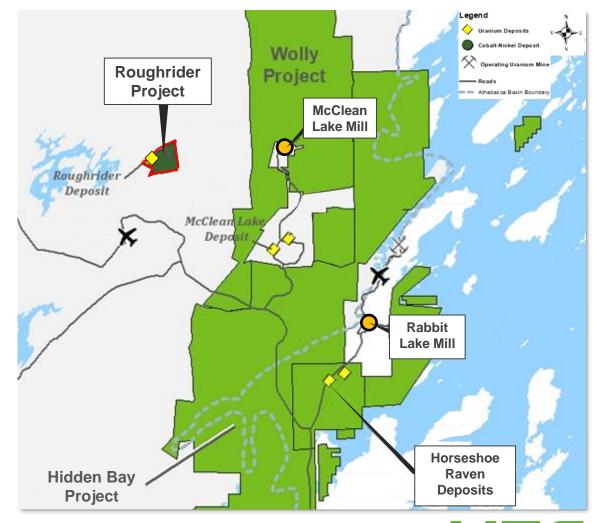
(1) Refer to the appendix for a detailed breakdown of resources reported under S-K 1300, note the Disclaimer on Slide 2, and refer to the Company's technical reports on SEDAR and EDGAR. Does not include the Roughrider, Kiggavik, Wheeler River, or West Bear project resources.

UEC

UEC Acquired Roughrider from Rio Tinto

Total Consideration of \$146.2 million (\$82.1 M in Cash and \$64.1 M in UEC Stock)¹

- Uranium Energy Corp and Rio Tinto completed transaction on the World-class development-stage Roughrider Uranium Project in Canada
- Historic resource of 58 Million lbs. at an average grade of 4.73% U₃O₈⁽²⁾
- UEC welcomed Rio Tinto as a New Shareholder
- Updated Roughrider Technical Report will be completed in early 2023
- (1) See UEC press releases dated Oct 17, 2022, and Dec 19, 2022
- (2) Please note the Disclaimer on Slide 2. A qualified person has not completed sufficient work to classify the historic mineral resources as current mineral resources, and the estimate should not be relied upon.



Roughrider Project Overview

High-grade uranium deposit in the infrastructure-rich eastern portion of the world class Athabasca uranium district

- World-class project in a premier uranium mining jurisdiction
- Pre-production work includes shaft and decline modelling, geotechnical drilling and monitor wells, environmental & heritage assessments, and a reclamation plan
- Strong ESG foundation
- UEC adds to East Athabasca project hub where project synergies create a critical mass of uranium resources along with UEC's recent discovery at Christie Lake with uranium grading 69% over 2.1 m.⁽¹⁾



(1) Please see the Company's press release dated Oct 4, 2022



UEC To Advance Christie Lake in 2023

High-grade Deposit Along Trend From McArthur River

- Christie Lake is the only exploration project not controlled by Cameco and Orano along McArthur River – Cigar Lake Corridor
- 20.35 Million Ib. U_3O_8 in three existing deposits before discovery of Sakura Zone this summer
- CB-176A intersects one of the best uranium intercepts reported in 2022⁽¹⁾

CB-176A



68.7% eU₃O₈ over 2.1 m

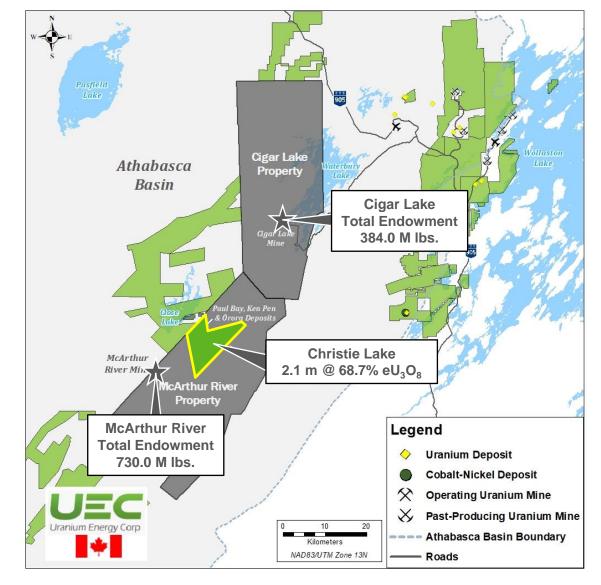
CB-173



21.6% eU_3O_8 over 2.3 m

(1) Please see the Company's press release dated Oct 4, 2022

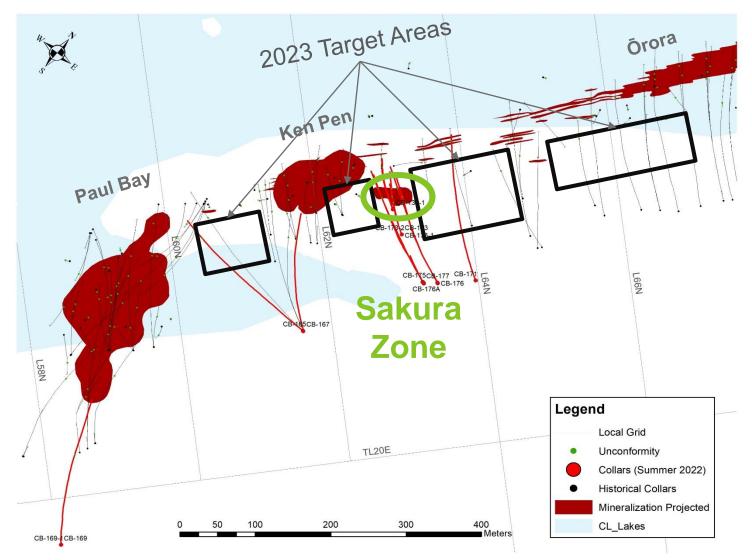
20 URANIUM ENERGY CORP | NYSE AMERICAN: UEC | URANIUMENERGY.COM



Christie Lake 2023 Program

Focused on Expanding Sakura Zone

- Sakura represents a new parallel trend to previous zones
- Primary focus to follow up & expand Sakura Zone mineralization
- Approx \$4.8 million exploration program
- ~17,000 m drilling focused on delineation and expansion of Sakura
- Winter portion of the program planned to be completed by mid-April
- Intend to file updated S-K 1300 resource report including Sakura by mid-summer





Investing in UEC Supports ESG Goals and a Low Carbon Future

Nuclear is the largest carbon-free electricity source in the U.S., uranium is fueling ~20% of total electricity produced today¹



This is equivalent to removing the emissions of 100M gas-powered vehicles per year²

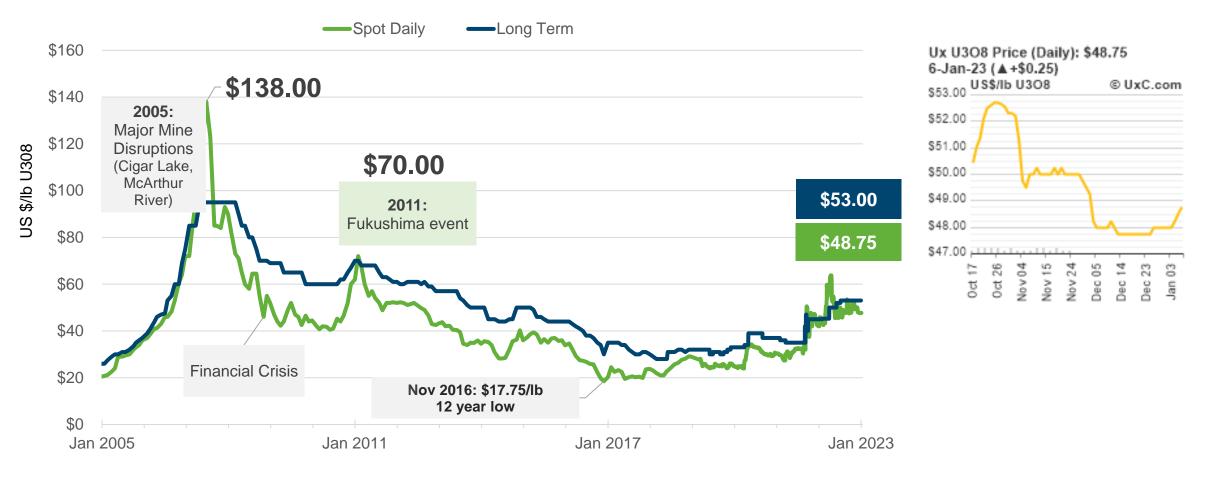


Leading research institutions have found that the most affordable and efficient net-zero grid requires nuclear energy³

