

LARGEST & DIVERSIFIED NORTH AMERICAN FOCUSED URANIUM COMPANY

Corporate Presentation – October 2023



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

\$566 Million

Accretive Acquisitions(1)

North American Resource & Infrastructure

Rosatom's Uranium One Americas, UEX, Rio Tinto's Roughrider Project, and a portfolio of Canadian uranium exploration projects from Rio Tinto

226.2 M lbs. M&I 102.7 M lbs. Inferred

U₃O₈ Resources⁽²⁾

Creating the Largest Diversified North American Focused Portfolio

3x increase of total resources

4x increase of production capacity

8.5 M lbs. U₃O₈ U.S. Licensed Capacity/ Year⁽³⁾

Largest, Fully Permitted, Low-Cost ISR Projects Resource Base of Any U.S. Based Producer

\$192.3 Million

Cash & Liquid Assets(4)

Strong Balance Sheet, No Debt

\$163.95 Million Gross Revenue

with gross profit of \$49.60 Million

for the fiscal year ending July 31, 2023

Physical Uranium Portfolio(5)

Cumulative to Sep 28, 2023:

Purchased 4.12 M lbs. at avg. cost of \$35.12/lb.

Sold 3.15 M lbs. at avg. price of \$52.05/lb.⁽⁴⁾

Inventory on hand: 466,000 lbs. at avg. price of \$34.17/lb.

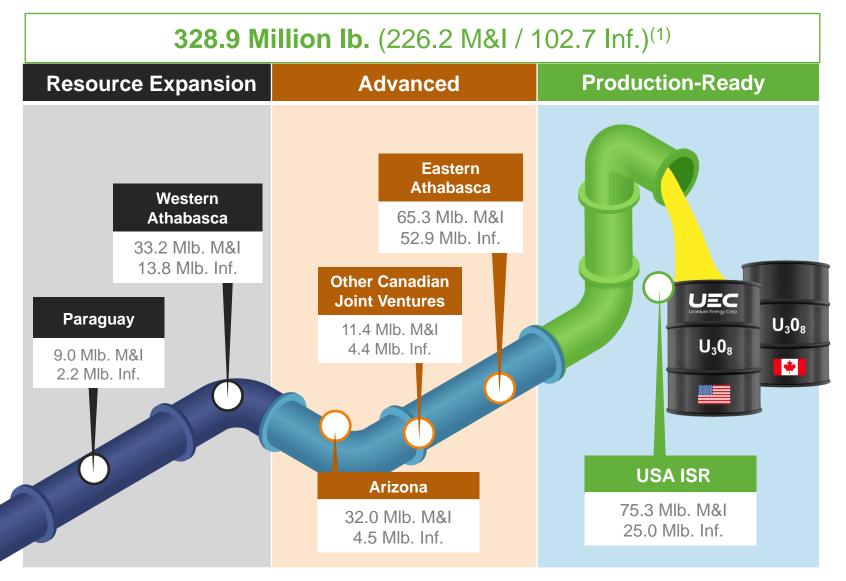
1.5 M lbs. to be received through Dec 2025 at avg. cost of \$48.09/lb.

3 URANIUM ENERGY CORP | NYSE AMERICAN: **UEC** | **URANIUM**ENERGY.COM

1) UEC press release dated Oct 12, 2022; \$340 M in acquisitions was completed in the FY 2023 as of July 31, 2023 (2) Does not include the Kiggavik, Wheeler River, or West Bear project resources. Refer to appendix for a detailed breakdown of resources reported under S-K 1300, note the Disclaimer on Slide 2, and the Company's technical reports on SEDAR and EDGAR (3) UEC press release dated Nov 17, 2024 (5) As of Sep 28, 2023, see UEC press release dated Sep 29, 2023



Creating Value by Delivering on our Pipeline







Texas Hub & Spoke ISR Portfolio

⁽¹⁾ Does not include the Kiggavik, Wheeler River, or West Bear project resources. 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 Wins Award from the U.S. Department of Energy to Supply 300,000 lbs. U₃O₈ at \$59.50/lb. to the Strategic Uranium Reserve

UEC U.S. domestic production pipeline with permitted Texas and Wyoming assets

- 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 was made in the first quarter of 2023
- The \$17.85 M sale to DOE was concluded in the first quarter of 2023 with a 300,000 pound of delivery of unobligated U.S. origin U₃O₈





Sanctions on Uranium Imports from Russia

Feb 7, 2023 - Legislation to ban the import of Russian uranium into the United States was introduced by the U.S. House Energy and Commerce Committee and the U.S. Senate Energy and Natural Resources Committee with similar terms on March 9, 2023.



Members of the U.S. Senate committee sponsoring the legislation stated:

"The time is now to permanently remove all Russian energy from the American marketplace"

"It is absolutely imperative that we cut off all Russian imports, including uranium"

"Imports from Russia and its allies, Kazakhstan and Uzbekistan, account for nearly half of the uranium powering the United States' nuclear plants.

This high level of dependence on foreign uranium was threatening our national interest and national security before Russia invaded Ukraine, now it's simply unacceptable"

Feb 2, 2023 - The European Parliament passed a resolution with 489 votes in favour that:

"calls for an immediate and full embargo on EU imports of Uranium from Russia and sanctions on Russia's Rosatom"

The ultimate resolution will fall to individual member states





U.S. Bipartisan Legislation (Pending)

The Bipartisan Amendment of U.S. National Defense Authorization Act for Fiscal Year 2024 Approved(1)

July 31, 2023 - The US Senate has voted by 96-3 to approve legislation that would strengthen domestic nuclear fuel production and ensure that disruptions in uranium supply will not impact the development of advance reactors or the operation of the USA's existing power reactor fleet.



The amendment will require the US Department of Energy (DOE) to begin acquiring at least 100 tonnes of low-enriched uranium per year, entering into at least two contracts by the end of 2026. It also requires DOE to begin acquiring at least 20 tonnes per year of HALEU by the end of 2027.

The programme must utilize only uranium "produced, converted, enriched, deconverted, and reduced" in the USA, or, if this is not practicable, a country that is an ally or partner of the USA.

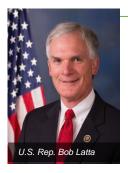
The bipartisan amendment to the National Defense Authorization Act for Fiscal Year 2024 was introduced to Congress in Feb 2023 by Senators Joe Manchin, John Barrasso and Jim Risch.



"Finally, the United States is going to start taking care of its own and producing the enriched uranium we need rather than depending on Russia. It's long past due, and we finally, with this amendment, will get started in the right direction", Senators Joe Manchin

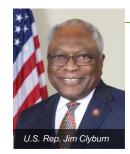
Bipartisan Nuclear Fuel Security Act Re-Introduced(2)

Sep 26, 2023 - Legislation would establish and expand U.S. nuclear fuel programs to boost domestic nuclear fuel capabilities and innovation



"To mitigate this issue, we should harness the power of nuclear fuel – which is both clean and renewable – to meet the energy needs of the American people.

Right now, unfortunately, we import 90 percent of the uranium fuel used in our domestic nuclear reactors from foreign countries. To avoid threats to our nuclear supply chain, it's critical we take action to reinvest in our domestic nuclear energy capabilities – and it begins with shoring up our domestic uranium mining, production, enrichment, and conversion capacity.", U.S. Representatives Bob Latta (R-OH5).



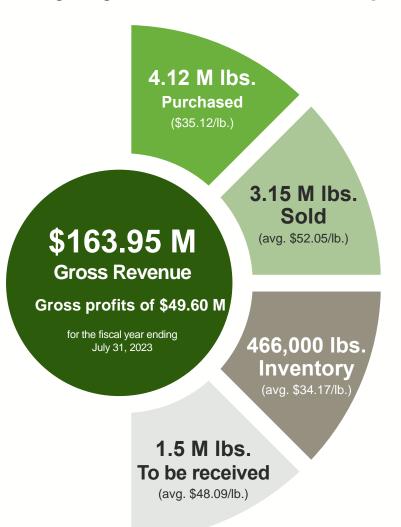
"We will not achieve full energy independence or unlock the economic and security benefits that come with it without investing in a strong domestic nuclear industry.

Strengthening our ability to produce nuclear fuel on American soil will reduce our reliance on Russia and bring us one step closer towards detangling our web of energy dependence in an ever-changing world.", Assistant Democratic Leader James E. Clyburn (D-SC6) said.



Physical Portfolio - North American Warehoused Uranium

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

Cumulative as of September 28, 2023:

Purchased 4.12 M lbs. at avg. cost of \$35.12/lb.

Part of the contracted 5.9 M lbs. at approx. \$38.95/lb. avg. cost with multiple deliveries between Mar 2021 to Dec 2025

466,000 lbs. Inventory on hand⁽²⁾

At an average cost of \$34.17/lb.

