

LARGEST & DIVERSIFIED NORTH AMERICAN FOCUSED URANIUM COMPANY

Corporate Presentation – April 2024



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.



Fundamentals Favor Significant Price Appreciation Prices Still Well Below Previous Highs







Reactor Demand Significantly Exceeds Primary Production

2024 Global(1)

Demand expected ~ 197 M lbs.

Production expected ~ 155 M lbs.

Production gap is ~ 41 M lbs.

below requirements

Cumulative gap⁽¹⁾

In 2025 is ~66 M lbs.

By 2034 is ~406 M lbs.

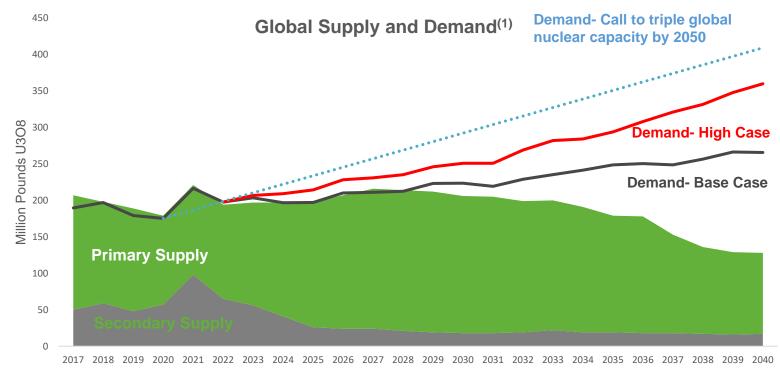
By 2040 Mid Case > 1.14 B lbs.

By 2040 High Case > 1.28 B lbs.

U.S. = Largest Demand for Uranium

2024 U.S. Demand Projected at 47.2 M lbs.(2)

Russia, Kazakhstan, & Uzbekistan Supplies 48% of U.S. Uranium Demand





Nuclear Power Strategically Positioned to Fill Data Center Energy Demand

The Al Boom Will Require Large Increases in Electricity Generation

- Data Center Energy Demand is growing with large power requirements; a hyperscaler's data center can use as much power as 80,000 households
- In the U.S market, demand, measured by power consumption is expected to reach 35 GW by 2030E, up from 17GW in 2022A
- Nuclear is the only 24/7 green baseload power generation solution that can be scaled alongside forecasted demand

March 04, 2024

amazon

Amazon.com is making a push into nuclear energy by acquiring a nuclear powered data center in Pennsylvania, marking its first-ever agreement with a nuclear power facility

Source: Citi Data Center Demand and Nuclear Power: February 2024

U.S. Data Center Power Consumption, by Providers / Enterprises⁽¹⁾







Microsoft hires a director of nuclear technologies to oversee a program to develop small-scale nuclear reactors to power datacenters



Unprecedented U.S. Government Support for U.S. Nuclear Fuel Cycle

Nuclear Fuel Security Act Included in Fiscal Year 2024 National Defense Authorization Act

Key Nuclear Provisions in the Bill Include(1)

- √ \$2.72 Billion to support increasing domestic capabilities for uranium, conversion, and enrichment for LEU and HALEU
- √ This funding requires a ban on Russian Uranium imports
- ✓ Expected to occur by legislative or administrative action





UEC U.S. Production Restarting August 2024 - 100% Unhedged, Full Spot Market Exposure

\$564 Million

Accretive Acquisitions⁽¹⁾

Fastest Growing North American Uranium Company

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

\$332.5 Million

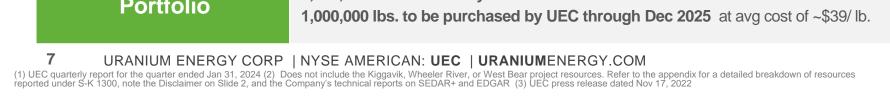
Cash & Liquid Assets(1)

Strong Balance Sheet, No Debt

Physical Uranium Portfolio

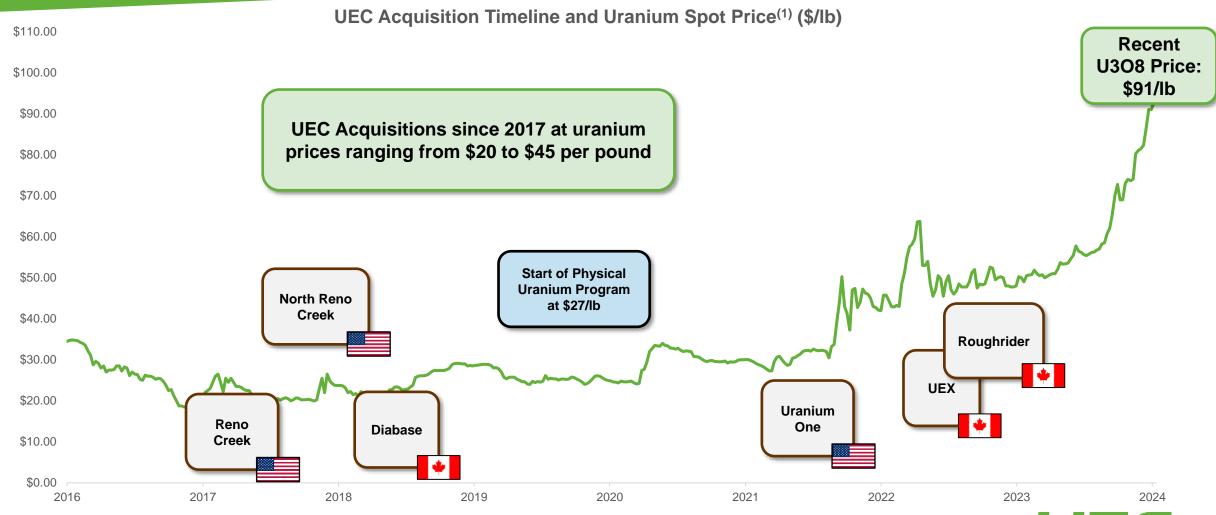
Cumulative to Jan 31, 2024:

1,166,000 lbs of Inventory on hand





Disciplined Growth Strategy Acquisitions through the bottom of the Uranium Cycle



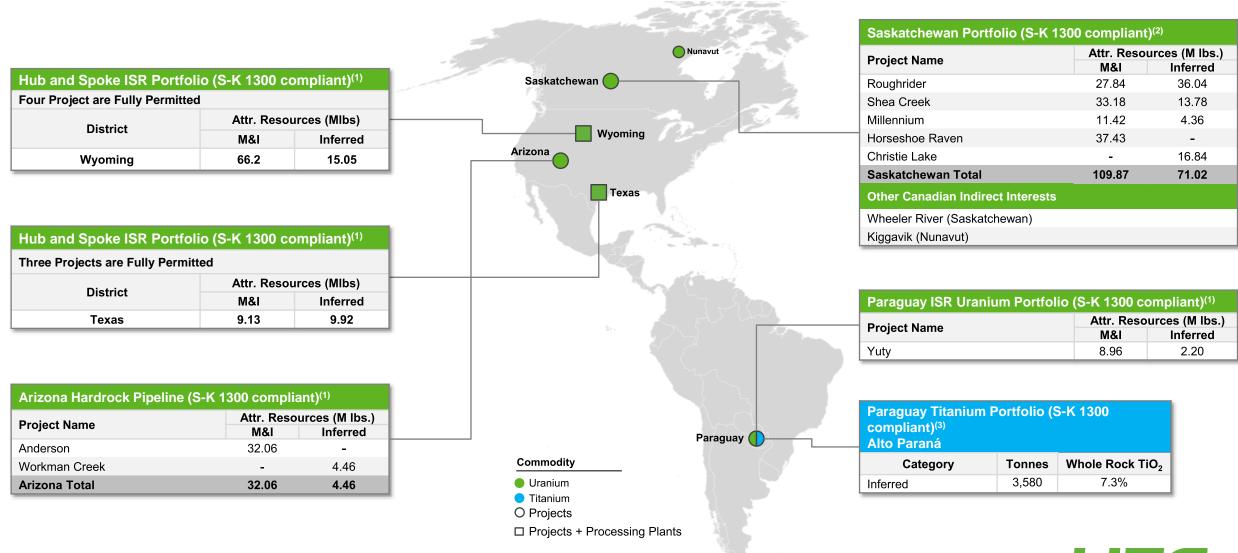
URANIUM ENERGY CORP | NYSE AMERICAN: UEC | URANIUMENERGY.COM

1) Source: Uranium price per UxC as of Apr.22, 2024

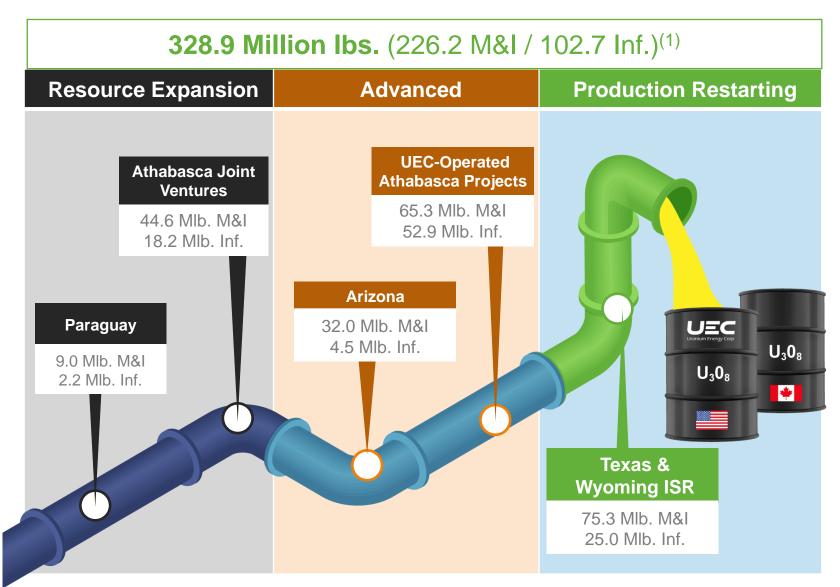
2) Uranium price at time of acquisition based on weekly U3O8 prices per UxC.



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



Creating Value by Delivering on a Production Pipeline







⁽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

Emerging U.S. Government and SMR Demand for American Uranium



UEC and TerraPower announce a memorandum of understanding ("MOU") with the objective of reestablishing domestic supply chains of uranium fuel

- This MOU will allow TerraPower and UEC to explore the potential supply of uranium for TerraPower's first-of-kind Natrium reactor and energy storage system
- Wyoming's Governor Mark Gordon stated: This MOU is a great step forward for the Wyoming uranium industry





UEC wins award from the U.S. Department of Energy to supply 300,000 lbs. U3O8 to the strategic uranium reserve at a 20% Premium (based on spot market price at the time)

- This award established the U.S. strategic uranium reserve which is part of Government's goal of supporting America's nuclear fuel supply chain
- Strategic uranium reserve expected to be a 1.5 billion dollar program





Production Restarting in Wyoming, August 2024

7 Fully Permitted Projects in Texas and Wyoming





Wyoming Hub & Spoke ISR Portfolio

Irigaray Processing Plant

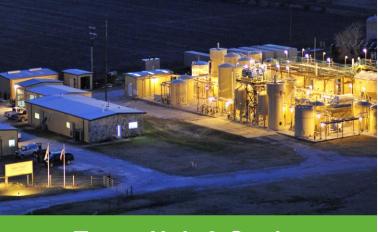
Licensed Production Capacity of 2.5 M lbs./yr (Plans to increase to 4 M lbs./year licensed capacity)

11 satellite projects

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

9.1 M lbs. M&I9.9 M lbs. Inferred

U₃O₈ resources

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



Processing Plants



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

Irigaray & Christensen Ranch – Production Restarting August 2024

Licensed Capacity of 2.5 M lbs. Per Year

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

15.50 M lbs. Indicated and

0.14 M lbs. Inferred U₃O₈ Resources⁽¹⁾

August 2024 Production Restart expected to be fully funded with cash on hand (2)

- Key focus before the August restart is hiring and training of additional operations personnel for ramp-up of uranium production
- To enable a faster production restart, extensive preparations at the Christensen Ranch wellfields and satellite processing plant were completed in 2023
- Christensen Ranch ISR Project is the first project ("Spoke") to feed the Irigaray CPP Hub
- Infrastructure & production ready: 4 fully installed wellfields. Additional Wyoming "spokes" to supplement future production











New Wellfield Testing Completed -Christensen Ranch Mine Unit 8&10



⁽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

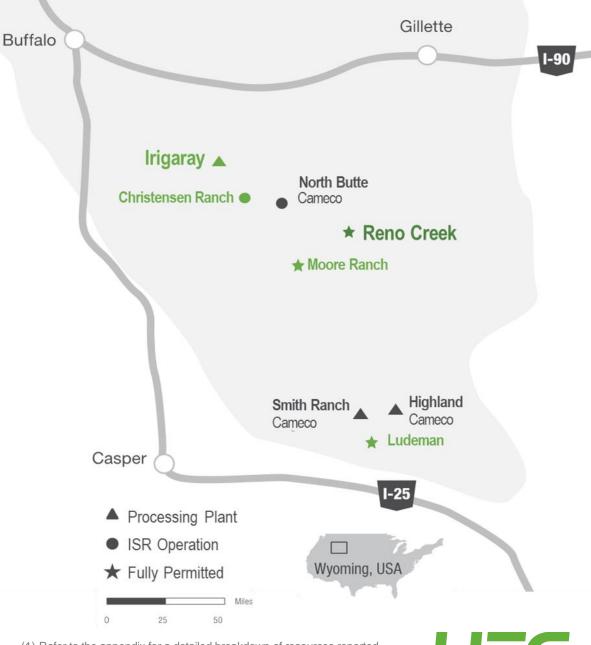
⁽²⁾ See UEC news release dated January 16, 2024