UEC

Source: (1)(2) NEI.org (3) Leading research institutions: Harvard, MIT and the OECD (4) IAEA's Annual Report Oct 2022

Fundamentals Favor Significant Price Appreciation – Prices still Well Below Previous Highs



Source: TradeTech, Numerco, UxC, LLC: www.uxc.com Jan 6, 2023



UEC At a Glance

Member of the Russell 2000® Index

Cash, Equity and Inventory Holdings ^(1,2,3)	\$110.5 million, no debt		
Avg. Daily Vol. (3-mo)	9,324,594	Top ShareholdersState Street, FigCEF Holdings,	UEC Team, Blackrock, Vanguard Group, State Street, Fidelity, Northern Trust, UBS, CEF Holdings, Sprott, KCR Fund, Global X
Shares Outstanding	369.8 M		Management, and Rio Tinto
Warrants	4.8 M		
Options + Stock Awards	10.4 M		
Fully Diluted ⁽¹⁾	385.0 M		1
Recent Activity	\$3.91 As of Jan 6, 2023	Analyst Coverage Pune Coli	Heiko Ihle, H.C. Wainwright & Co. Katie Lachapelle, Canaccord Genuity Puneet Singh, Eight Capital Colin Healey, Haywood Securities Inc. Joseph Reagor, ROTH Capital Partners
Market Cap	\$1.4 B As of Jan 6, 2023		

(1) The Company's press release dated Dec 19, 2022

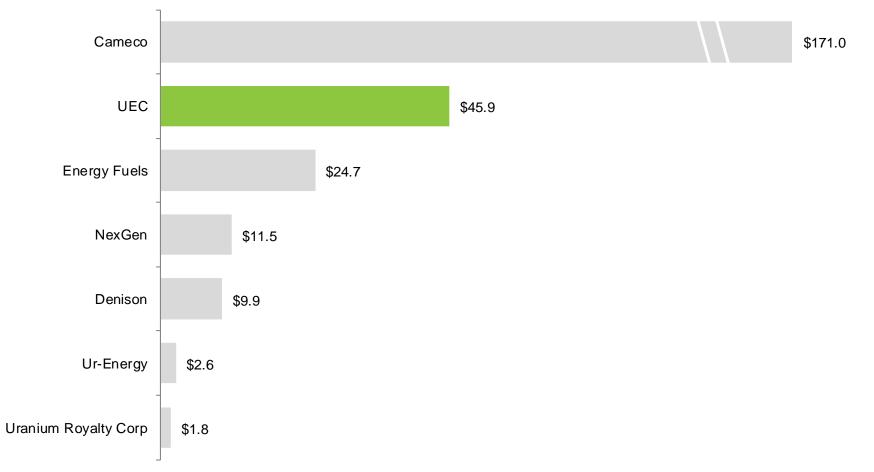
(2) Equity holdings include 15M shares of Uranium Royalty Corp (UROY) having a trading price of US\$2.30 and 96.3M Anfield shares with trading price of US\$0.05 and other equity securities

(3) As of Dec 16, 2022, Physical holding included 866,000 lbs. of inventory



Strengthened Positioning and Liquidity Among Peer Group

1 Year Average Daily Traded Value – U.S. Listings (\$ M)⁽¹⁾



Source: FactSet (1) Based on last 1 year of trading across U.S. listings

UEC

840 Years of Combined Experience in the Uranium Industry



Amir Adnani President, CEO, Director

An entrepreneur, founding CEO of UEC, founder and Chairman of GoldMining Inc., with extensive experience building natural resource companies.



Donna Wichers

VP of Wyoming Operations

Former COO and board member of Uranium One Americas. Over 40 years of experience in senior roles with ISR and conventional uranium mines in the U.S.



Spencer Abraham Chairman, Board of Directors

Served as a U.S. Senator from 1995 to 2001, as Secretary of Energy from 2001 to 2005 and previously as non-executive Chairman of Areva's U.S. board.



Clyde Yancey

VP of Exploration

Over 35 years of experience in uranium exploration in North and South America.



Scott Melbye Executive Vice President

38 years of experience in senior roles with uranium majors, Cameco, Uranium One, and Kazatomprom. President of Uranium Producers of America and former Chair of the World Nuclear Fuel Market.



Andy Kurrus

VP of Resource Development

Over 30 years experience with uranium exploration in the U.S.



Robert Underdown VP of Production - Texas

Has held senior operational positions at ISR uranium mines in Texas for over 35 years.



Craig Wall

VP of Environmental, Health & Safety

Over 15 years of permitting ISR projects in the U.S. ESG project manager. Chairman of Texas Mining & Reclamation Association uranium sub-committee.



Committee.

F. P. "Butch" Powell

VP of Marketing and Sales

More than 30 years' experience in

the nuclear fuel industry - also

serving as Chair of the Nuclear

Energy Institute's Fuel Suppliers

Investment Summary

- Total Resources of 266.1 M lbs. U₃O₈ (198.4 M&I / 67.7 Inf.)
- Production ready, low-cost In-Situ Recovery (ISR) mining with the largest resource base of fully permitted ISR projects of any U.S. based producer
- Production profile of 8.5 M lbs. U₃0₈ per year based on permitted and installed capacity of Wyoming and South Texas hub-andspoke operations¹
- Physical uranium program includes 5.8 M lbs. contracted U.S. warehoused uranium²
- UEC Wins \$17.85M Award to Supply U.S. Origin Uranium to U.S.
 DOE NNSA⁴
- Strong Balance sheet with \$110.5 million of cash and liquid assets, no debt³
- Geopolitical events and energy independence are placing a premium on North American supply

See Disclaimer on slide 2

(1) UEC news release Nov 17, 2022 (2) See UEC news release dated Dec 19, 2022. Inventory sales of 1,150,000lbs delivered U3O8 which is part of the contracted 5.8 M lbs. physical uranium at approx. \$38/lb avg cost with multiple deliveries between Mar 2021 to Dec 2025 (3) See UEC news release dated Dec 19, 2022 (4) See UEC news release dated Dec 20, 2022