Sold 3.15 M lbs. at avg. sales price of \$52.05/lb. (1)

Sold at 0.81/lb. above avg. spot price (\$51.24/lb. over the period), gross profits of \$49.60 M

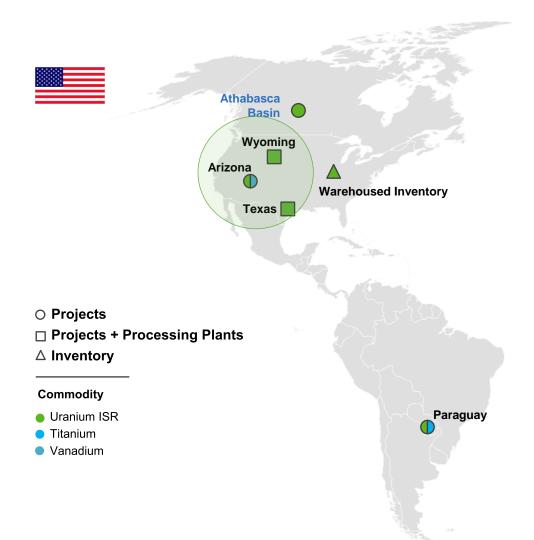
1.5 M lbs. to be received at an avg. cost of \$48.09/lb. (2)

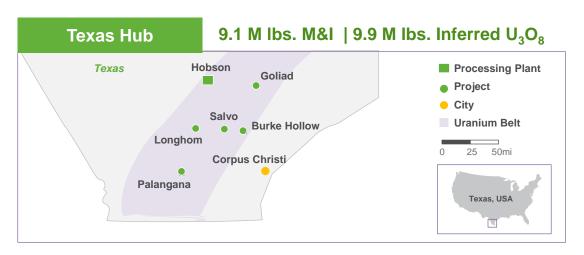
To be received by UEC at an avg. cost of ~\$48.09/lb. with various delivery dates through Dec 2025

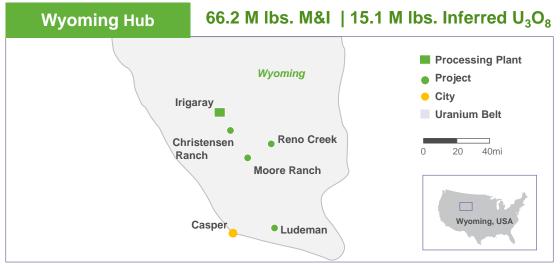


U.S. ISR Production Platform

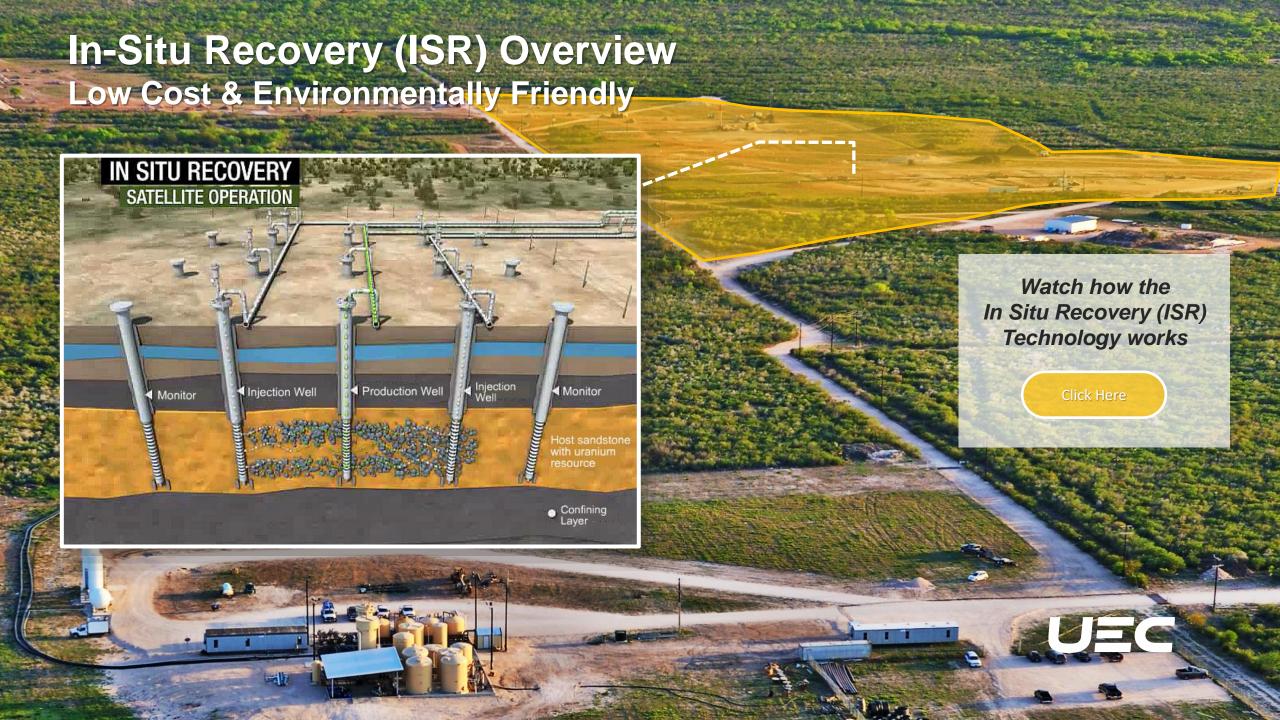
7 Fully Permitted Projects in Texas and Wyoming











UEC Acquires Uranium One Americas for \$112 Million Cash

Transformative Acquisition



Creating America's Leading Uranium Mining Company









Highly Accretive Transaction

- Doubling production capacity by total number of permitted U.S. ISR projects, resources and processing infrastructure
- Anticipated capital expenditures savings



Positioned to lead resurgence of U.S. uranium production

- Resulting Wyoming Hub & Spoke platform forms largest S-K 1300 uranium resource reported in the U.S.⁽²⁾
- Production re-start platform with fully permitted projects



Proven Production with Significant Past Investment

- 6 million lbs of historic ISR production
- Over \$400 million of capital deployed by U1A since 2009 on the Wyoming projects



Resource **Expansion Potential**

- Dominant land package
- Adds ~100.000 acres across Wyoming's prolific Power River and Great **Divide Basins**



⁽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

Texas & Wyoming Hub & Spoke Platform Fully Permitted



- Uranium Projects
- Processing Plants



Wyoming Hub & Spoke ISR Portfolio

Irigaray Processing Plant

Licensed Production Capacity of 2.5 M lbs./yr (Plans to increase to 4 M lbs./year licensed capacity)

7 satellite projects
(4 Permitted)

66.2 M lbs. M&I 15.1 M lbs. Inferred

U₃O₈ 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./yr

5 satellite projects
(3 Permitted)

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

U₃O₈ resources

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



Irigaray & Christensen Ranch

Licensed Capacity of 2.5 M lbs. Per Year

(Plans to increase to 4 M lbs./year licensed capacity)

18.95 M lbs. Indicated and

1.13 M lbs. Inferred U₃O₈ Resources⁽¹⁾

July 2023: UEC Completes Restart Program at the **Christensen Ranch ISR Project in Wyoming**

- Steps for operations resumption at Christensen Ranch ISR Project have been completed⁽²⁾
- Completed the first phase of the resource expansion drilling campaign - 51 holes were drilled at Irigaray and south of Christensen Ranch Mine(3)
- Christensen Ranch ISR Project is the first project ("Spoke") to feed the Irigaray CPP Hub
- Infrastructure & production ready: 4 fully installed wellfields. Additional drilling and well installation program to commence in August 2023, providing a ramp-up for production requirements



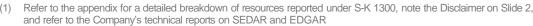








Christensen Ranch Mine Unit 8&10



⁽²⁾ See UEC news release dated July 12, 2023 (3) See UEC news release dated July 31, 2023