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 $U_3O_8^{(1)}$

- 50 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

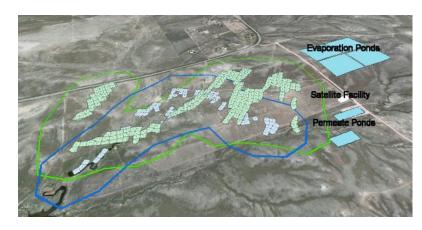


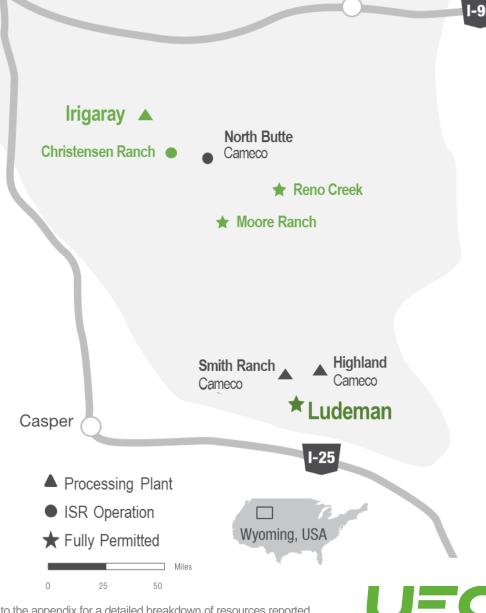
Ludeman ISR Project

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

Moore Ranch ISR Project

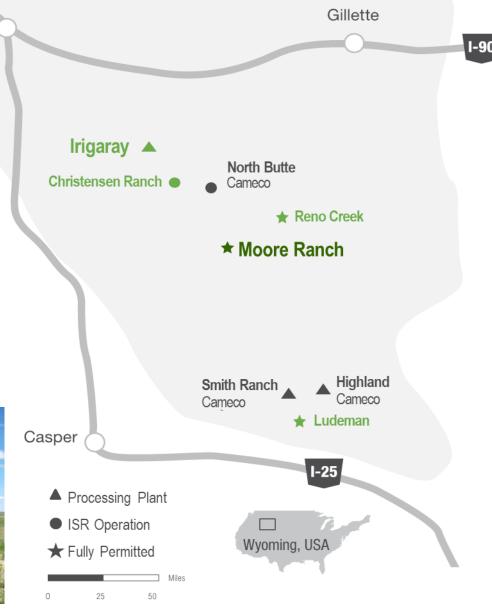
Permitted, Construction Ready

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

- 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
- Past pilot operations to determine wellfield flow conditions were successful
- Additional exploration upside along known uranium trends
- Satellite operation to Irigaray,
 40 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-3: Discovered June 27, 2023 is currently being delineated with five drilling rigs. To date, 190 exploration holes have been drilled and completed
- ✓ 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





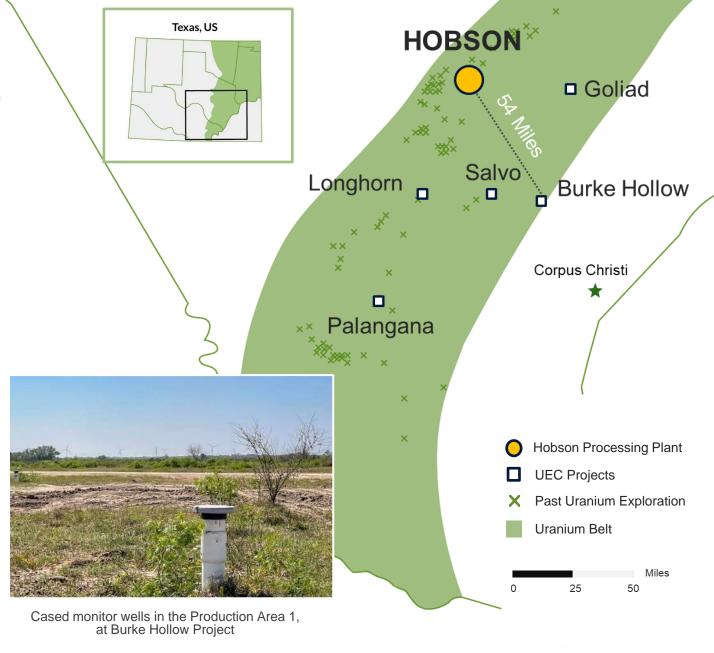
Burke Hollow ISR Project, South Texas

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



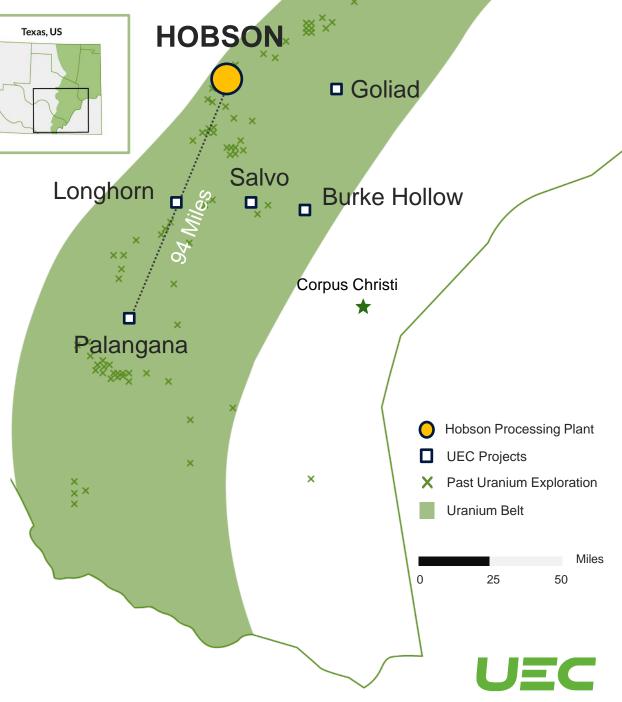


Palangana ISR Mine First Producing Mine Proof of Concept

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)

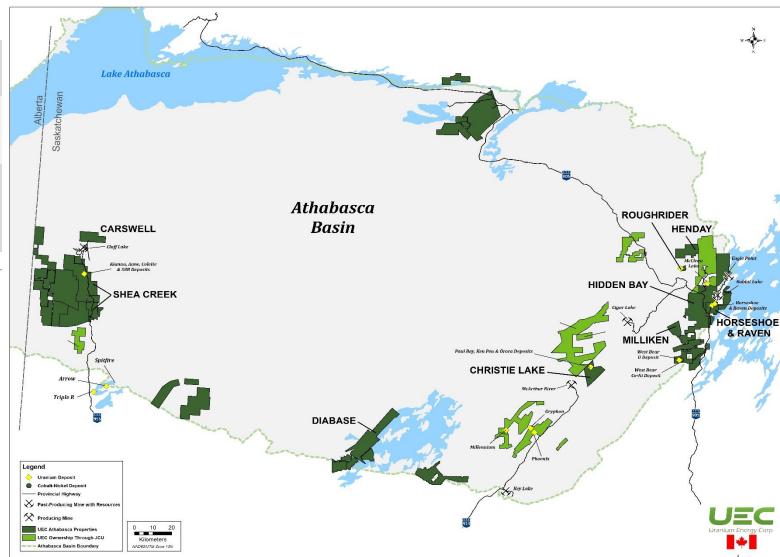
71.0 M lbs.

Attributable Inferred U₃O₈ Resources (1)

1,136,083 Acres

Land position for future growth opportunities

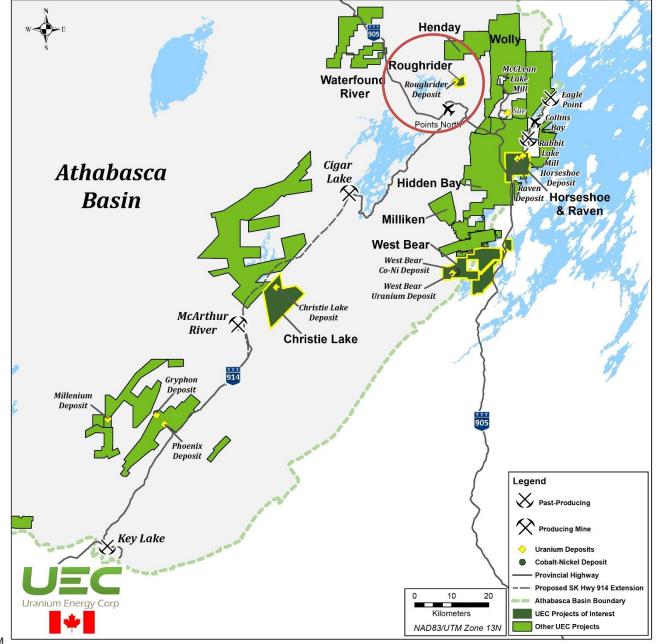




UEC Acquired the World-Class Development-Stage Roughrider Project from Rio Tinto

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, High Grade, Advanced Uranium Project, near Licensed Toll Millings