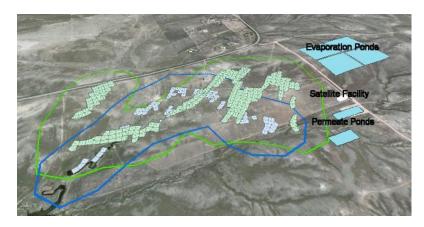


Ludeman ISR Project

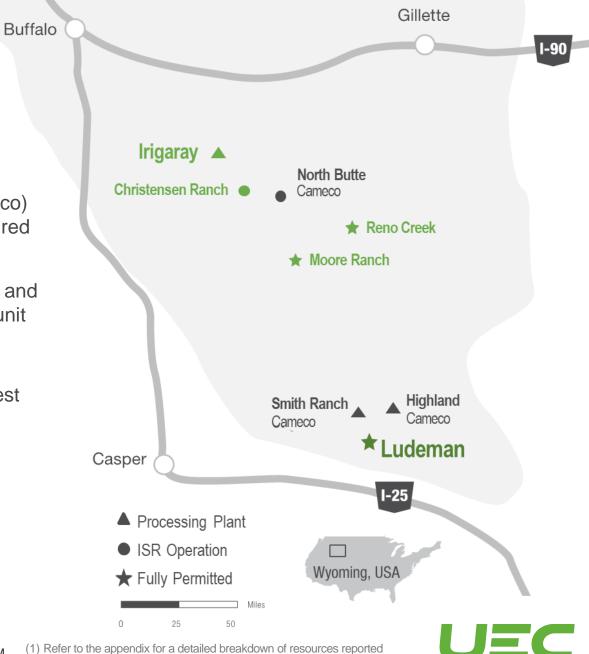
Permitted, Construction Ready

9.7 M lbs. M&I \mid 1.3 M lbs. Inferred U₃O₈⁽¹⁾

- Most of the project area was held by Power Resources (Cameco) until 2003, after which Energy Metals (precursor to U1A) acquired the properties
- Engineering completed for satellite plant facility, infrastructure, and evaporation ponds, with mine design completed for first mine unit
- Additional exploration upside along known uranium trends
- Satellite operation to Irigaray, 120 miles by road to the northwest



28 URANIUM ENERGY CORP | NYSE AMERICAN: UEC | URANIUMENERGY.COM



(1) Refer to the appendix for a detailed breakdown of resources reported under S-K 1300, note the Disclaimer on Slide 2, and refer to the Company's technical reports on SEDAR and EDGAR

Moore Ranch ISR Project

Permitted, Construction Ready

3.21 M lbs. M&I | 0.04 M lbs. Inferred $\rm U_3O_8^{(1)}$

- Fully permitted for 3 M lbs./yr full processing plant, although will be constructed and operated as a satellite to Irigaray CPP
- Delineation drilling and wellfield pattern design complete
- Pilot operations to determine wellfield flow conditions are successful
- Additional exploration upside along known uranium trends
- Satellite operation to Irigaray, 55 miles by road to the northwest





U**T**

(1) Refer to the appendix for a detailed breakdown of resources reported under S-K 1300, note the Disclaimer on Slide 2, and refer to the Company's technical reports on SEDAR and EDGAR

Palangana ISR Mine First Producing Mine **Proof of Concept**

\$10M

Initial CAPEX

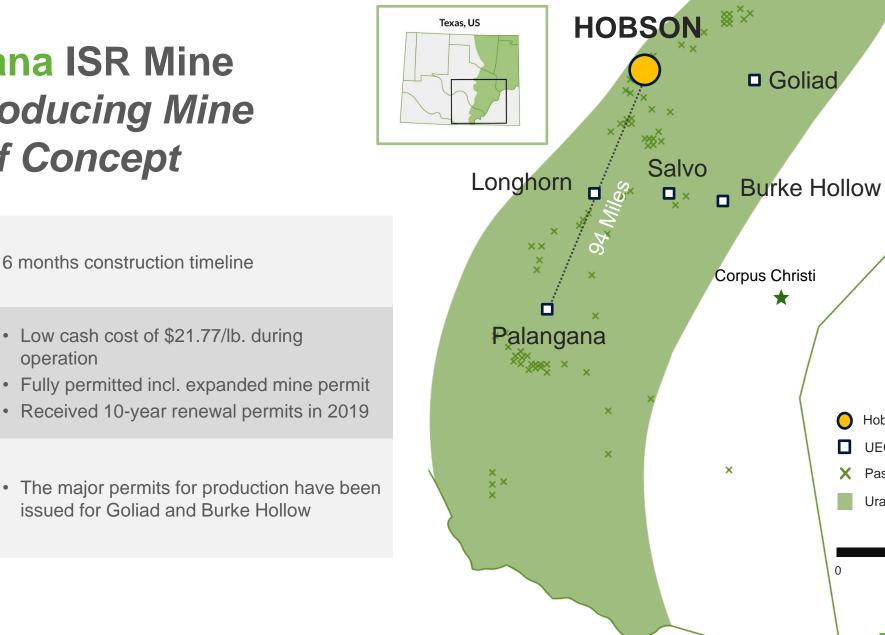
Production

Similar Costs

for Future

Projects

Ready



Hobson Processing Plant

Past Uranium Exploration

Miles

50

UEC Projects

Uranium Belt

25

Burke Hollow ISR Project, South Texas

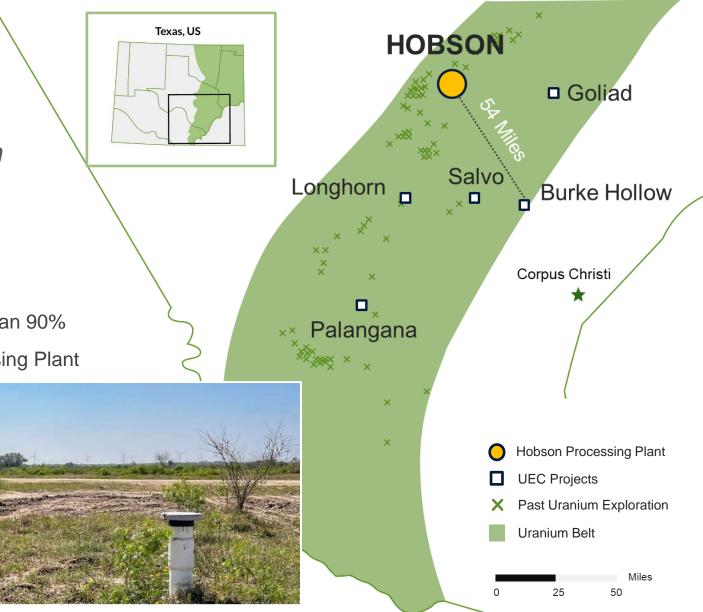
Advancing Towards Uranium Extraction

2.32 M lbs. M&I and 4.86 M lbs. Inferred U_3O_8 Resources⁽¹⁾

- Discovery of six trends since 2012
- Leach amenability testing indicates recovery greater than 90%
- ~20,000 acres located ~50 miles from Hobson Processing Plant
- 50% of the property unexplored

Final permits issued:

- ✓ Mine Production Area
- ✓ Two Class I disposal wells
- Aquifer Exemption
- Radioactive Materials License



Cased monitor wells in the Production Area 1, at Burke Hollow Project

See news releases dated July 27, Jan 26, Apr 14, 2022, and Oct 28, 2021.

31 URANIUM ENERGY CORP | NYSE AMERICAN: UEC | URANIUMENERGY.COM

(1) Refer to the appendix for a detailed breakdown of resources reported under S-K 1300, note the Disclaimer on Slide 2, and refer to the Company's technical reports on SEDAR and EDGAR



ISR District Opportunity in Paraguay

Similar geology as South Texas and leveraging ~\$50M of historic exploration work by Anschutz and Cameco, including new work completed by UEC.