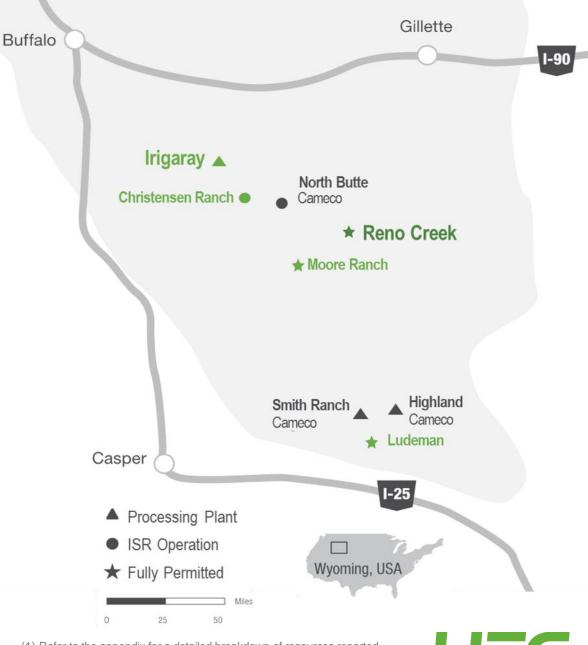


Reno Creek ISR Project

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



(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

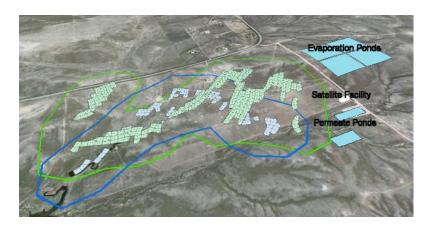


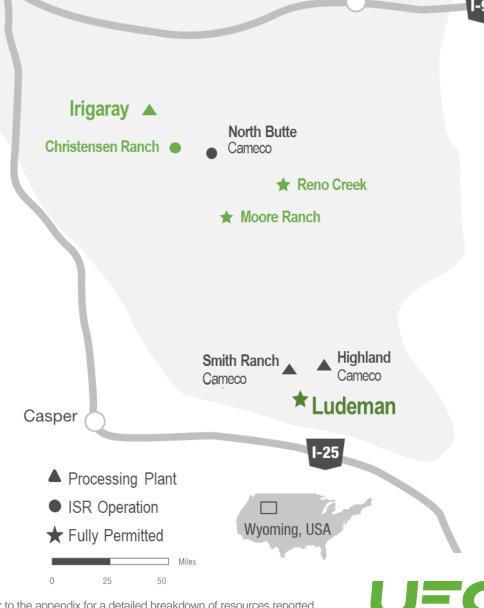
Ludeman ISR Project

Permitted, Construction Ready

9.7 M lbs. M&I | 1.3 M lbs. Inferred $U_3O_8^{(1)}$

- 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





Buffalo







Hobson CPP is fully licensed and permitted

4 M lbs. /year Licensed Production Capacity







Burke Hollow ISR Project, South Texas

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

July 2023: Advancing development of two Production Areas (PA-1 and PA-2) towards the extraction phase

- ✓ Drilling at PA-2: Five drilling rigs incl. the final design and installation of the PA-2 monitoring ring in progress
- √ 533 exploration and delineation holes (232,655 feet) have been drilled within Burke Hollow PA-2 area
- √ 106 monitor wells for PA-1 installed
- On-going exploration and delineation (within 17,510-acre project) to further define additional production areas
- Monitor wells baseline samplings and area pump test have been completed
- ✓ The final authorization application to begin production has been prepared and submitted





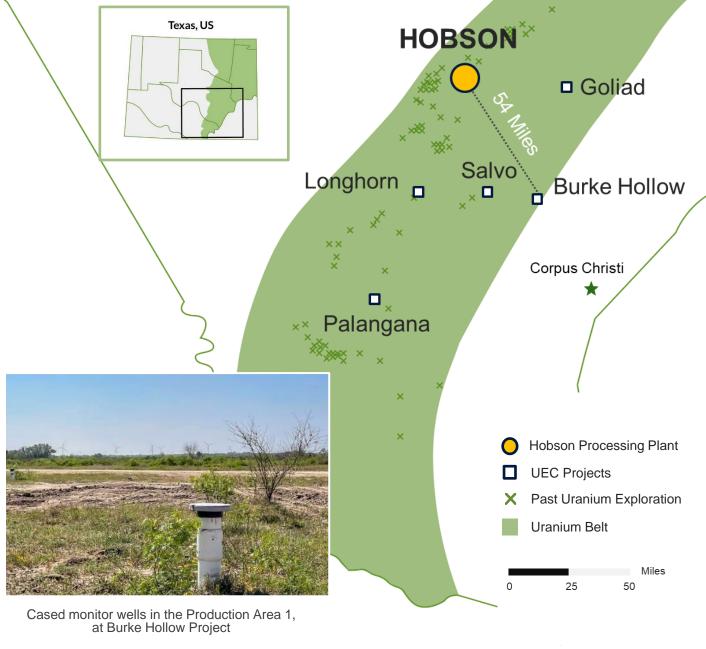
Burke Hollow ISR Project, South Texas

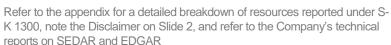
Advancing Towards Uranium Extraction

- Discovery of six trends since 2012
- Leach amenability testing indicates recovery >90%
- ~20,000 acres
- ~50 miles from Hobson CPP
- 50% of the property unexplored

Final Permits Issued

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





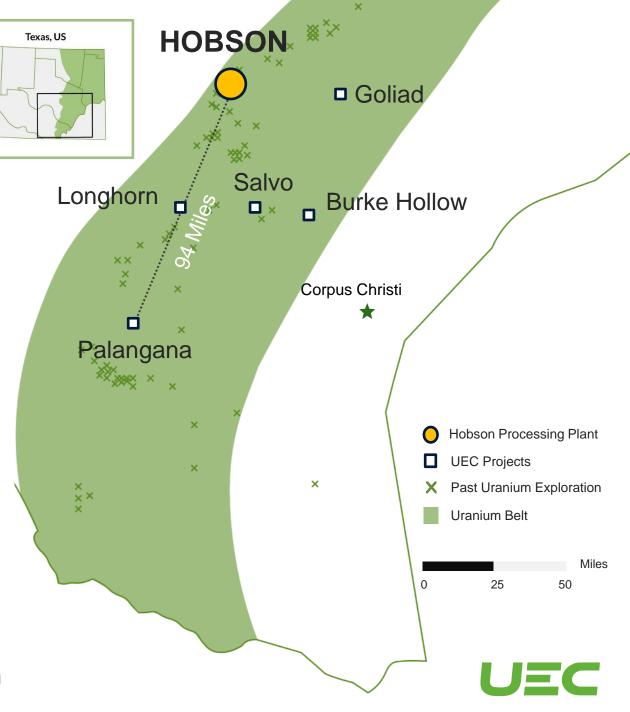


Palangana ISR Mine First Producing Mine Proof of Concept

July 2023: Advancing the fully permitted, past producing *Palangana project* for production re-start

- ✓ Drilling commenced at Production Area-4 (PA-4)
- √ 30 delineation holes completed, guiding future wellfield design and installation

\$10M Initial CAPEX	6 months construction timeline
Production Ready	 Low cash cost of \$21.77/lb. during operation Fully permitted incl. expanded mine permit Received 10-year renewal permits in 2019
Similar Costs for Future Projects	The major permits for production have been issued for Goliad and Burke Hollow



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



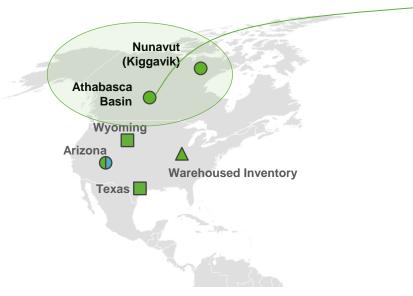
109.9 M lbs.

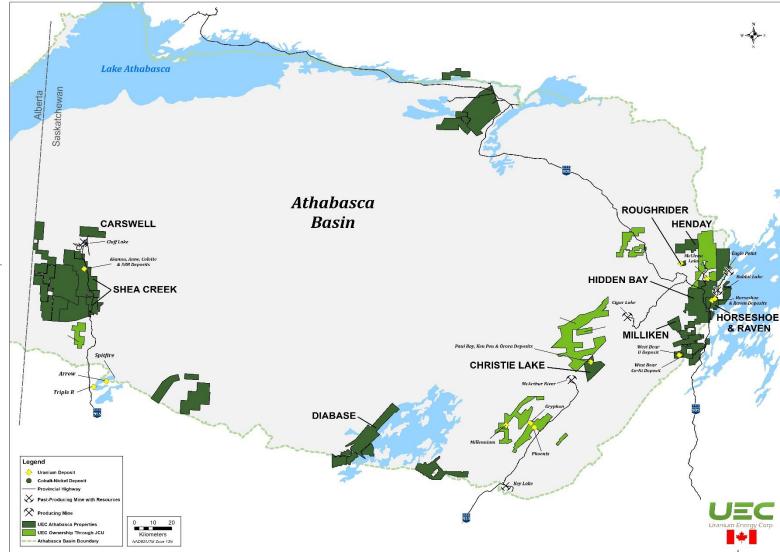
Attributable M&I U₃O₈ Resources (1)

71.0 M lbs.

Attributable Inferred U₃O₈ Resources (1)