Jan 2024: UEC Intersects 6.28% eU₃O₈ Over 2.9 metres in a 25 metre Step Out from the Roughrider East Zone Deposit⁽¹⁾

- Exploration Drilling Extends Potential of East Zone Deposit
- Metallurgical Drill Program at Roughrider
 Completed four metallurgical holes completed that
 intersected grades and thicknesses of uranium
 mineralization consistent with the resource model of the
 three zones
- Roughrider Next Steps:
 - ✓ UEC plans to drill an additional 20 holes comprising 9,000 m this winter
 - ✓ Current resource estimate includes 27.8 million lb U₃O₈ comprising 389,000 tonnes grading 3.25% U₃O₈ in the Indicated category and 36.0 million lb U₃O₈ comprising 359,000 tonnes grading 4.55% U₃O₈ in the Inferred category⁽²⁾









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

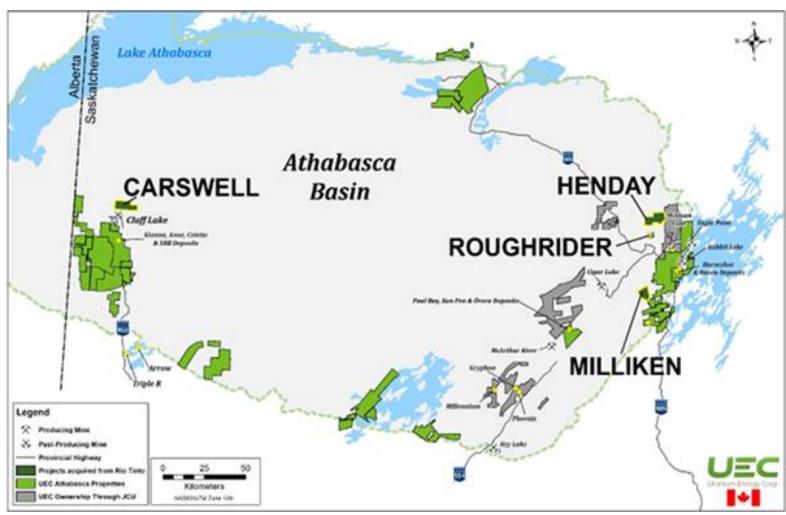
Total Consideration of C\$1.5 million Cash¹

- 60% in the Henday JV Project
- 100% of the Milliken Project
- 100% in the Carswell 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 Advancing Christie Lake

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)

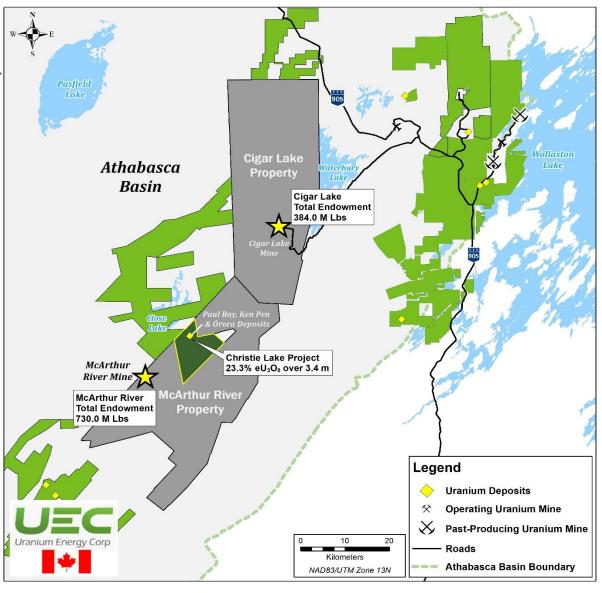


68.7% eU₃O₈ over 2.1 m

CB-173



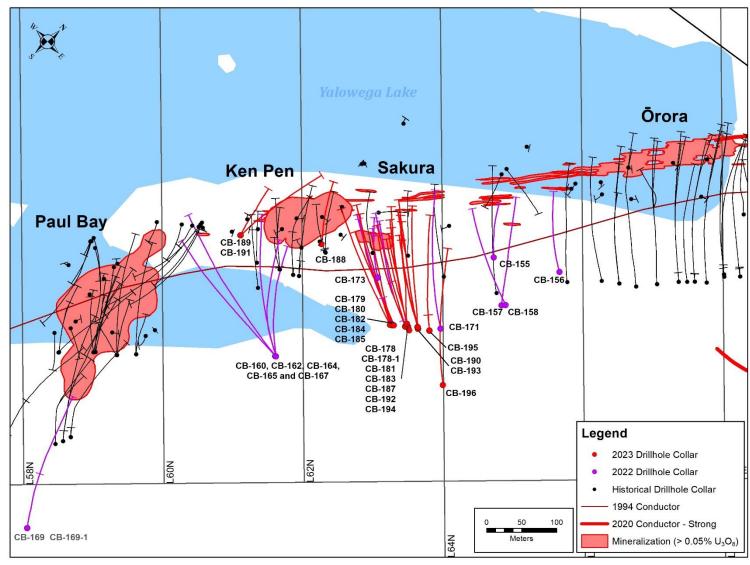
21.6% eU₃O₈ over 2.3 m



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

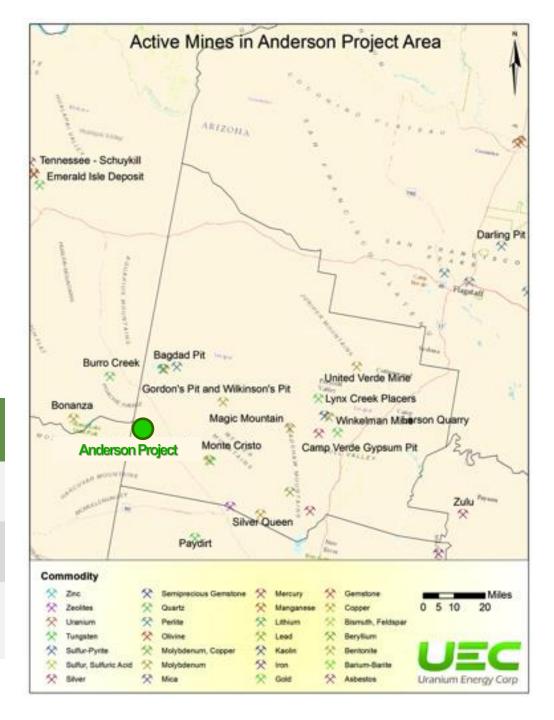
U.S. Conventional Mining

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⁾	\$332.4 million, no debt
Avg. Daily Vol. (3-mo)	7,937,381
Shares Outstanding	401.1 M
Warrants	3.6 M
Options + Stock Awards	8.9 M
Fully Diluted ⁽¹⁾	413.5 M
Recent Activity	\$6.68 As of Apr 22, 2024
Market Cap	\$2.68 B As of Apr 22, 2024

Top Shareholders

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

Analyst Coverage

Katie Lachapelle, Canaccord Genuity
Puneet Singh, Eight Capital
Heiko Ihle, H.C. Wainwright & Co.
Joseph Reagor, ROTH Capital Partners
Justin Chan, Sprott Capital Partners
Craig Hutchison, TD Securities

⁽²⁾ As of Jan 31, 2024, physical holding includes 1,166,000 lbs. of inventory (\$117.8M in physical uranium inventories based on U3O8 spot price of \$101.00/lb. Source: UxC CVD)



⁽¹⁾ The Company's quarterly report for the quarter year ended Jan 31, 2024

Physical Portfolio - North American Warehoused Uranium

Bolsters UEC balance sheet and provides strategic inventory

Spot market sales of FY 2023 3,150,000 (YE July 31, 2023) pounds of uranium Gross **Profits of** \$49.60 \$163.95 Million million **Record Revenue** from spot uranium market Weighted sales(1) Average Sales Price of \$52.05/lb **Average Market Price** of \$51.24/lb



Cumulative from March 2021 Inception - as of January 31, 2024(2):

5.8 M lbs Total Uranium Purchases Contracted	1,166,000 lbs. Inventory on hand	1.0 M lbs. To Be Delivered under Contracted Purchases
5.8M lbs. at ~\$40/lb avg. cost- multiple deliveries between Mar 2021- Dec 2025	At an avg. cost of ~\$54/lb.	At an avg. cost of ~\$39/lb



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.