Project	Historic Operator	Stage	SK-1300 Resource (M lbs)
Yuty	Cue Resources / Cameco	Exploration / Development	8.96 M lbs. in 9.074 Mt grading 0.049% U_3O_8 Indicated 2.20 M lbs. in 2.73 Mt grading 0.040% U_3O_8 Inferred ⁽¹⁾
Project	Historic Operator	Stage	Exploration Target (M lbs)
Oviedo	Anschutz Corp	Exploration	23 – 56 M lbs. in 28.9 - 53.8Mt grading 0.04% to 0.052% U ₃ O ₈ ⁽²⁾



(1) See news release dated July 20, 2022; refer to the SK-1300 TRS filed on July 19, 2022, on SEDAR and EDGAR

(2) Refer to slide 2 for definition



U.S. Conventional Mining

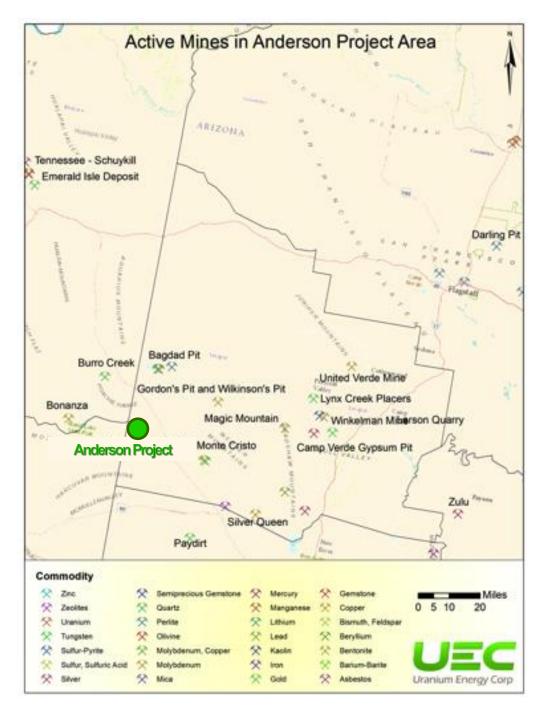
Anderson Project – Arizona

A Large U.S. Resource	 S-K 1300 Compliant Resource⁽¹⁾ Indicated Resource: 32.05 M lbs. within 16.17 Mt, avg. grade of 0.099%
8,268 Acres	Project located ~75 miles northwest of Phoenix, AZ
History	Between 1955-1958 with ~\$40M spent by previous operators, including Urangesellschaft
Extensive Work	Feasibility studies, milling studies, and hydrological reports previously completed by third parties

Workman Creek Project – Arizona

A Large U.S. Resource	 S-K 1300 Compliant Resource Inferred Resource: 5.542 M lbs. within 3.2 Mt, avg. grade of 0.086%
3,620 Acres	 Located within Gila County, in the central portion of the State of Arizona, USA Consists of 183 unpatented lode mining claims
History	Historic Operators include Wyoming Minerals Corp ("WMC"), a subsidiary of Westinghouse (1970-80's), Cooper Minerals Inc.(2004-05) and Rodinia Minerals (2005-10).
Extensive Work*	400 exploration and development holes, geological mapping, regional & detailed geochemical, petrographic, mineralogical paragenetic, metallurgical studies, and geophysical surveys which culminated in a positive feasibility study

33 URANIUM ENERGY CORP | NYSE AMERICAN: UEC | URANIUMENERGY.COM (1) Company's news release dated July 13, 2022



Nuclear Energy

Clean, Safe, Reliable & Economic

Perfect Compliment to Renewable Wind and Solar

Saves Lives and Improves Quality of Life



Reactor Demand Significantly Exceeds Primary Production

U.S. Uranium Production Needed to Fill Gap

2023 Demand expected ~ 194 M lbs.

2023 Production expected ~ 143 M lbs.

2023 Production gap is > 50 M lbs. below requirements

Cumulative gap in 2030 is ~345 M lbs. and ~454 M lbs. by 2032











Robust Nuclear Power Growth –

More than a doubling of nuclear generation by 2050¹¹

Global investments in nuclear energy generation are projected to average well over \$100 B per year through mid-century⁸



CHINA approves 6 new reactors⁹ and is planning for 70 GW of installed nuclear capacity by 2025, at least 150 new reactors in the next 15 years²

SOUTH KOREA incoming government will reverse the country's nuclear phaseout plan⁷

INDIA plans for 21 new reactors by 2031; 10 new plants over next 3 years⁵

JAPAN 33 operable reactors. Energy Plan targeting 20-22% nuclear power, nuclear deemed essential to achieve net-zero target by 2050. The majority of Japanese support restarting idled nuclear reactors for the first time in over a decade⁶ **U.A.E.** completed 3 reactors; 1 unit under construction³

RUSSIA is building 36 reactors in China, India, Bangladesh, Turkey, Egypt, Iran, Finland, Belarus, Slovakia, Armenia, Uzbekistan and Hungary

FINLAND New survey from Finnish Energy reveals that support for nuclear is higher than ever¹⁰ **U.K.** upgrading nuclear fleet to new advanced reactors - wants 25% of its electricity from nuclear power, signals a significant shift in the country's energy mix

FRANCE to build 6-14 new reactors⁴

U.S. has maintained a 20% market share for 30 years with power uprates and efficiency = to 32 new reactors – A Stealth Growth Story!



36 URANIUM ENERGY CORP | NYSE AMERICAN: UEC | URANIUMENERGY.COM

Source: (*) WNA Jan 4, 2023 (**) IAEA PRIS Jan 4, 2023; (1) WNA Fuel Report Apr 2022; (2) South China Morning Post Mar 24, 2022; Bloomberg Green Nov 2, 2021; (3) WNN; NEI Dec 2020, Mar 2021 (4) France 24, Feb 10, 2022 (5) Bloomberg Mar 28, 2022 (6) Power-Technology.com Mar 2022 (7) Financial Times Apr 13, 2022 (8) NEI.org - United Nations IPCC Report, Apr 2022 (9) AsiaNikkei.com, Apr 22, 2022 (10) TVO.FI May 13, 2022 (11) WNN Oct 27, 2022

Nuclear Power is Critical to U.S. Energy

Bi-Partisan Support – All-time high in public support with Democrat and Republican voters now both in favor of nuclear energy

Biden Administration wants Congressional approval allowing DOE to purchase \$4.3B of domestic uranium, conversion and enrichment - end U.S. reliance on nuclear fuel from Russia and support a U.S. supply chain for existing and new advanced reactors. The \$1.5B Strategic Uranium Reserve would likely be rolled into the new program

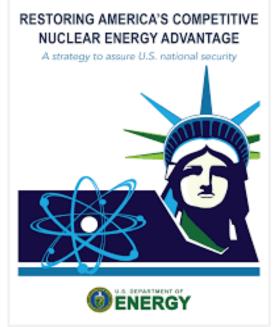
UEC Wins \$17.5M Supply Contract Award to Supply the U.S. Uranium Reserve

Bipartisan Infrastructure Bill Signed Into Law that provides a \$6B nuclear credit program for qualifying nuclear plants with priority given to reactors using uranium produced in the United States

The U.S. has set a goal to reach 100% carbon pollution-free electricity by 2035 – Nuclear Energy "Absolutely Essential" (US Energy Secretary Jennifer Granholm)

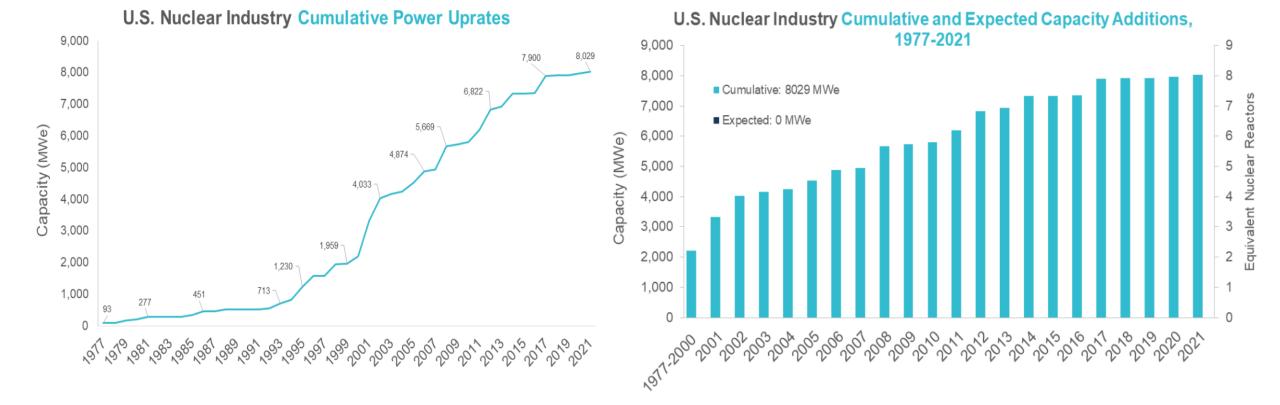
Largest Source of Carbon-Free Power Generation and Electricity