Does not include the Kiggavik, Wheeler River, or West Bear project resources

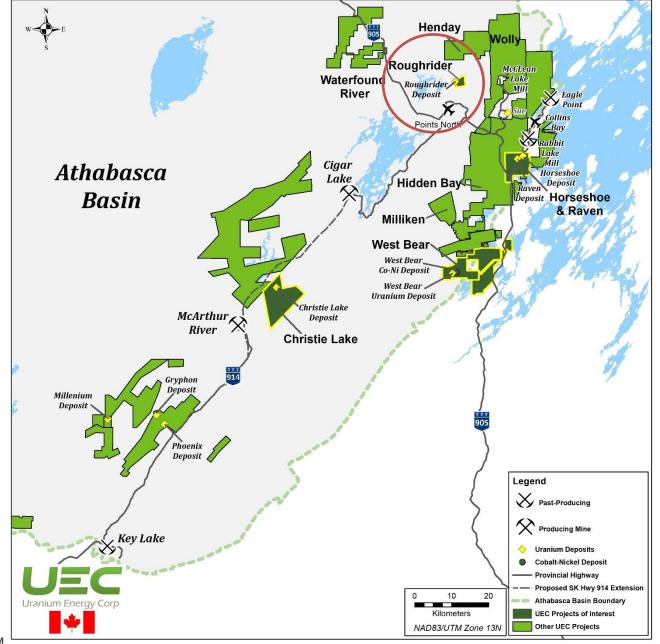




UEC Acquired the World-Class Development-Stage Roughrider Project from Rio Tinto

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

- New S-K 1300 resource estimate⁽²⁾
- 27.8 M lbs. Indicated resources grading
 3.25% U₃O₈ in 389,000 tonnes and 36.0 M lbs.
 Inferred resources grading 4.55% U₃O₈ Resources in 359,000 tonnes⁽²⁾
- 665 diamond drill holes (228,180 m.) of drilling completed on the Project by Hathor and Rio Tinto
- Next step: Commencing an initial assessment economic study and completing further delineation drilling to upgrade the current inferred resources to indicated



Advancing the Roughrider Project

100% Owned, Highest Grade, Advanced Uranium Project, Licensed for Toll Milling

May 2023: Commencing S-K 1300 Initial
Assessment Economic Study and Environmental
Baseline Program - Drilling to start in fall 2023

- Significant prior investment by Rio Tinto and Hathor - financial, engineering, community engagement, environmental and regulatory
- Satellite to UEC's Eastern Athabasca Projects
 Christie Lake and Horseshoe Raven, that could be co-milled in the future
- Excellent Infrastructure:
 - ✓ Regional airport, road, facilities < 6 km away</p>
 - √ High voltage power < 20 km away
 </p>
 - ✓ Hydro-electric power can reduce carbon intensity and footprint during the construction and operation
 - ✓ **Two mills licensed** for toll milling < 50 km by road









UEC Acquired A Portfolio of Canadian Uranium Exploration Projects from Rio Tinto

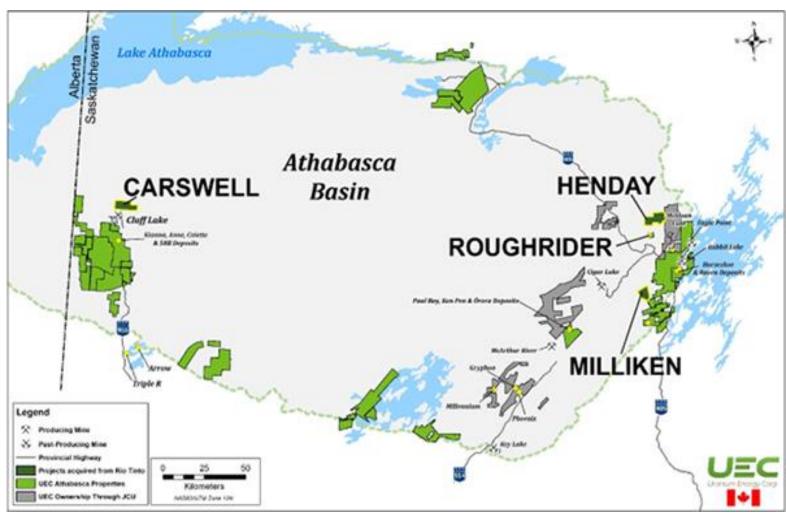
Total Consideration of C\$1.5 million Cash¹

- 60% in the **Henday JV Project**
- 100% of the Milliken Project
- 50% in the Carswell JV Project
- UEC's Athabasca land portfolio of 1,136,083 acres (459,757 Ha) for exploration and growth

Henday Project: ~5 km. north of the Roughrider project, close to support infrastructure offering regional synergies with Roughrider⁽²⁾ and the Eastern Athabasca Hub that UEC assembled as part of the UEX acquisition⁽³⁾

Carswell Project: north of the past-producing Cluff Lake operation; close to UEC's Shea Creek (49% interest in the Shea Creek deposits: Anne, Kianna, 58B, and Collette)

Milliken Project: western extension of UEC's Hidden Bay project's Wolf Lake trend - multiple uranium showings over 19 km.



UEC Advances Christie Lake in 2023

New 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 M lbs. U₃O₈ in three existing deposits before the discovery of Sakura Zone in 2022
- 2023: Drill program further delineated the Sakura Zone with the high-grade discovery in drill holes CB-183-1 (26.16% eU₃O₈ over 3.8 m) and CB-178-1 (23.22% eU₃O₈ over 3.4 m)

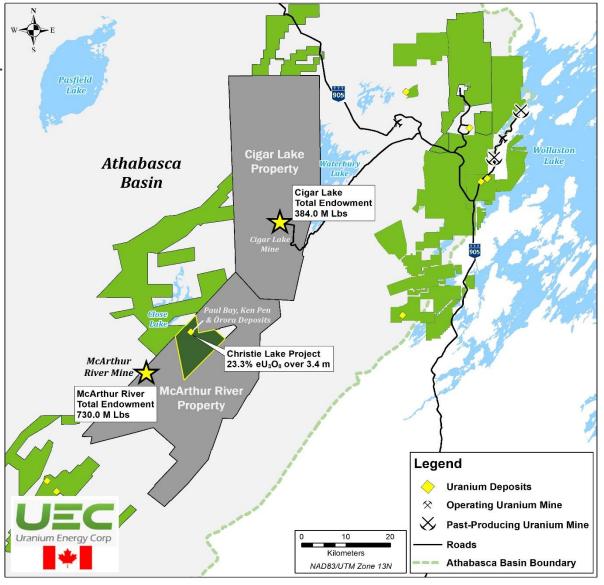


68.7% eU₃O₈ over 2.1 m

CB-173



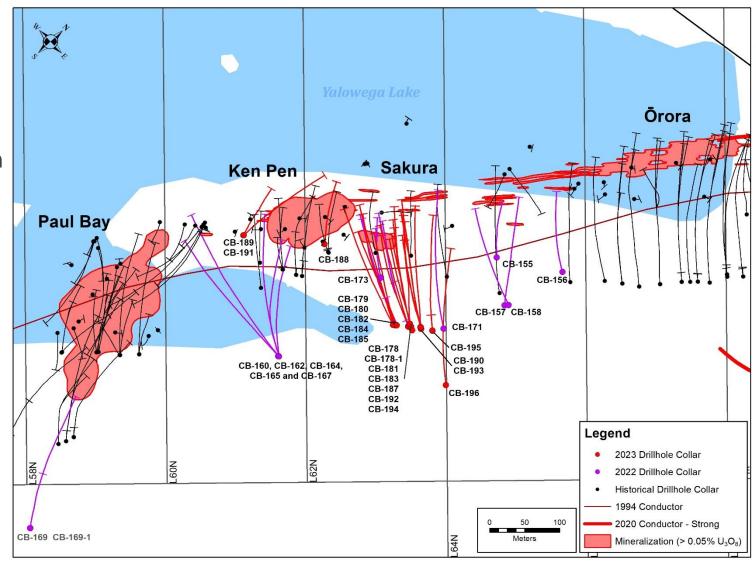
21.6% eU₃O₈ over 2.3 m



Christie Lake 2023 Program

Focused on Expanding Sakura Zone

- Sakura represents new mineralization that exploits a new trend at Christie Lake
- Primary focus was follow-up & expansion of new Sakura Zone mineralization
- First hole of 2023 winter program intersected 23.2% eU₃O₈ over 3.4 m, follow-up was 26.16% eU₃O₈ over 3.8 m
- Approx \$3.0 million invested into Christie Lake exploration program
- ~12,400 m drilling so far in 2023 focused on delineation and expansion of Sakura
- Planning resource update to include Sakura Zone





Strong Joint-Venture Partnerships

Established Uranium Miners as Operators Allows UEC to Focus on Growth



Millennium – 69.9% Owner and Operator

- Millennium is a Feasibility Study stage project located between Cameco's McArthur River Mine and Key Lake Mill in the Athabasca Basin (Saskatchewan, Canada)
- Cameco's next global development project, CNSC licensing paused
- Hosts 75.9 M lbs. U₃O₈ of Indicated and 29.0 M lbs. U₃O₈ of Inferred resource (100% basis)¹



Shea Creek – ~50.9% Owner and Operator Kiggavik – ~66.2% Owner and Operator

Shea Creek

- Currently one of the largest undeveloped deposits in the Athabasca Basin
- Hosts 67.6 M lbs. U₃O₈ of Indicated and 28.1 M lbs. U₃O₈ of Inferred resources (100% basis)²

Kiggavik

- Kiggavik is a Feasibility Study stage project located in Nunavut, Canada
- Hosts 127.3 M lbs. U₃O₈ of historical Indicated and 5.4 M lbs. U₃O₈ of historical Inferred resource (100% basis)³

⁽³⁾ Kiggavik resources as reported by Orano in their 2021 Activities Report available on their website at <a href="https://www.orano.group/docs/default-source/orano-doc/finance/publications-financieres-et-reglementees/2021/orano-annual-activity-report-2021.pdf?sfvrsn=a2e56244_8 converted from tonnes U to pounds U3O8 and from %U to %U3O8. The reader is cautioned that neither UEC or UEX are aware whether Orano's reporting of resources conforms to NI 43-101 and CIM guidelines. These are treated by the UEX and UEC as historic resource estimates. There are no other estimates available to UEC or UEX.