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.



Scott Melbye
Executive Vice President

40 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.



Brent Berg Senior VP of U.S. Operations

Former President of Cameco Resources, leading Cameco's U.S. uranium ISR operations in Wyoming and Nebraska. More than 21 years of experience in uranium production.



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.



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



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.



Chris Hamel

VP of Exploration - Canada

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



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.



Andy Kurrus

VP of Resource Development

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



Uniquely Positioned with 100% Unhedged Production and Significant Growth Pipeline

- Wyoming Production Restarting August 2024
- 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
- One of the largest resource portfolios in North America: Total resources of 328.9 M lbs. U₃O₈ (226.2 M&I / 102.7 Inf.)⁽¹⁾
- \$332.5M of cash and liquid assets including 1,166,000 lbs in inventory & debt free balance sheet⁽²⁾
- Geopolitical events and energy security have placed a premium on North American supply



⁽¹⁾ Does not include the Kiggavik, Wheeler River, or West Bear project resources. See Disclaimer on slide 2

⁽²⁾ The Company's quarterly report for the quarter year ended Jan 31, 2024

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

World-Class High Titania Slag Project

Amongst the Highest-grade & Largest Ilmenite Deposits with a Resource ~ 3.6 billion tonnes at 7.3% TiO₂



World-class ilmenite deposit

- Large High-Grade Resource ~ 3.6 billion tonnes grading 7.3% TiO₂
- Surface deposit, extensive lateral grade and consistency
- Base case 150ktpa slag utilises < 0.2% of Regional Resource per year
- Stretch case 500ktpa slag utilises < 0.7% of Regional Resource per year

Favourable position - low cost & low carbon intensity

- Close to major hydroelectric power source ~ US\$ 0.045 / kWh
- CO₂e/t of final product lowest of all existing slag producers evaluated

Compelling financial results

- Base case of 150ktpa High Titania Slag NPV US\$419m 21% IRR
- Stretch case of 500ktpa High Titania Slag NPV US\$1,554m 25% IRR

Exceptional team - technically well advanced

- Clear development strategy experienced titanium industry team
- Proven conventional process technology mine to smelter

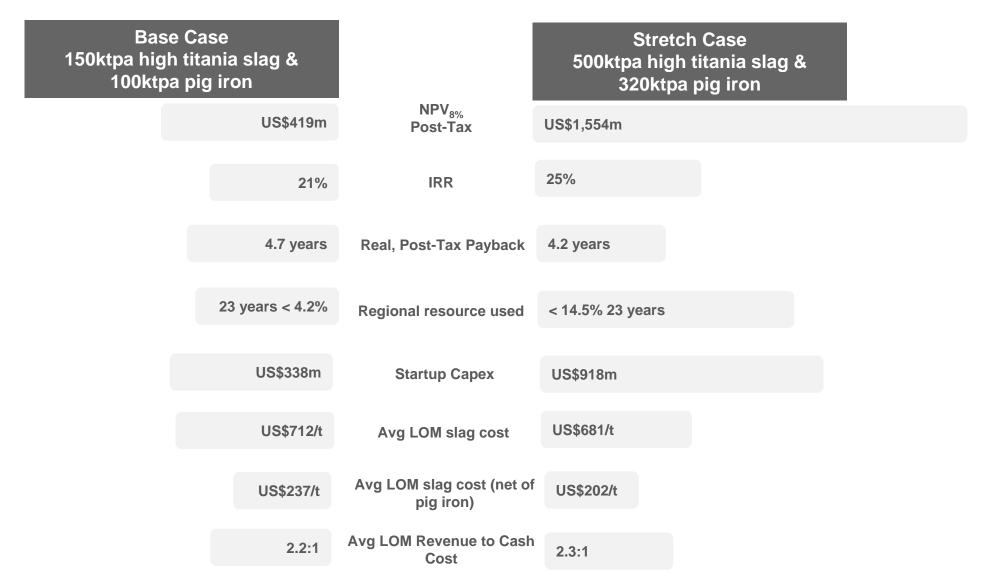
Strongly supported by current market fundamentals

- Chloride slag, forecasted to experience the fastest demand growth
- Project well timed for development



⁽¹⁾ Please see UEC news release dated November 13, 2023; refer to the SK-1300 TRS dated November 2023 for the Alto Parana Titanium Project filed on SEDAR+ and EDGAR

S-K 1300 Exceptional Indicative Economic Highlights



⁽¹⁾ Please see UEC news release dated November 13, 2023; refer to the SK-1300 TRS dated November 2023 for the Alto Parana Titanium Project filed on SEDAR+ and EDGAR



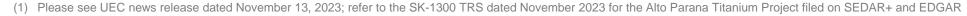
Emergence of a World-Class High Titania Slag Producer

Exceptional Progress to Date



Staged Approach to Project Development







Alto Paraná Titanium Development Strategy

Salient Points

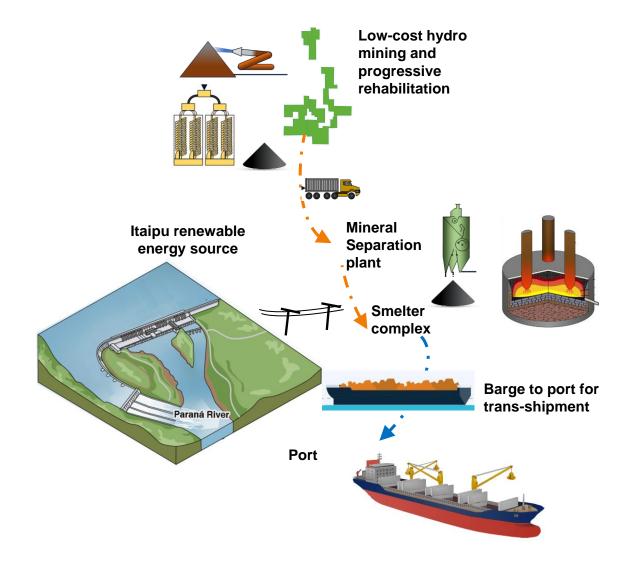
- Fully integrated and powered by renewable energy
- Low-cost mining operation
- Proven conventional process producing an ilmenite smelter feed
- Arc furnace/s to produce a high titania slag and high purity pig iron
- Significant expansion potential

Base Case

- Capacity ~150,000 tpa of high titania slag including chloride fines
- ~100,000 tpa high purity pig iron

Stretched Case

- Capacity ~500,000 tpa of high titania slag including chloride fines
- ~320,000 tpa high purity pig iron





Investing in UEC Supports ESG Goals and a Low Carbon Future











Tripling of Nuclear Energy by 2050 – A Historic Pledge Announced at COP28 for Global Expansion Led by the U.S.