Virtually No U.S. Uranium Production Despite Operating the World's Largest Nuclear Reactor Fleet





U.S. Nuclear Power Uprates ~ 8 New Large-Scaled Reactors



Source: NEI.org, October 2022

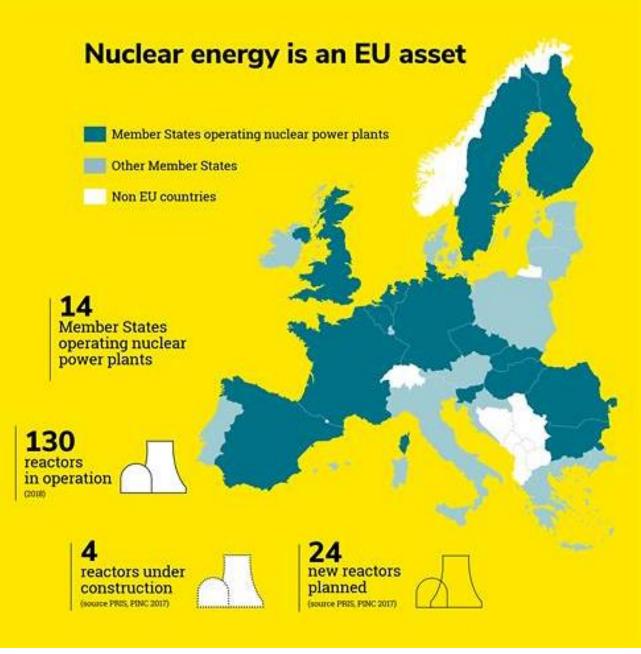
UEC

38 URANIUM ENERGY CORP | NYSE AMERICAN: UEC | URANIUMENERGY.COM

Global Approval for Nuclear Power Continues to Grow

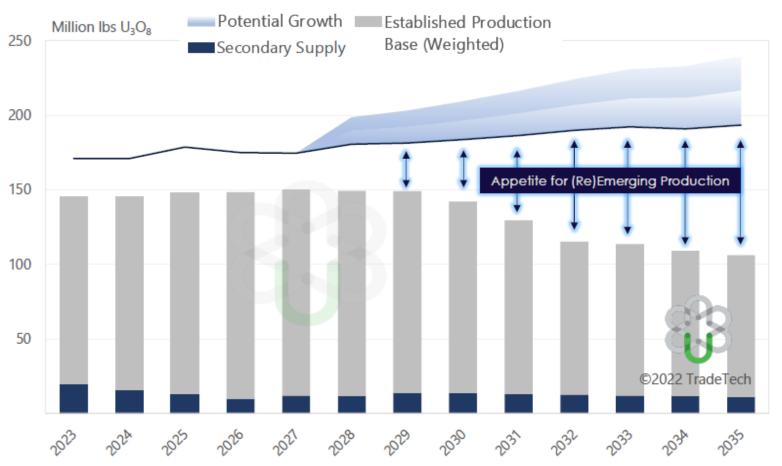
EU Taxonomy Includes Nuclear as an Environmentally Sustainable Investment





Global Supply & Demand Existing Primary Production + Secondary Market Supply

- Inventory overhang drawing down more rapidly than expected
- Secondary supply from Russia to western nations will be reduced/ eliminated
- Enrichment underfeeding likely to change to overfeeding - increasing uranium demand
- New production requires permitting and development lead times for new mines



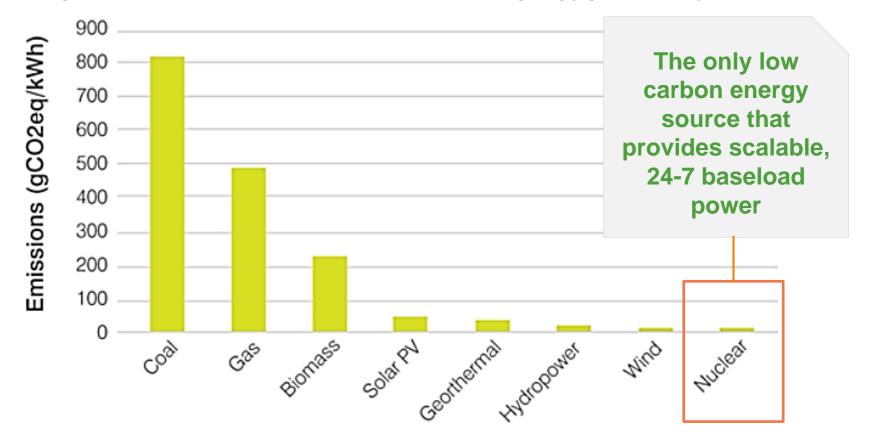
*2022 Q2 U3O8 Requirements reflect Western reactor requirements, inventory maintenance, and potential growth tied to national carbon reduction schemes.



Source: TradeTech October 2022

Nuclear Power = Carbon Free - Clean Energy America's Largest Clean Energy Source

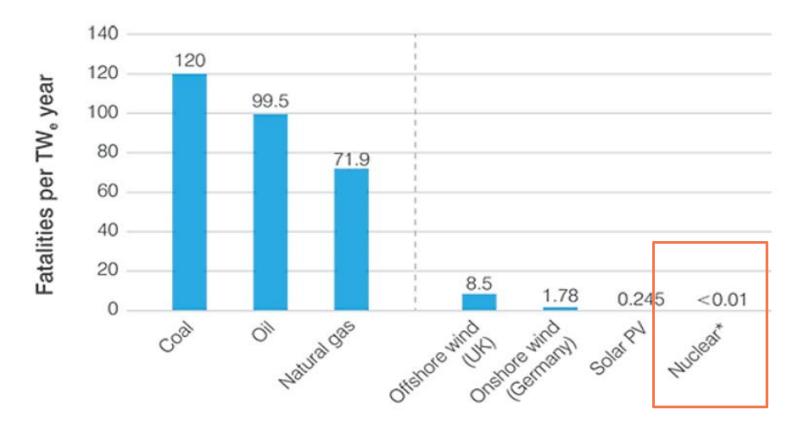
Life-cycle carbon emissions from selected electricity supply technologies





Nuclear Power = Safest Form of Electricity Generation

Nuclear has the lowest energy accident fatalities for OECD countries



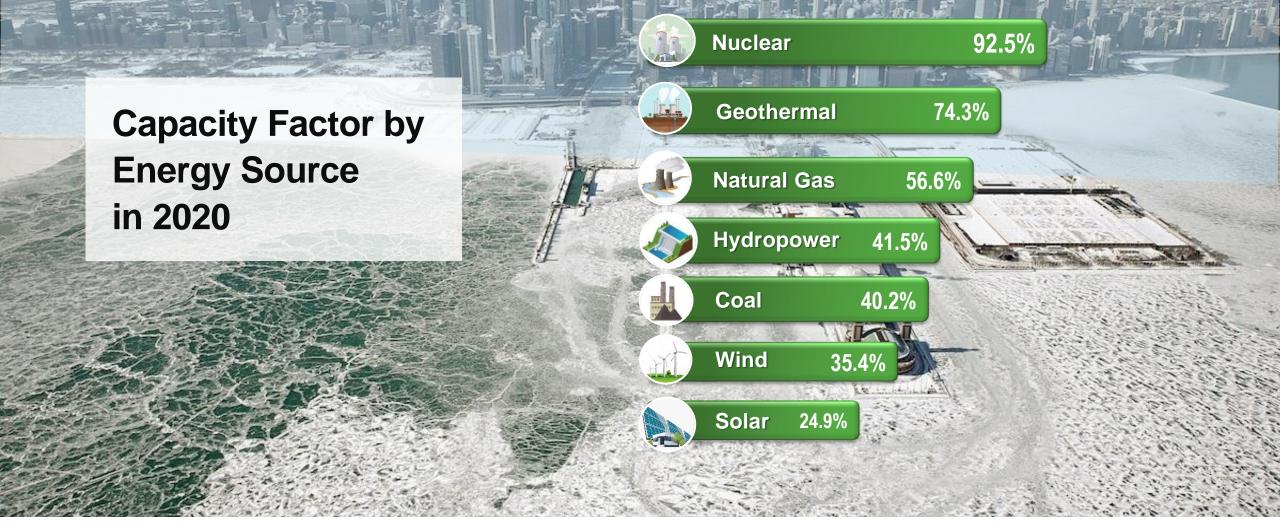
"Nuclear energy is the safest of all the electricity technologies we have."