⁽¹⁾ Millennium resources as reported by Cameco on their website at https://www.cameco.com/businesses/uranium-projects/millennium/reserves-resources#measured_and_indicated as of December 31, 2021. Cameco has reported that the estimates have been prepared in accordance with the CIM Definitions Standards.

⁽²⁾ TRS "2022 Technical Report on the Shea Creek Project, Saskatchewan" with an effective date of October 31, 2022, a copy of which is available under UEC's Corporate profile on EDGAR at https://www.sec.gov/edgar/searchedgar/companysearch. These resources are reported in accordance with the CRIRSCO definition standards adopted by the SEC in § 229.1304 (Item 1304) Individual property disclosure

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% $\rm U_3O_8$ Indicated 2.20 M lbs. in 2.73 Mt grading 0.040% $\rm U_3O_8$ 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% $\rm U_3O_8^{(2)}$





⁽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

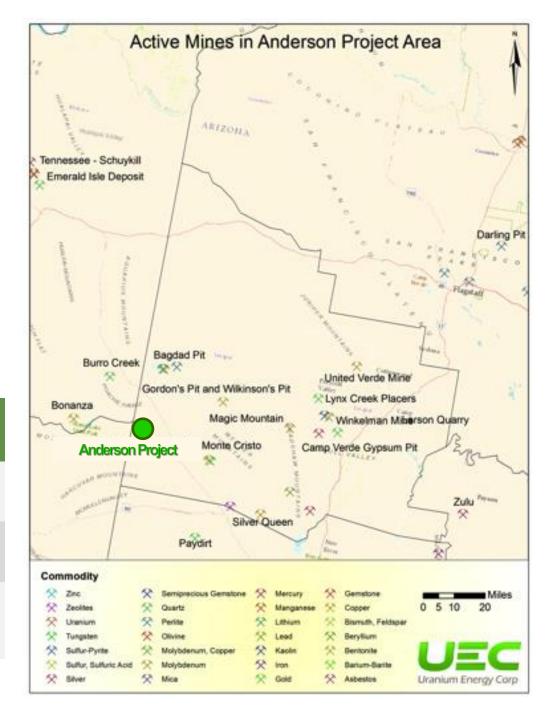
U.S. Conventional Mining

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: 4.459 M lbs. within 1.98 Mt, avg. grade of 0.113%
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



UEC At a Glance

Member of the Russell 2000® Index

Cash, Equity ⁽¹⁾ and Inventory Holdings ⁽²⁾	\$192.3 million, no debt
Avg. Daily Vol. (3-mo)	7,024,396
Shares Outstanding	378.5 M
Warrants	3.9 M
Options + Stock Awards	10.6 M
Fully Diluted ⁽¹⁾	392.9 M
Recent Activity	\$5.17 As of Oct 5, 2023
Market Cap	\$1.96 B As of Oct 5, 2023

Top Shareholders

UEC Team, Blackrock, Vanguard Group, State Street, Fidelity, Northern Trust, UBS, CEF Holdings, Sprott, KCR Fund, Global X Management, and Rio Tinto

Analyst Coverage

Katie Lachapelle, Canaccord Genuity
Puneet Singh, Eight Capital
Heiko Ihle, H.C. Wainwright & Co.
Colin Healey, Haywood Securities Inc.
Joseph Reagor, ROTH Capital Partners
Justin Chan, Sprott Capital Partners

⁽²⁾ As of Sep 28, 2023, physical holding includes 466,000 lbs. of inventory (\$34.3M in physical uranium inventories based on U3O8 spot price of \$73.50/lb. Source: UxC CVD)



⁽¹⁾ The Company's annual report for the fiscal year ended July 31, 2023; UEC press release dated Sep 29, 2023

865 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.



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 Committee



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.



James Hatley

VP of Production - Canada

Over 25 years of mining experience incl. uranium and base metals mine development, construction, and operations. Led construction for Vale, developed McArthur River and Cigar Lake for Cameco Corp.



Scott Melbye
Executive Vice President

39 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.



Robert Underdown
VP of Production - Texas

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



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.



Chris Hamel

VP of Exploration - Canada

Over 20 years of experience in uranium exploration in North America and the Athabasca Basin



Andy Kurrus

VP of Resource Development

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



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.



Investment Summary

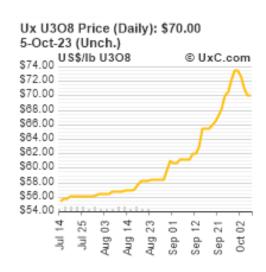
- Total resources of 328.9 M lbs. U₃O₈ (226.2 M&I / 102.7 Inf.)⁽¹⁾
- Two Central Processing Plants in Wyoming and Texas with the largest resource base of fully permitted ISR projects of any U.S. based producer
- Advancing the High-grade Roughrider Project with Initial Assessment Economic Study & Environmental Baseline studies underway
- Physical uranium program includes 1.5 M lbs. remaining⁽²⁾ contracted uranium purchases at avg. cost \$48.09/lb. through to Dec 2025. 466,000 lbs. Inventory on hand at an average cost of \$34.17/lb.
- \$192.3 M of cash and liquid assets & debt free balance sheet⁽⁴⁾;
 \$163.95 M gross revenue with gross profits of \$49.60 M⁽³⁾
- Geopolitical events and energy independence are placing a premium on North American supply
- Undervalued relative to peers on a price to net asset value basis

⁽¹⁾ Does not include the Kiggavik, Wheeler River, or West Bear project resources. See Disclaimer on slide 2
(2) The Company's annual report for the fiscal year ended July 31, 2023, see UEC news release dated Dec 19, 2022 and Sep 29, 2023. As of Sep 28, 2023, cumulative sales of 3.15 M lbs. at avg. price of \$52.05/lb. is part of the contracted 5.9 M lbs. at approx. \$38.95/lb. avg. cost with multiple deliveries between Mar 2021 to Dec 2025
(3) The Company's annual report for the fiscal year ended July 31, 2023
(4) As of Sep 28, 2023, see UEC press release Sep 29, 2023



Fundamentals Favor Significant Price Appreciation – Prices Still Well Below Previous Highs and Global Production Cost





Source: (1) UxC, LLC: www.uxc.com Oct 5, 2023, Numerco (2) TradeTech Sep 30, 2023, price as of Aug 31, 2023



Investing in UEC Supports ESG Goals and a Low Carbon Future











Reactor Demand Significantly Exceeds Primary Production

2023 Global⁽¹⁾

Demand expected ~ 195 M lbs.

Production expected ~ 143 M lbs.

Production gap is ~ 52 M lbs. below requirements

Cumulative gap:(1)

In 2025 is >113 M lbs.

By 2033 is ~476 M lbs.

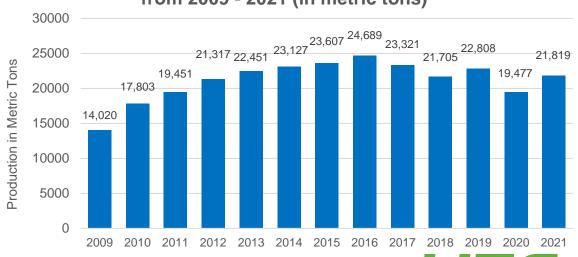
U.S. Uranium Production Needed to Fill Gap

2023 U.S. Demand – 44.4 M lbs.(2)

Former Soviet Union Production Region:(2)

Kazakhstan - 54.6 M lbs. Uzbekistan - 8.8 M lbs. Russia - 7.7 M lbs.