440

Operable Reactors
Worldwide*

60

Units Under Construction*

70

New Reactors Connected since 2014**

435

Reactors Planned and Proposed Worldwide¹









CHINA Government is expected to approve 6-8 new reactors/year for the foreseeable future.² In total, China has 56 reactors in operation, 26 under construction, 41 planned, and 158 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 aims to produce 100,000 MW of nuclear power by 2047, a massive increase from current production of 8,000 MW⁵

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 reactors¹¹

U.A.E. 4 operable reactors³

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

FINLAND New survey reveals that support for nuclear is higher than ever in history¹⁰

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

SWEDEN announced plans to construct 2 largescale reactors by 2035 and the equivalent of 10 new reactors by 2045¹²

FRANCE to build 6-14 new reactors⁴

U.S. has maintained a ~20% market share for 30 years with power uprates and efficiency = to about 8 new reactors¹³ – A Stealth Growth Story!



U.S. Close to Banning Russian Uranium

Dec 11, 2023 – The U.S. House passed The Prohibiting Russian Uranium Imports Act (H.R. 1042). The bill, sponsored by Rep. Cathy McMorris Rodgers and co-sponsored by Rep. Robert Latta, would ban Russian uranium imports 90 days after enactment and allow a temporary waiver until January 2028¹. For the ban to advance, a companion bill must be considered and passed in the US Senate before the legislation can be signed into law by President Biden.



- Full bipartisan support in the House
- Unanimous consent vote was called by Barrasso/Manchin to pass the bill in an expedited fashion on the Senate Floor
- Such consent nearly achieved, except for a surprise "hold" placed on the bill passage by Texas Senator Ted Cruz
- Cruz objection completely unrelated to the Russian uranium issue, but rather a procedural hold to pressure passage of his legislation regarding expedited permitting of semiconductor chip manufacturing capacity
- Cruz can either lift the hold, or the widely supported language is attached to another legislative vehicle for passage

Additional Developments:

- House Foreign Affairs Committee holding hearings to press for sanctions specifically on Russia's Rosatom
- President Biden applying broad sanctions in response to Navalny assassination



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

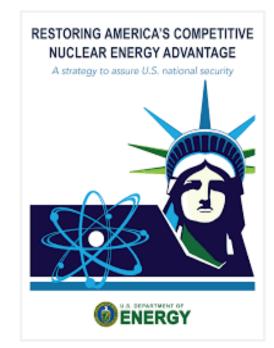
Biden Administration wants Congressional support to revitalize domestic fuel cycle - end U.S. reliance on nuclear fuel from Russia for existing and new advanced reactors. Strategic Uranium Reserve would likely be rolled into the new program. HALEU already appropriated \$400 million – Industry Consortium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

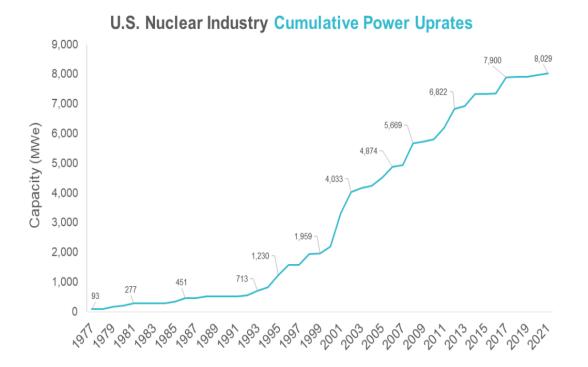
- Nuclear phase-outs or reductions are being abandoned
- License renewals Operational extensions to 80 years
- Power uprates Equivalent to 8 new, large-scale reactors in the U.S. alone

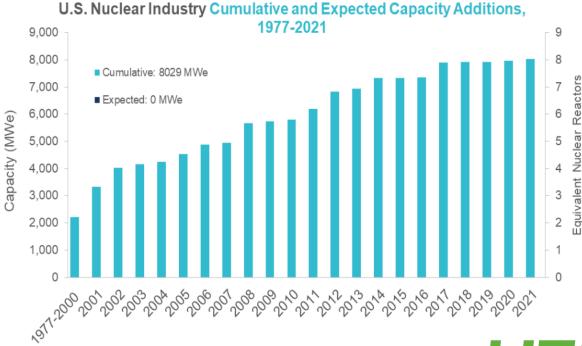








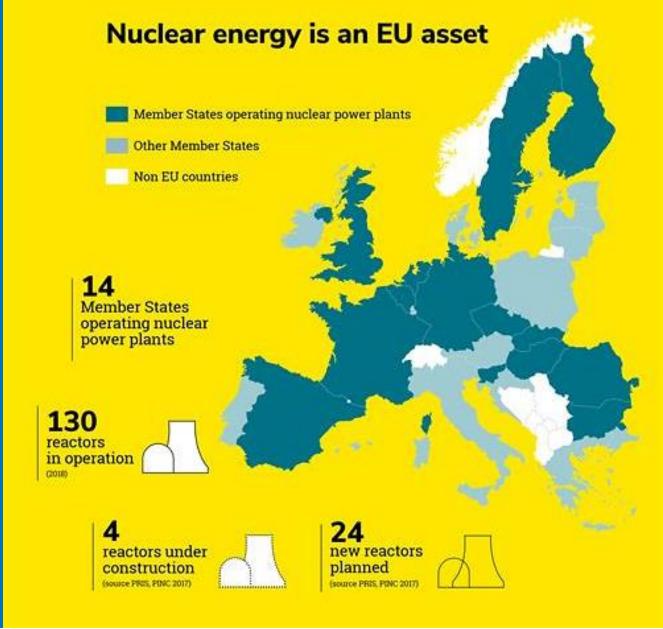




Global Approval for Nuclear Power Continues to Grow

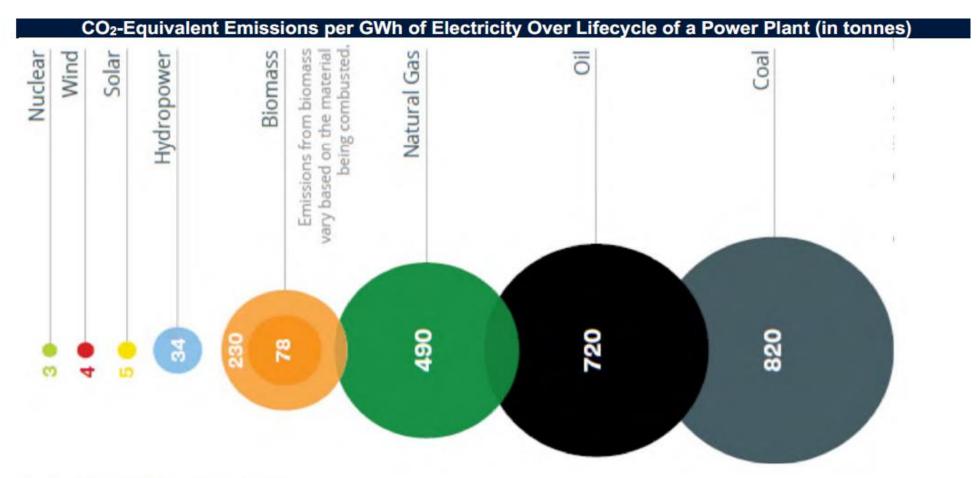
EU Taxonomy Includes Nuclear as an Environmentally Sustainable Investment