- Patrick Moore, former director of Greenpeace(1)

Source: World Nuclear Association - Harmony Program (1) Nuclear NewsWire July 13, 2022



2021 Polar Vortex – Nuclear Reliability at 95%



Source: U.S. Energy Information Administration

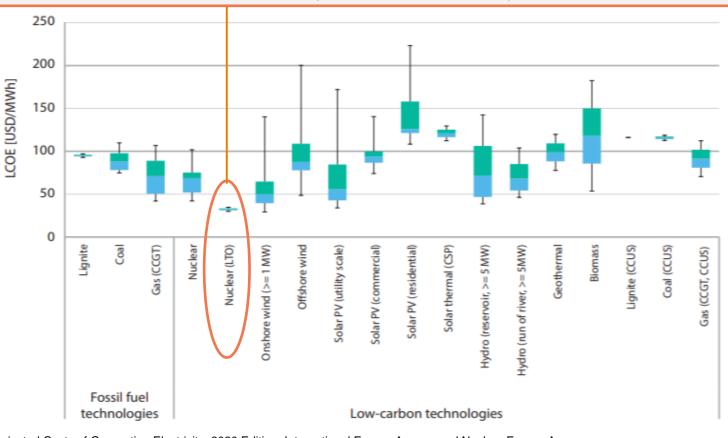


43 URANIUM ENERGY CORP | NYSE AMERICAN: UEC | URANIUMENERGY.COM



Nuclear Power = Lowest Levelized Cost of Electricity For Extended Life Plants vs any Other Source

Most nuclear plants in the U.S. have or will extend their operational lives by at least 20 - 40 years¹



Projected Costs of Generating Electricity, 2020 Edition, International Energy Agency and Nuclear Energy Agency (2,3) WNFC Apr 2022, Constellation Presentation "A Utility View on Nuclear Fuel Supply Risk Management"
 URANIUM ENERGY CORP | NYSE AMERICAN: UEC | URANIUMENERGY.COM

80 years

Second license renewals will extend carbon-free production to 80-years³

more than 3x the useful life of renewables

2x the useful life of coal

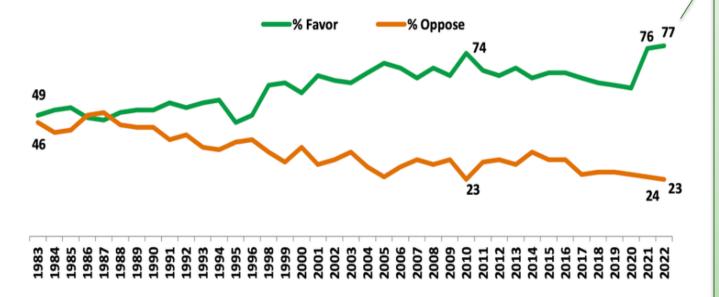
Uranium accounts for < 10% of nuclear operating costs²

UEC

Support for Nuclear Energy is Strong and Increasing

Favorability to Nuclear Energy 1983-2022

Overall, do you strongly favor, somewhat favor, somewhat oppose the use of nuclear energy as one of the ways to provide electricity in the United States?



- 86% agreed that we should renew the license of nuclear power plants that continue to meet federal safety standards
- 84% agreed that our nation should prepare now so that advanced design nuclear power plants
- 72% agreed we should definitely build more nuclear power plants in the future

ECONOMIC BENEFITS









Source: www.bisconti.com/blog/public-opinion-survey-finds

Small Modular Reactor (SMR) An Important Emerging Market

Small Modular Reactors (SMR's)

Scalable, factory-built, smaller footprint, flexible operations, manageable investments, cost competitive, unique applications

Advanced Reactors

Leverages pros/cons of previous designs, takes advantage of technological and material advances, fuel cycle advances, higher efficiencies

New Applications

Hydrogen production, clean water through de-salinization, transportation, waste solutions, medicine

300 SMRs (90 GWe of nuclear power) expected to be added to the U.S. grid over the next 25

years - would double today's U.S. nuclear output, NEI recent Chief Nuclear Officers poll ⁽¹⁾







(1) NEI – Nuclear Energy Overview - June 22, 2022; Photo: Wyoming Gov. Mark Gordon (left), with U.S. John Barrasso, R-Wyo., at the Wyoming Capitol announcing efforts to advance a Natrium reactor demonstration project in Wyoming;

46 URANIUM ENERGY CORP | NYSE AMERICAN: UEC | URANIUMENERGY.COM



Uranium Supply Removed from the Market Restricted Primary Supply 2016 – 2035

% Sequestered vs 2016 Restricted Primary Supply (Mlbs U_3O_8) 1200% -10 Sequestered (Aggregated) -30 COVID-19 Impacted Operations 900% -50 Reduced Operations (2016-2022) -70 Suspended (C&M) 600% IGPI[™] Depleted (Aggregated) -90 Estimated ~100 million lbs U308 sequestered by 2026; 838 ~900% increase over 2016 levels -110 © 2022 TradeTech *Assumes annual exercising of Yellow Cake's 300% -130 Framework Agreement with Kazatomprom; does not account for additional purchasing from UPC, URC, Denison Mines, UEC, Boss Energy, enCore Energy or -150 other physical funds; does not account for sequestered pounds sold into uranium spot or term markets -170 0% between 2021-2026. 2016 2018 2012 2020 2021 2022 2022 2022 2025 2026 2021 2028 2020 2030 2031 2032 2033 2035 2034

Sequestered, Suspended, Covid, Operational & Depletion Reductions

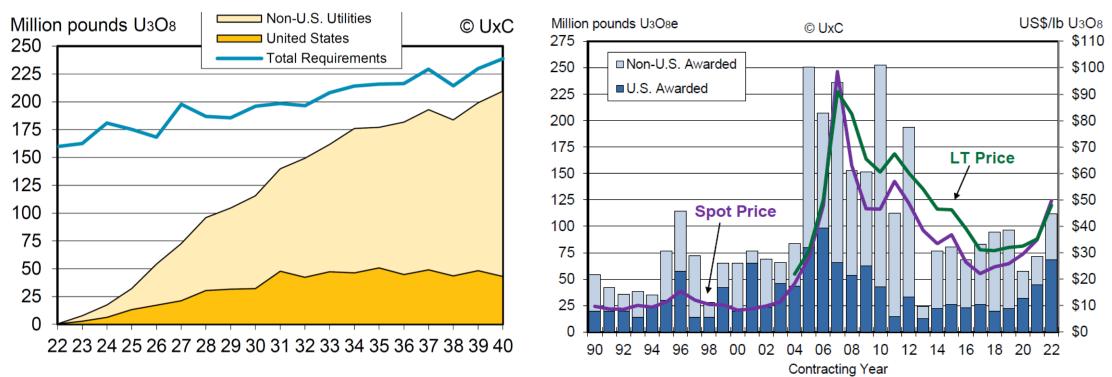
Source: TradeTech, October 2022

47 URANIUM ENERGY CORP | NYSE AMERICAN: UEC | URANIUMENERGY.COM



Utility Procurement Cycle: Old Contracts Rolling Off...New Contracts Need to be Signed