Uranium mine production in Kazakhstan from 2009 - 2021 (in metric tons)



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

436

Operable Reactors
Worldwide*

60

Units Under Construction*

69

New Reactors Connected since 2013**

3.1%

CAGR Uranium Demand Growth¹ Expected (2021-2041)









CHINA Government is expected to approve 6-8 new reactors/year for the foreseeable future.² In total, China has 55 reactors in operation, 24 under construction, 44 planned, and 154 proposed⁹

SOUTH KOREA current government has reversed the country's nuclear phaseout plans from prior administration—in the new plan Nuclear energy will account for 35% of South Korea's electricity generation by 2036⁷

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 netzero target by 2050. The majority of Japanese support restarting idled nuclear reactors for the first time in over a decade⁶

BULGARIA energy strategy includes 4 new nuclear reactors¹²

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!



Nuclear Power is Critical to U.S. Energy

Largest Source of Carbon-Free Power Generation and Electricity

Virtually No U.S. Uranium Production - Despite operating the world's largest nuclear reactor fleet

Bi-Partisan Support – Aug 1, 2023: U.S. Senators introduced a bi-partisan resolution supporting nuclear energy, stating "the domestic nuclear supply chain and the associated workforce needs to be further established"¹

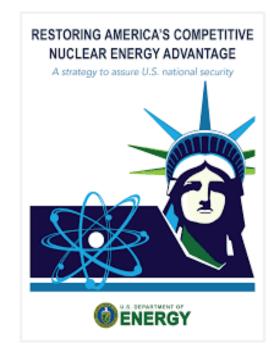
Biden Administration wants Congressional support to revitalize domestic fuel cycle - end U.S. reliance on nuclear fuel from Russia for existing and new advanced reactors. Strategic Uranium Reserve would likely be rolled into the new program. HALEU already appropriated \$400 million – Industry Consortium formed.

UEC Wins \$17.85M Supply Contract Award to Supply the U.S. Uranium Reserve

Bipartisan Spending Bills 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. Production Tax Credits have also been granted to preserve all existing nuclear capacity with profound results.



"We are really standing at the dawn of a new nuclear age...nuclear is a critical, clean, baseload power (US Energy Secretary Jennifer Granholm)²





Reversal of Early Retirements - Plant Life Extensions - Uprates

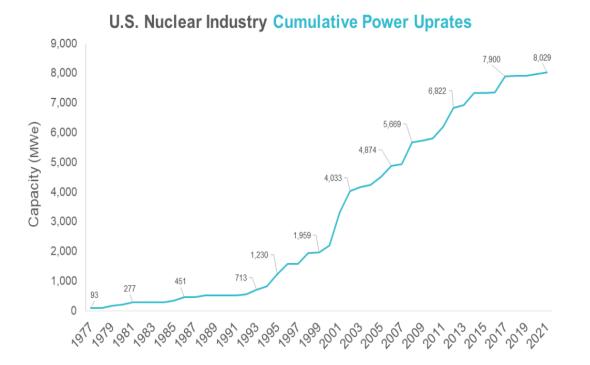
- Nuclear phase-outs or reductions are being abandoned
- License renewals Operational extensions to 80 years
- Power uprates Equivalent to 8 new, large-scale reactors in the U.S. alone

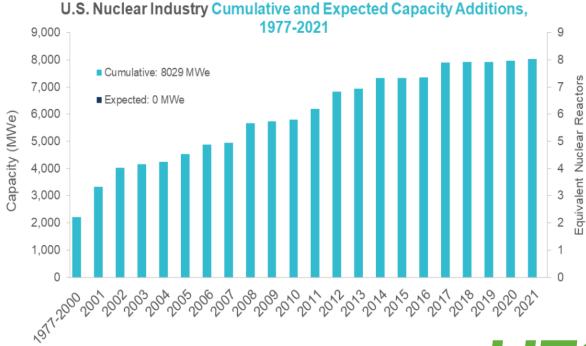








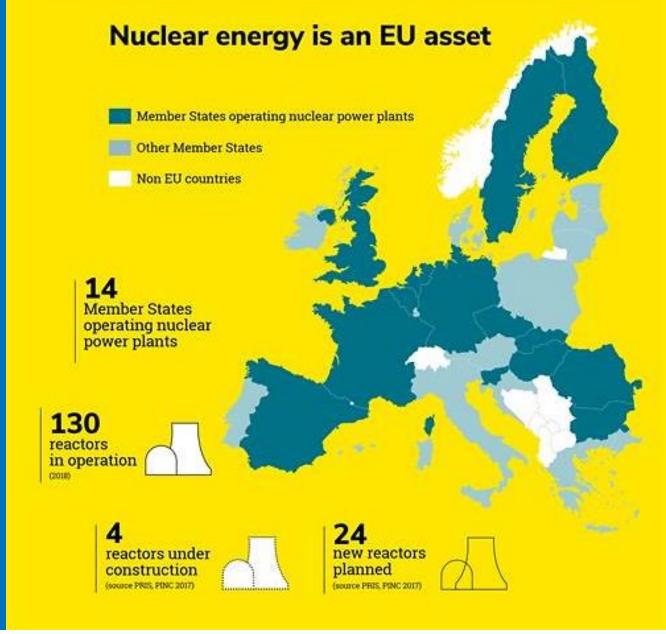




Global Approval for Nuclear Power Continues to Grow

EU Taxonomy Includes Nuclear as an Environmentally Sustainable Investment

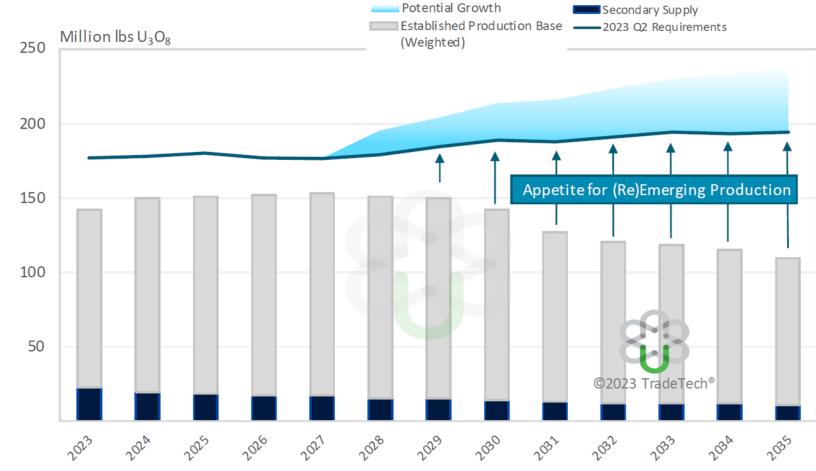






Global Supply & Demand Existing Primary Production + Secondary Market Supply

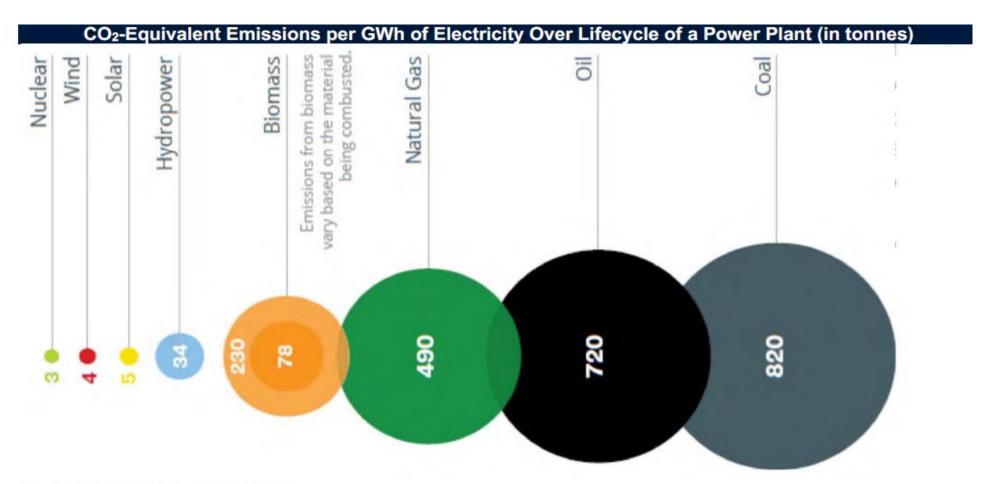
- Inventory overhang drawing down more rapidly than expected
- Secondary supply from Russia to western nations will be reduced/ eliminated
- Enrichment underfeeding is changing to overfeedingincreasing uranium demand
- New production requires permitting and development lead times for new mines



2023 Q2 U3O8 Requirements reflect Western reactor requirements, inventory maintenance, and potential growth tied to national carbon reduction schemes