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



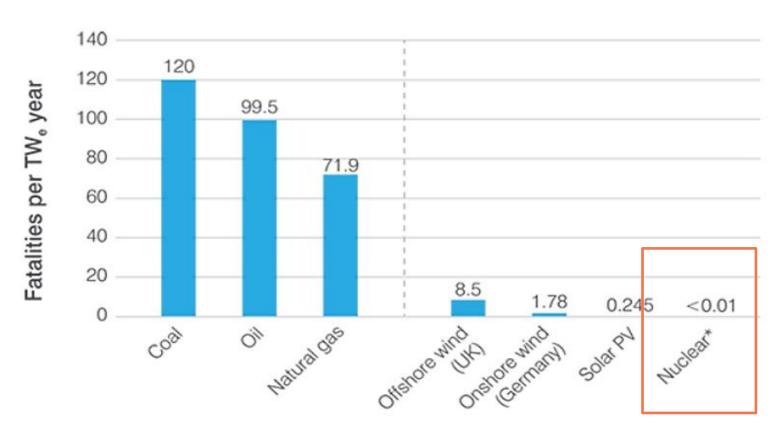
Source: Our World in Data, 2022

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

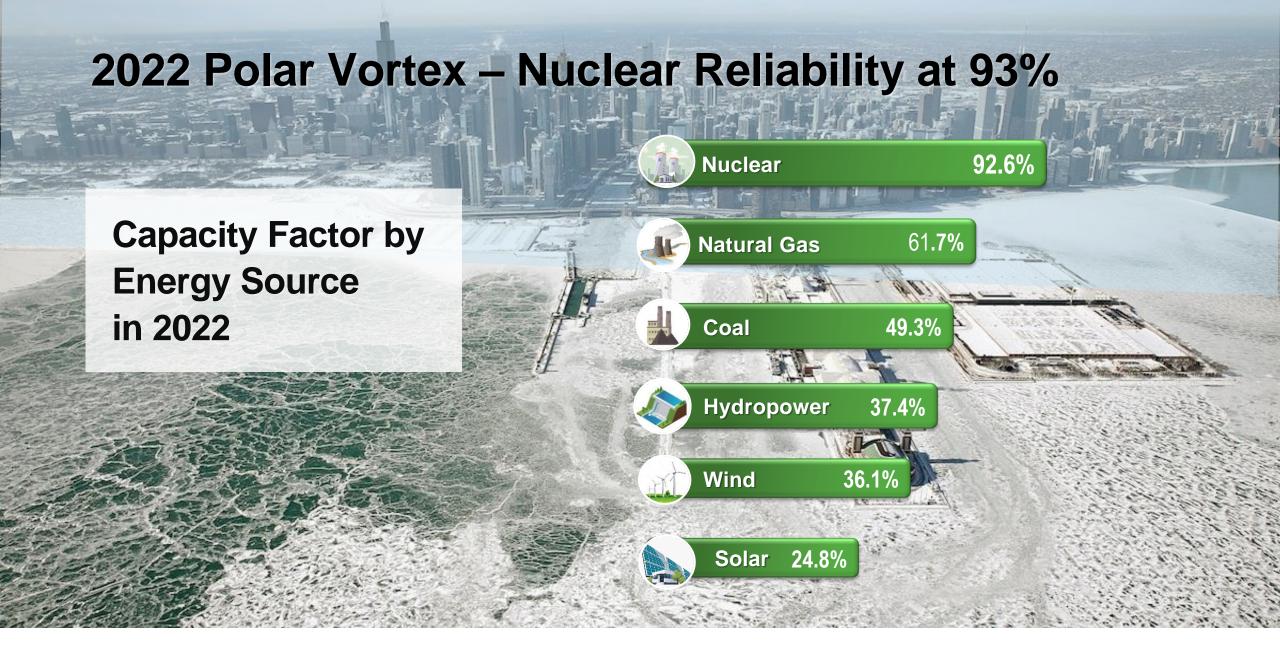


"Nuclear energy is the safest of all the electricity technologies we have."

- Patrick Moore, former director of Greenpeace⁽¹⁾

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



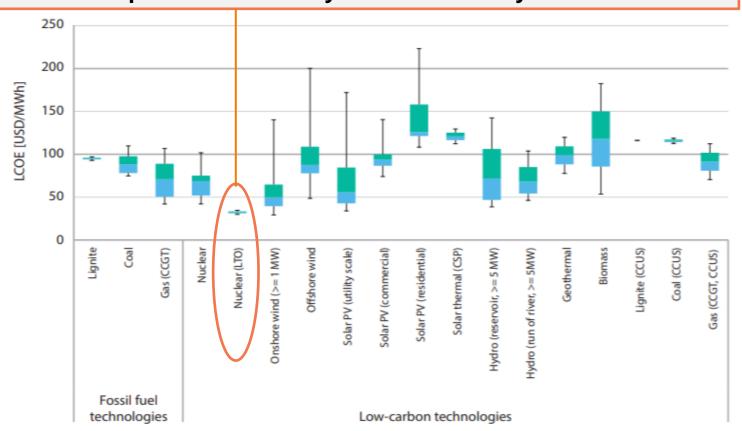






Nuclear Power = Lowest Levelized Cost of Electricity For Extended Life Plants vs any Other Source

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



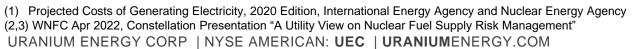
80 years

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 for10% of nuclearoperating costs²



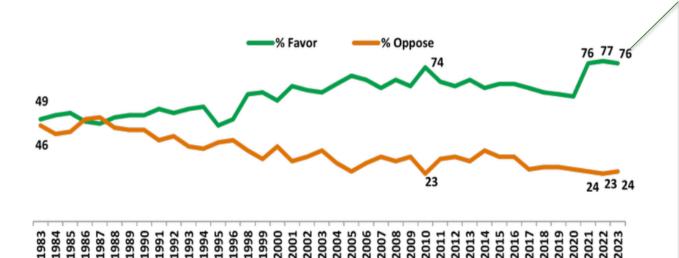


Support for Nuclear Energy is Strong and Increasing Public favors nuclear for reliability, clean air, energy security, energy independence

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⁾

The NRC stated that they expected to see no fewer than 25 license applications for SMR and advanced reactors by 2029⁽²⁾





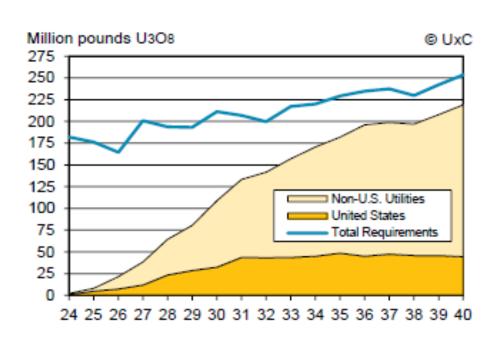




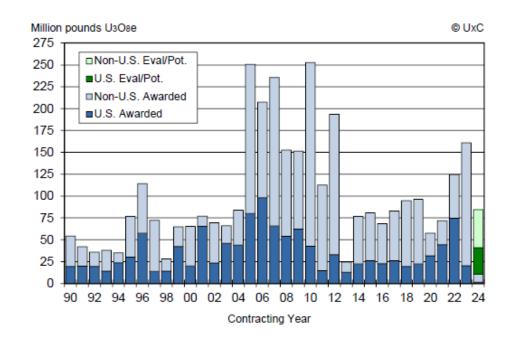
Utility Procurement Cycle: Old Contracts Rolling Off...New Contracts Need to be Signed

1.24 Billion Pounds of Contracting needed by 2035!

Utility Uncommitted Demand



Historic Long-Term Contracting







Bottom Line - Positive Market Outlook

- ✓ **Carbon Free Energy Goals** Renewed focus on the Clean, Safe, Reliable Energy Nuclear Power provides is prompting new reactor development and programs around the world.
- ✓ **Demand Growth** 68 reactors added to the grid in the past 10 years; 61 under construction, 435 reactors planned and proposed, reactor operating life extending to 80 years, reactor uprates, unexpected demand coming from reactors that were or were getting close to or were being retired, new demand emerging from SMRs/Ars, higher tails assay and under to overfeeding, have all contributed to increasing uranium demand.
- Change in Western Demand Drivers National Security, Energy Security, redevelopment of Domestic Nuclear Fuel Supply Chains, Increased Focus on Security of Supply
- New Utility Procurement Cycle is Unfolding "New" fundamentals are taking hold Western utilities are entering a new contracting cycle, new interest in supply assurance, increasing demand for uranium in geopolitically stable and secure jursidictions (e.g. Canada, U.S.). Aversion to Russian Supply and other more complicated geopolitical jursidictions, (e.g. Niger).
- Strong Bipartisan Political Support from U.S. Lawmakers is resulting in infrastructure funding and uranium purchases. Legislation pending in the U.S. to ban Russian uranium supply that will provide investment assurances for the domestic nuclear fuel supply chain. Also included in U.S. Energy Carbon Free Goals, Clean Energy Standard, American Jobs Plan providing new support for the U.S, Reactor Fleet.
- ✓ 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.
- ✓ **Strategic Interest in Physical Inventory** Producers, Developers, Financial buyers as well as Utilities looking to increase inventory positions, contributing to Accelerated Market Re-Balancing.
- ✓ **Underinvestment in Supply –** Resulting in a Uranium Market Structural Deficit, Production is significantly lower than requirements with forecasts averaging over 40 M lbs./year over the next 10 years and expanding further after that. Lead Time to Advance Large New Mines can be 10 years or longer.