1.3 Billion Pounds of Contracting needed by 2035!



Utility Uncommitted Demand

Historic Long-Term Contracting

Source: UxC Market Outlook Q4 2022

Bottom Line - Positive Market Outlook

- Demand Growth 65 reactors added to grid in past 9 years; 60 reactors under construction nuclear generation has recovered to pre-Fukushima levels – More new reactors are planned
- Strategic Interest Growing in Physical Inventory Producers, Developers, Financial buyers
- The Department of Energy's historic announcement to purchase 17-19 M lbs. U.S. mined U₃O₈
 UEC wins 300,000 lbs of DOE's initial 1 M lbs. domestic uranium purchase
- Strong Bipartisan Support for Nuclear Energy, Included in U.S. Energy Carbon Free Goals, Clean Energy Standard, American Jobs Plan
- ✓ **Utility Procurement Cycle Starting to Unfold** "New" fundamentals have not been tested
- ✓ **Underinvestment and Supply Cutbacks** significant primary supply deficit
- ✓ Lead Time to Advance Large New Mines can be 10 years or longer.
- Accelerated Market Re-Balancing Growing primary production shortfall exists. Russian Invasion of Ukraine is resulting in a reduction of nuclear fuel supply to Western nations



Appendix



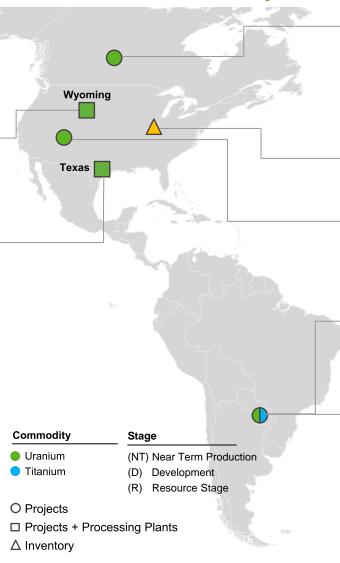
Total Resources of 198 M lbs. U_3O_8 as M&I and 68 M lbs. U_3O_8 as Inferred Largest, Diversified Resource Base in the Western Hemisphere

Processing Plants									
Wyoming Irigaray Plant – 2.5 M lbs./year licensed capacity									
Texas Hobson Plant – 4 M Ibs./year production capacity									
Wyoming Hub and Spoke ISR P	ortfolio	(S-K 1300	compliant) ⁽						
Project Name	Stage	Resou	rces (M lbs.)						
Froject Name	Slaye	M&I	Inferred						
Christensen Ranch (Fully Permitted)	(NT)	12.7	0.99						
Ludeman (Fully Permitted)	(NT)	9.71	1.26						
Moore Ranch (Fully Permitted) 3 M lbs./year production capacity	(NT)	3.21	0.04						
Reno Creek (Fully Permitted) 2 M lbs./year production capacity	(NT)	26	1.49						
Irigaray (Partially Permitted)	(D)	5.89	0.14						
Allemand-Ross	(R)	0.46	2.49						
Barge	(R)	4.36	0						
Clarkson Hill	(R)	0	1.11						
Jab/West Jab	(R)	2.73	1.68						
Nine Mile Lake	(R)	0	4.31						
Red Rim	(R)	1.14	1.54						
Total in All Categories		66.2	15.1						

Texas Hub & Spoke ISR Portfolio (S-K 1300 compliant)⁽¹⁾

Project Name	Store	Resources (M lbs.)				
Project Name	Stage	M&I	Inferred			
Palangana (Fully Permitted)	(NT)	0.64	1.0			
Goliad (Fully Permitted)	(NT)	6.16	1.22			
Burke Hollow (Fully Permitted)	(NT)	2.32	4.86			
Salvo	(R)	0	2.84			
Total in All Categories		9.12	9.92			

51



Canadian Portfolio (S-K 1300 compliant) ⁽²⁾								
Project Name	Stage	Resour M&I	ces (M lbs.) Inferred					
Shea Creek	(R)	33.18	13.78					
Millennium	(R)	11.42	4.36					
Horseshoe Raven	(R)	37.43	0					
Christie Lake	(R)	0	16.84					

Inventory

5.8 M lbs. U.S. warehoused U_3O_8 in physical uranium portfolio³

U.S. Hardrock Pipeline			
Project Name	Stage	Resou M&I	urces (M lbs.) Inferred
Anderson	(R)	32.0	0
Workman	(R)	-	5.5

Paraguay ISR Uranium Portfolio

Broject Name	Store	Resources (M lbs.)			
Project Name	Stage	M&I	Inferred		
Yuty	(R)	8.9	2.2		
Oviedo	(R)	23 - 56 Exploration target			
Paraguay Titanium Busines	S				
Alto Paraná					

4.94 Billion Tons Grading 7.41% TiO_2 and 23.6% Fe_2O_3

Strategic Equity Interest

URANIUM ROYALTY CORP 15% equity stake in Uranium Royalty Corp.



URANIUM ENERGY CORP | NYSE AMERICAN: UEC | URANIUMENERGY.COM

(1) Refer to technical reports on SEDAR and EDGAR, or Company's website, for a detailed breakdown of S-K 1300 resources and Disclaimer on slide 2 (2) Refer to the appendix for detailed breakdown of current Canadian resources reported under S-K 1300 (3) See UEC news release dated Dec 19, 2022. Inventory sales of 1.15 M lbs. delivered U3O8 which is part of the contracted 5.8 M lbs. physical uranium at approx. \$38/lb avg cost with multiple deliveries between Mar 2021 to Dec 2025

UEC U.S. and Paraguay Resource Summary⁽¹⁾



	Meas	sured Resou	urces	Indi	cated Reso	urces	M+I		Inferred		Exp	oloration Targe	ət		Historic**	
PROJECTS	Tons ('000)	Grade (% U3O8)	lbs. U3O8 ('000)	Tons ('000)	Grade (% U3O8)	lbs. U3O8 ('000)	lbs. U3O8 ('000)	Tons ('000)	Grade (% U3O8)	lbs. U3O8 ('000)	Tons ('000)	Grade (% U3O8)	lbs. U3O8 ('000)	Tons ('000)	Grade (% U3O8)	lbs. U3O8 ('000)
ARIZONA																
Anderson				16,175	0.099	32,055	32,055									
Los Cuatros														30,000	0.02	12,000
Workman Creek								3,222	0.09	5,542						
NEW MEXICO																
Dalton Pass														2,530	0.09	4,430
C de Baca																500
WYOMING																
Reno Creek	14,990	0.043	12,920	16,980	0.039	13,070	25,990	1,920	0.039	1,490						
Irigaray				3,881	0.076	5,899	5,899	104	0.068	141						
Christensen Ranch				6,555	0.073	9,596	9,596			0						
Moore Ranch	2,675	0.06	3,210				3,210	46	0.047	44						
Ludeman	2,674	0.091	5,017	2,660	0.088	4,697	9,714	866	0.073	1,258						
Allemand-Ross	246	0.083	417	32	0.066	42	459	1,275	0.098	2,496						
Barge				4,301	0.051	4,361	4,361			0						
Jab/West Jab	1,621	0.073	2,335	253	0.077	392	2,727	1,402	0.06	1,711						
Charlie				1,255	0.12	3,100	3,100	411	0.12	988						
Clarkson Hill							0	957	0.06	1,113						
Nine Mile Lake							0	3,405	0.04	4,308						
Red Rim				337	0.17	1,142	1,142	473	0.16	1,539						
Remaining Wyoming District																72,476
TEXAS																
Burke Hollow	70	0.082	115	1,337	0.087	2,209	2,324	2,494	0.098	4,859	3,000 to 6,000	0.03 to 0.06	1,800 to 7,200			
Goliad	1,595	0.053	2,668	1,504	0.102	3,492	6,160	1,547	0.05	1,501						
La Palangana				232	0.134	643	643	302	0.18	1,001						
Salvo								1,200	0.08	2,839						
PARAGUAY																
Yuty				9,074	0.050	8,962	8,962	2,733	0.04	2,203						
Oviedo							0				28,900 to 53,800	0.04 to 0.05	23,100 to 56,000			
TOTALS	23,871		26,682	64,576		89,660	116,342	22,357		32,722	31,900 to 69,800	0.04 to 0.06	24,900 to 63,200	32,530	0.1*	89,406