Nuclear Emits the Lowest CO₂ Emissions Over Lifecycle of a Power Plant



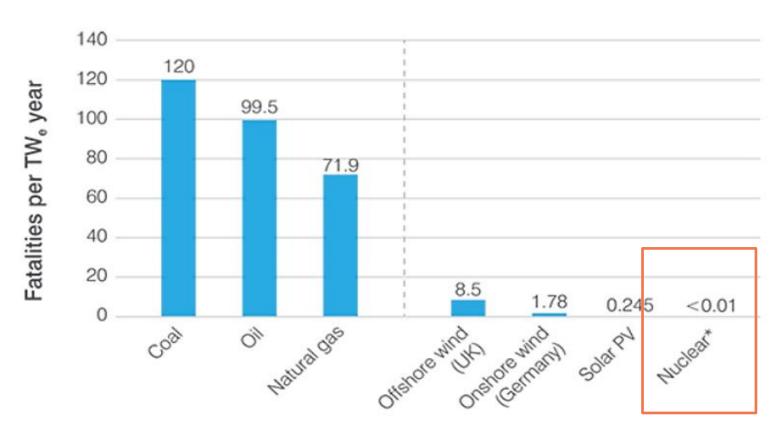
Source: Our World in Data, 2022

Source:TradeTech Uranium Market Study 2023: Issue 3



Nuclear Power = Safest Form of Electricity Generation

Nuclear has the lowest energy accident fatalities for OECD countries

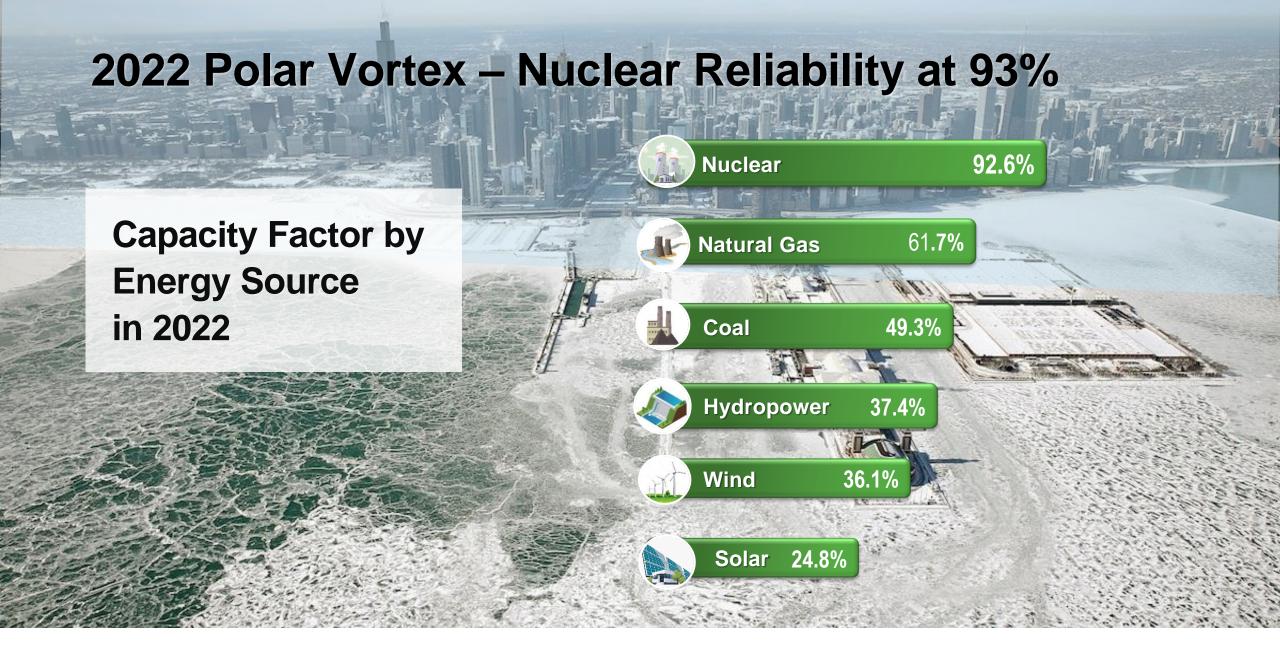


"Nuclear energy is the safest of all the electricity technologies we have."

- Patrick Moore, former director of Greenpeace⁽¹⁾

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



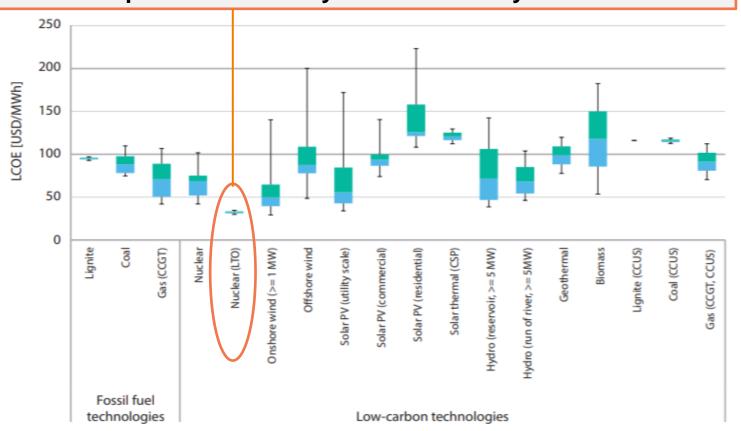






Nuclear Power = Lowest Levelized Cost of Electricity For Extended Life Plants vs any Other Source

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



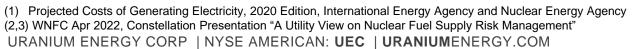
80 years

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 nuclearoperating costs²



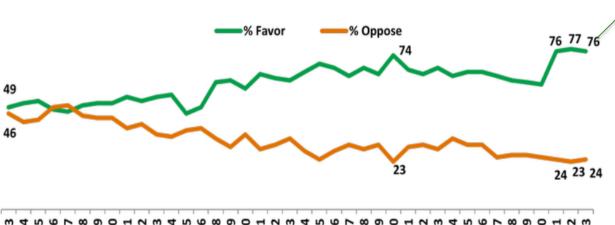


Support for Nuclear Energy is Strong and Increasing Public favors nuclear for reliability, clean air, energy security, energy independence

Favorability to Nuclear Energy 1983-2023

Public Support for Nuclear Energy Stays at Record Level For Third Year in a Row

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



The 2023 survey coincides with global policymaker recognition of nuclear energy's important role in combatting climate change, with increased public concerns about energy, and with burgeoning technological advancements in plant design

76% of the public favored nuclear energy

- 86% said that nuclear energy will be important in meeting the nation's electricity needs in the years ahead
- 89% agreed that we should renew the license of nuclear power plants that continue to meet federal safety standards
- 87% agreed that our nation should prepare now so that advanced-design nuclear power plants will be available to provide electricity, and
- 71% agreed we should definitely build more nuclear power plants in the future
- Near-unanimous support for license renewal of nuclear power plants that continue to meet federal safety standards

ECONOMIC BENEFITS









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

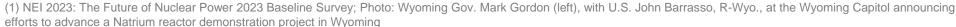
Hydrogen production, clean water through de-salinization, transportation, waste solutions, medicine 300 SMRs (99 GWe of nuclear power) expected to be added to the U.S. grid over the next 25 years - would double today's U.S. nuclear output, NEI recent



Chief Nuclear Officers poll (1)