Appendix



The Environmentally Friendly In-Situ Recovery Method

e ISR

for MORE INFORMATION

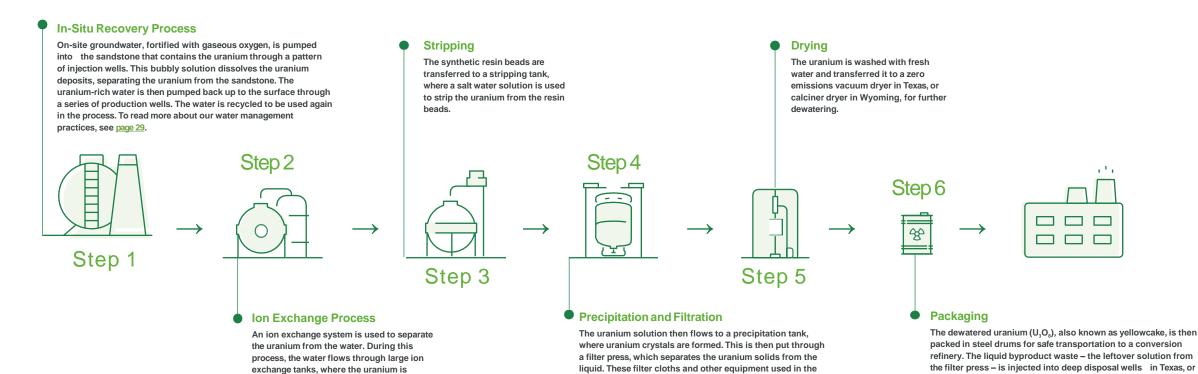
restricted.

into evaporation ponds in Wyoming, in compliance with

government regulations.

VISIT OUR WEBSITE

ISR is considered considerably more environmentally friendly compared to alternative, traditional mining approaches, as the ISR process does not require blasting or waste rock movement, resulting in less damage to the environment, minimal dust, and no resulting tailings or tailings facilities. Further, ISR is more discrete and, therefore, land access does not typically have to be restricted, and the area may be restored to its pre-mining usage faster than when applying traditional mining methods.



recovery process, such as bag filters, piping, pumps and

or byproduct waste and must be sent to a licensed

disposal facility for disposal.

hoses, when no longer usable are classified as radiological,

concentrated onto millions of synthetic resin

beads. These beads are then transferred in a

specially designed resin-hauling trailer to one

UEC's Role in the Nuclear Energy Value Chain



UEC is a Sustainability Leader

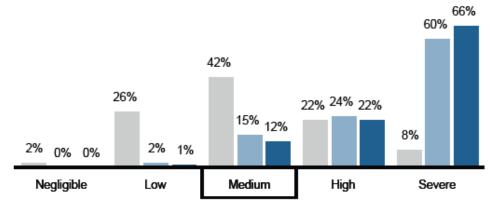
- UEC has the lowest reported carbon intensity of uranium mining companies, with 39.06 lbs CO₂e / lb of yellowcake
- UEC holds the leading Sustainalytics and ISS Quality Score ESG ratings amongst uranium mining companies assessed
- UEC is ranked in the 95th percentile (10th of 200) when assessed on its sustainability practices against global diversified metals and mining companies¹



MORNINGSTAR SUSTAINALYTICS

ESG Risk Rating Ranking







An Industry Leader in Sustainability

Governance

Enhanced diversity on UEC's Board of Directors achieving 33% female representation and 67% ethnically diverse Directors.



33%
Female Directors



67%

Ethnically diverse members on the Board of Directors.

100%

Employees confirmed adherence with UEC's Code of Business Conduct.

Zero

Whistleblower or grievances reported.

Social



Obtained an industry leading safety record with zero reportable incidences.

\$11.6M

Invested back into the local community through procurement spend.



\$2.4V

Procured from Indigenous owned businesses.

\$87,000+

In donations to local organizations on behalf of UEC.

1,010+hrs

Of job-specific training provided to UEC employees.

Environment



CO, Neutral

From operations for the second year in a row.





Completed assessments aligned to the TCFD and TNFD recommended disclosures.

Scope 1+2

Expanded our scope 1 and 2 emissions measurement to cover all operational locations.

Conducted a decarbonization study for our Texas operations to align to our net-zero goal.

Began the
evaluation of a netzero mine design
for our Roughrider
project in
Saskatchewan,
Canada.



70 acres

Of reclaimed wellfield land released for unrestricted use.





2511 acres

Reclaimed and underreview by regulators and 300 acres actively being restored. Released our preliminary economic assessment for UEC's Alto Parana titanium project in Paraguay, identifying the potential to produce titanium feedstock and high-quality pig iron with the lowest projected carbon intensity of existing ilmenite smelting operations globally.

The Road to Net-Zero

We believe nuclear energy will continue to be an important part of the energy transition and low carbon economy. As such, we are focused on scaling our business to meet the future energy needs for nuclear in the U.S. and globally. Further, we recognize the critical nature of the fight against climate change. As such, we have made decarbonizing our operations a priority and have committed to achieve net-zero for our ISR operations in Texas and Wyoming.

Important Strides Towards Decarbonization

UEC has made important strides towards expanding its decarbonization program in FY23. These include:



Expanding our GHG emissions measurement program to cover all assets.



Conducted a decarbonization study for our Texas operations to align with our net-zero goal.



Conducted a baseline study to understand emissions intensity of yellowcake when in production to inform future decarbonization planning.



Continued our efforts to address emissions as urgently as possible, through investing in R&D, energy efficiency, procuring renewable energy credits, conducting carbon-free energy studies and procuring offsets.



Began the **evaluation of a net-zero mine design** for our exploration asset, Roughrider, in Saskatchewan, Canada. This includes the **integration of carbon pricing into the economic model**. This effort continues into FY24 and will be evaluated amongst several mine design options.



Released our preliminary economic assessment ("PEA") for UEC's Alto Parana titanium project in Paraguay. The combination of favorable aspects of mineralization, abundant and low-cost renewable power and efficient logistics gives UEC the potential to produce titanium feedstock and high-quality pig iron with a carbon intensity of less than 0.6t CO₂e/t, the lowest projected carbon intensity of existing ilmenite smelting operations globally.



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



PROJECTS	Mea	Measured Resources			Indicated Resources			M+I		Inferred		Exploration Target			Historic**		
	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								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		0.000	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 Distri	ict					,	•									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								,,		_,555							
Yuty				9,074	0.050	8,962	8,962	2,733	0.04	2,203							
Oviedo				-,	0.000	2,00=	·	_,		_,							
							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	ces	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 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