(1) Note to Investors. Measured, Indicated and Inferred Resources are estimated in accordance with SEC SK-1300 (*) Weighted averages URANIUM ENERGY CORP | NYSE AMERICAN: UEC | URANIUMENERGY.COM

52

Canadian Attributable Resource Summary

S-K 1300 Resources ⁽¹⁾							
Project	Ind	icated Resourc	ces	Inferred Resources			
	Tonnes (000's)	Grade (% U ₃ O ₈)	M Ibs. U ₃ O ₈	Tonnes (000's)	Grade (% U ₃ O ₈)	M Ibs. U ₃ O ₈	
Christie Lake	-	-	-	488	1.57%	16.84	
Horseshoe-Raven	10,353	0.16%	37.43	-	-	-	
Shea Creek	1,009	1.49%	33.18	616	1.01%	13.78	
Millennium	217	2.39%	11.42	62	3.19%	4.36	
Total	11,579	0.32%	82.02	1,165	1.36%	34.98	

(1) Note to Investors. The mineral resource estimate has been prepared using industry accepted practice and conforms to the disclosure requirements of S-K1300.



Uranium One Americas

Location, History, Origin	 Located in Wyoming, U.S. strategic uranium mine region Development of uranium properties commenced in 1970's 2007 – U.S. assets including Wyoming properties acquired from EMC for \$1.5B 2010 – Willow Creek and Texas operations, acquired from COGEMA for \$38M 2021 – Acquired by UEC for \$112 million in cash, with an additional \$2.9 M in estimated working capital and the assumption of \$19 M in reclamation bonding (the "Acquisition") 							
Properties	 Powder River Basin Irigaray and Christensen Ranch (Willow Creek) Moore Ranch (Incl. Ross Flats and Pine Tree) Ludeman Allemand-Ross Barge 	Great Divide Basin Antelope Crooks Creek Cyclone Rim JAB/West JAB Twin Buttes						
Resources:	Total S-K 1300 Resources ¹ : 42 M Ibs U3O8 (37.6 M Ibs. M&I, 4.3 M Ibs. Inferred) ¹							
Plants & Equipment	 Central Processing Plant at Irigaray: Licensed for 2.5 M lbs/yr Satellite Processing Plant at Christensen Four Installed Partially Mined Wellfields at Christensen ready for restart 							
Other	 Resin Processing Agreement in place with 3rd party at Irigaray through 2024. Potential revenue due from previous sale of conventional and non-core ISR assets Extensive and detailed U.S. uranium database 							







(1) See UEC news release dated Dec 20, 2021. Refer to the appendix for a detailed breakdown of resources reported under S-K 1300, note the Disclaimer on Slide 2, and refer to the Company's technical reports on SEDAR and EDGAR



UEC Acquisition of UEX - Doubling of UEC's Underlying Resources

Adds significant uranium resources in a prospective and politically stable mining jurisdiction

	UEC		Pro Forma	
Key Locations	Texas, Wyoming	Athabasca Basin	Texas, Wyoming, Athabasca Basin	Adds breadth to diverse portfolio of assets
Key Projects	Burke Hollow, Palangana, Reno Creek, Irigaray, Christensen Ranch, Ludeman	Christie Lake, Horseshoe- Raven, Millennium, Wheeler River, Shea Creek, Kiggavik	Reno Creek, Christie Lake, Horseshoe-Raven, Burke Hollow, Millennium, Wheeler River, Irigaray & Christensen Ranch, Kiggavik, Shea Creek	in politically stable mining jurisdiction
Attributable M&I (inclusive) U ₃ O ₈ Resources	75.3 M lbs. ^{1,3}	82.0 M lbs. ^{2,3}	157.3 M lbs. ^{2,3}	More than doubles existing uranium
Attributable Inferred U ₃ O ₈ Resources	25.0 M lbs. ^{1,3}	35.0 M lbs ^{2,3}	60 M lbs. ^{2,3}	resources on a pro forma basis ^{1,2}

Note: Excludes UEC's Alto Paraná titanium-vanadium asset

(1) Prior to asset swap agreement with Anfield Energy; see press release dated June 8, 2022

(2) Refer to appendix for detailed breakdown of UEC's current S-K 1300 Canadian resources, note the Disclaimer on Slide 2, and refer to the Company's technical reports on SEDAR and EDGAR. Excludes

Kiggavik, Wheeler River, and West Bear deposit

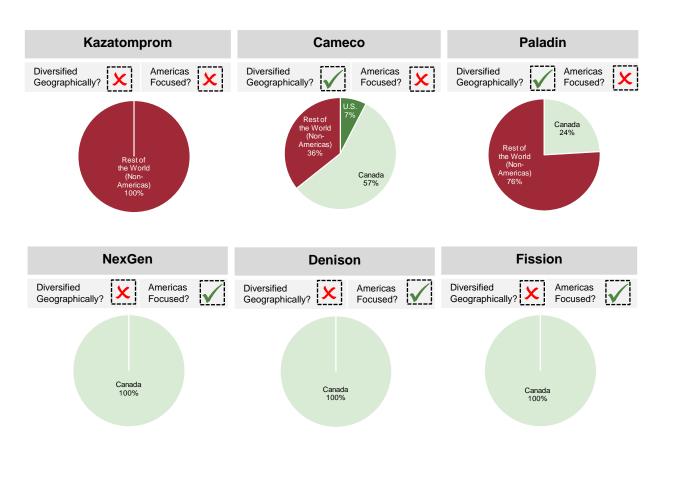
(3) The mineral resource estimate has been prepared using industry accepted practice and conforms to the disclosure requirements of S-K1300.

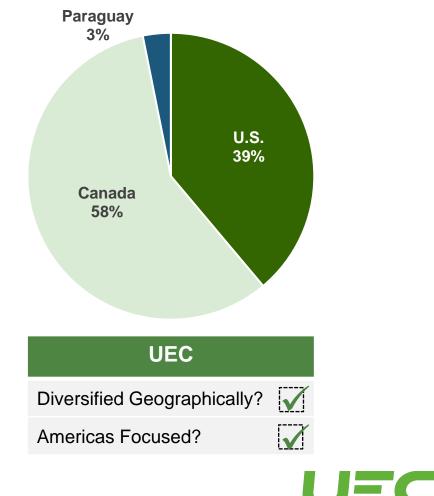


Largest Diversified Americas-Focused Uranium Portfolio

Combining U.S. Production and Canadian Development Assets

Attributable M&I (inclusive) Resources by Geographic Region, incl. Non-Current





Source: Company filings



URANIUM ENERGY CORP

Toll Free: (866) 748-1030 info@uraniumenergy.com www.uraniumenergy.com

Corporate Office 500 North Shoreline Ste. 800N Corpus Christi, TX 78401

Tel: (361) 888-8235 Fax: (361) 888-5041

Investor Relations: Bruce J. Nicholson

President and CEO: Amir Adnani

Executive Vice President Scott Melbye

UEC: NYSE American