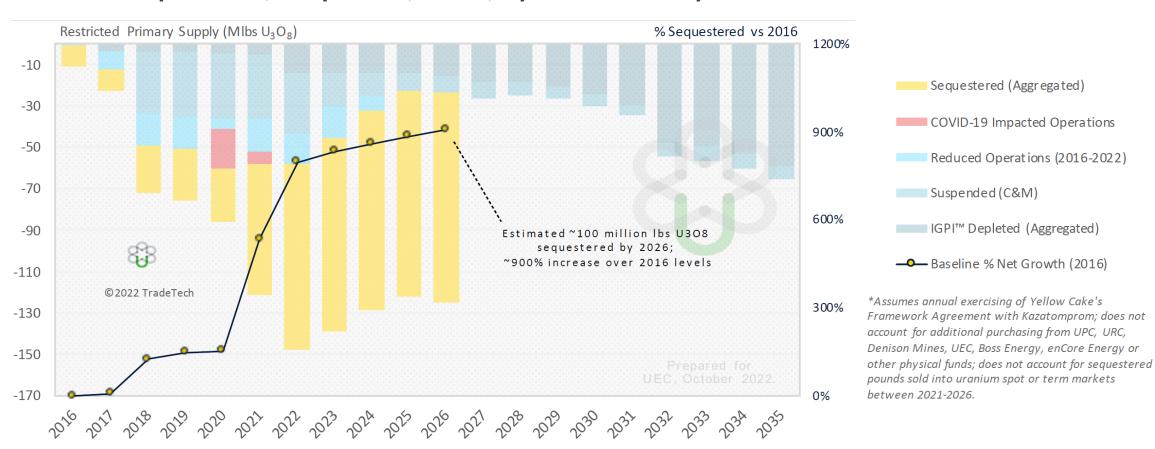






Uranium Supply Removed from the Market Restricted Primary Supply 2016 – 2035

Sequestered, Suspended, Covid, Operational & Depletion Reductions



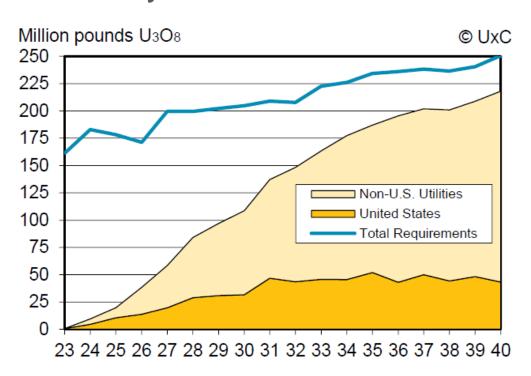
Source: TradeTech, October 2022



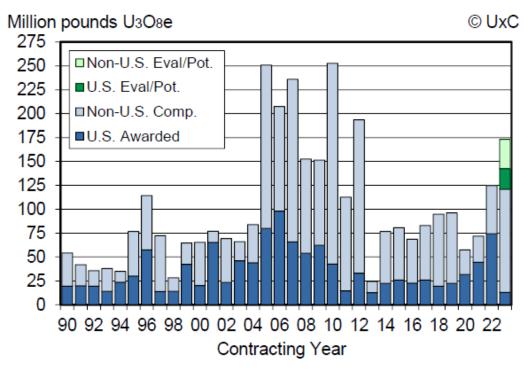
Utility Procurement Cycle:Old Contracts Rolling Off...New Contracts Need to be Signed

1.24 Billion Pounds of Contracting needed by 2035!

Utility Uncommitted Demand



Historic Long-Term Contracting



Source: UxC Market Outlook Q3 2023



Bottom Line - Positive Market Outlook

- ✓ **Demand Growth** 69 reactors added to the grid in the past 10 years; 60 reactors are 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 U₃O₀
 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 is Unfolding- "New" fundamentals are taking hold** Western utilities are entering a new contracting cycle- becoming more focused on supply assurance from low-risk jurisdictions (e.g. Canada, US).
- ✓ **Underinvestment, Change in Western Demand Drivers** Russia Aversion, Higher Tails Assay, Under to overfeeding increasing uranium demand, production gap vs requirements deficit averages over 42M- bs/year over next 10 years.
- ✓ **Lead Time to Advance Large New Mines** can be 10 years or longer.
- Accelerated Market Re-Balancing Primary production shortfalls, Russian Invasion of Ukraine, Niger Coup, all
 combining to reduce supply to Western nations.



Appendix



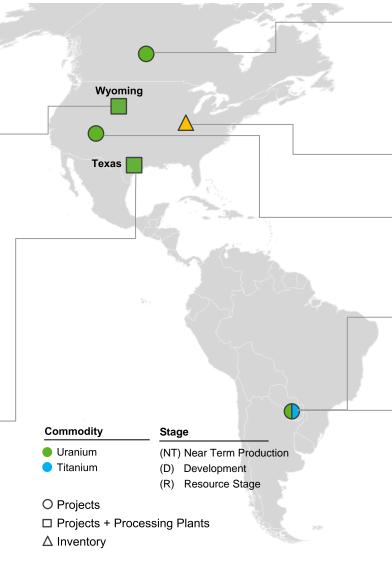
Total Resources of 226.2 M lbs. U_3O_8 as M&I and 102.7 M lbs. U_3O_8 as Inferred Largest, Diversified Resource Base in the Western Hemisphere

Processing Plants Wyoming Irigaray Plant – 2.5 M lbs./year licensed capacity Texas Hobson Plant – 4 M lbs./year production capacity

Wyoming Hub and Spake ISB Portfolio (S.K. 1200 compliant)(1)

Wyoming Hub and Spoke ISR Po	ortfolio	(S-K 1300 compliant)(1)			
Project Name	Stage	Resources (M lbs.)			
Project Name	Stage	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	Stage	Resources (M lbs.)						
Project Name		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								



Canadian Portfolio (S-K 1300 compliant) ⁽²⁾								
Project Name	Stage	Resourc M&I	es (M lbs.) Inferred					
Roughrider	(R)	27.84	36.04					
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 U₃O₈ in physical uranium portfolio³

U.S. Hardrock Pipeline			
Project Name	Stage	Resou M&I	ırces (M lbs.) Inferred
Anderson	(R)	32.0	0
Workman	(R)	_	4.46

Paraguay ISR Uranium Portfolio							
Project Name	Stage	Resources (M lbs.)					
Froject Name		M&I	Inferred				
Yuty	(R)	8.9	2.2				
Oviedo	(R)		23 - 56 oration target				

Paraguay Titanium Business Alto Paraná 4.94 Billion Tons Grading 7.41% TiO₂ and 23.6% Fe₂O₃

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

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



	Mea	sured Resou	urces	Indi	cated Reso	urces	M+I		Inferred		Exp	oloration Targ	et		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			ĺ						
Los Cuatros														30,000	0.02	12,000
Workman Creek								1,981	0.113	4,459						
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	1,667						
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	1,224						
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	21,116		31,639	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 (**) The foregoing historical resource estimates were completed prior to the implementation of SK-1300. 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.

Canadian Attributable Resource Summary

S-K 1300 Resources (1)							
Project	Ind	icated Resourc	es	Inferred Resources			
	Tonnes (000's)	Grade (% U ₃ O ₈)	M lbs. U ₃ O ₈	Tonnes (000's)	Grade (% U ₃ O ₈)	M lbs. U ₃ O ₈	
Roughrider	389	5.91	27.84	359	8.36	36.04	
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	11,968	0.42%	109.9	1,525	2.11	71.0	

⁽¹⁾ Note to Investors. The mineral resource estimate has been prepared using industry accepted practice and conforms to the disclosure requirements of S-K1300. Does not include the Kiggavik, Wheeler River, or West Bear project resources.

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")

	Powder River Basin	Great Divide Basin
Properties	 Irigaray and Christensen Ranch (Willow Creek) Moore Ranch (Incl. Ross Flats and Pine Tree) Ludeman Allemand-Ross Barge 	 Antelope Crooks Creek Cyclone Rim JAB/West JAB Twin Buttes



Total S-K 1300 Resources¹:

42 M lbs U₃O₈ (37.6 M lbs. M&I, 4.3 M lbs. 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

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

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







Key Locations	Texas, Wyoming	Athabasca Basin	Texas, Wyoming, Athabasca Basin
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
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}
Attributable Inferred U ₃ O ₈ Resources	25.0 M lbs. ^{1,3}	35.0 M lbs ^{2,3}	60 M lbs. ^{2,3}

Added breadth to diverse portfolio of assets in politically stable mining jurisdiction

More than doubled existing uranium 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

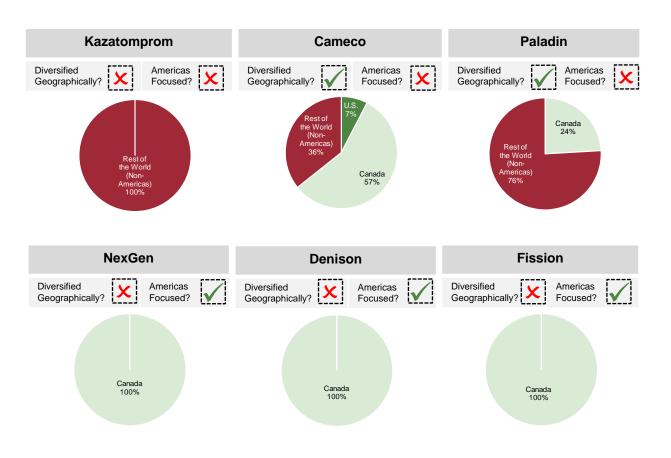
⁽²⁾ Refer to appendix for detailed breakdown of UEC's current S-K 1300 Canadian resources, note the Disclaimer on Slide 2, and refer to the Company's technical reports on SEDAR and EDGAR. Excludes Kiggavik, Wheeler River, and West Bear deposit

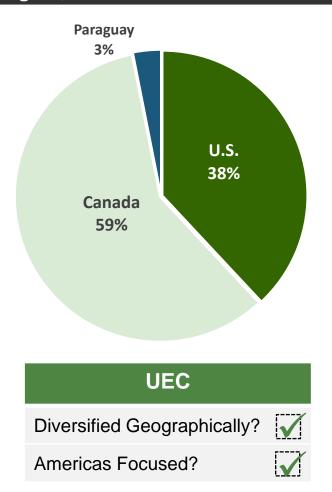
⁽³⁾ The mineral resource estimate has been prepared using industry accepted practice and conforms to the disclosure requirements of S-K1300.

Large and 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



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Corpus Christi, TX 78401

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President and CEO: Amir Adnani

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