



LARGEST & DIVERSIFIED NORTH AMERICAN FOCUSED URANIUM COMPANY

Corporate Presentation – April 2024

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



Disclaimer

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

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

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

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

| | |
|--|---|
| <p>\$564 Million Accretive Acquisitions⁽¹⁾</p> | <p>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</p> |
| <p>226.2 M lbs. M&I 102.7 M lbs. Inferred U₃O₈ Resources⁽²⁾</p> | <p>Creating the Largest Diversified North American Focused Portfolio 3x increase of total resources 4x increase of production capacity</p> |
| <p>8.5 M lbs. U₃O₈ U.S. Licensed Capacity/ Year⁽³⁾</p> | <p>Largest, Fully Permitted, Low-Cost ISR Projects Resource Base of Any U.S. Based Producer</p> |
| <p>\$332.5 Million Cash & Liquid Assets⁽¹⁾</p> | <p>Strong Balance Sheet, No Debt</p> |
| <p>Physical Uranium Portfolio</p> | <p>Cumulative to Jan 31, 2024: 1,166,000 lbs of Inventory on hand 1,000,000 lbs. to be purchased by UEC through Dec 2025 at avg cost of ~\$39/ lb.</p> |



HOBSON PLANT – TEXAS HUB & SPOKE OPERATIONS



IRIGARAY PLANT – WYOMING HUB & SPOKE OPERATIONS

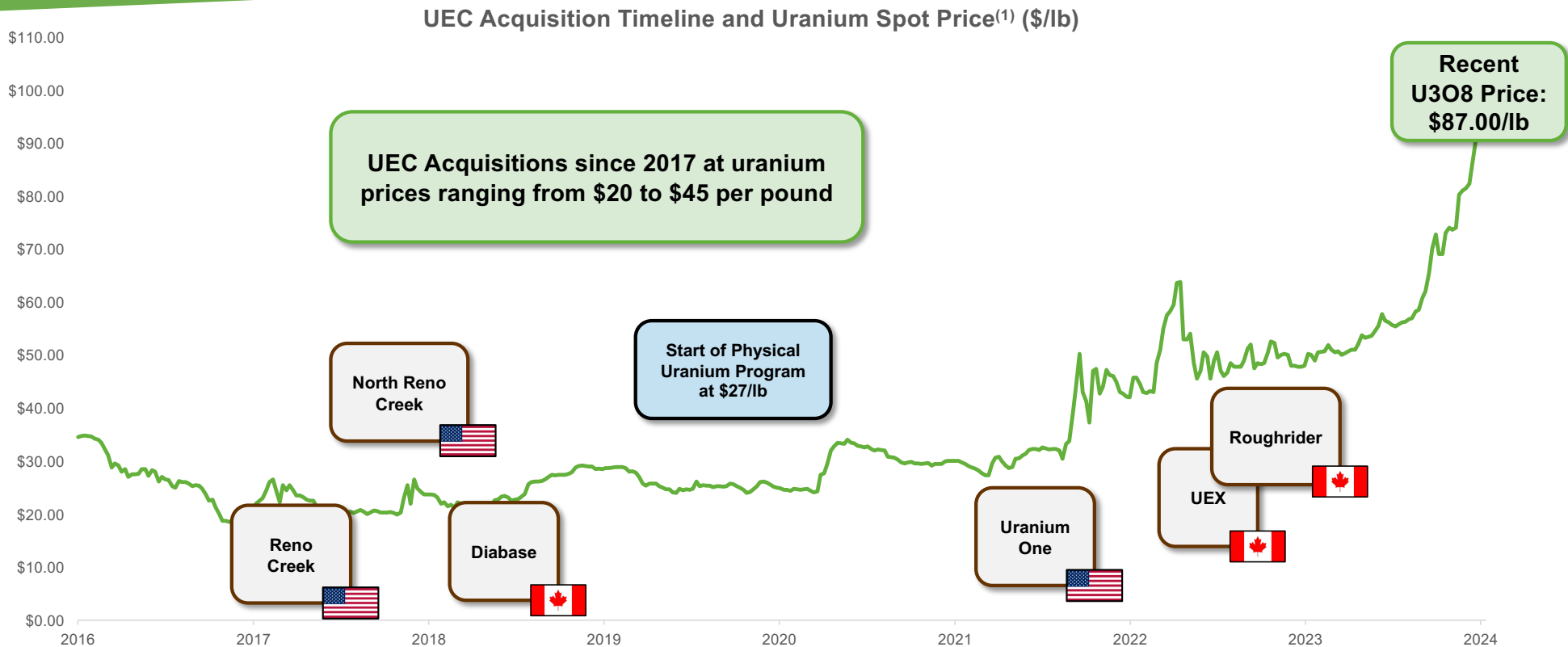


ATHABASCA BASIN , HIGH-GRADE CONVENTIONAL PORTFOLIO



Disciplined Growth Strategy

Acquisitions through the bottom of the Uranium Cycle

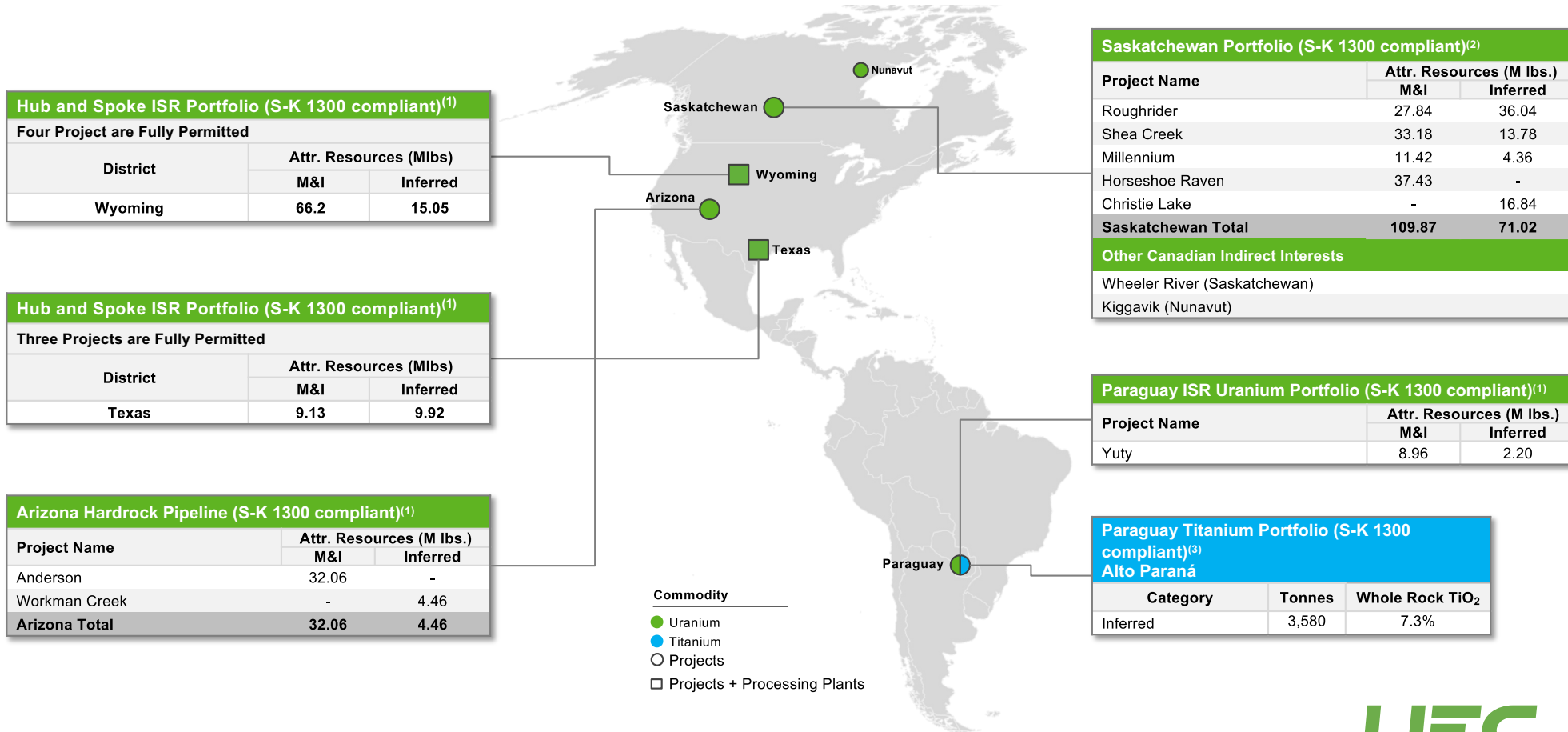


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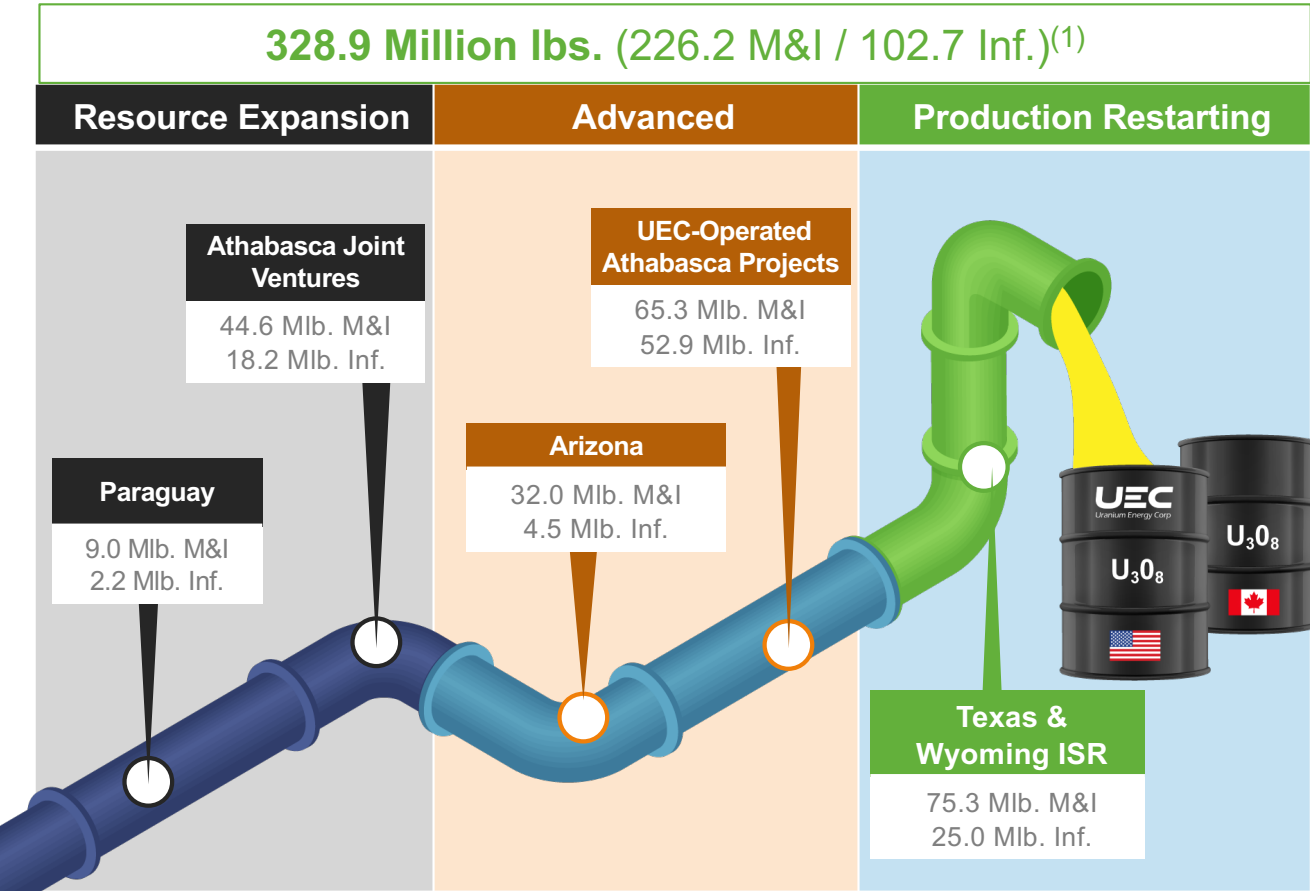
1) Source: Uranium price per UxC as of Apr.24, 2024
 2) Uranium price at time of acquisition based on weekly U3O8 prices per UxC.



Total Resources of 226.2 M lbs. U₃O₈ as M&I and 102.7 M lbs. U₃O₈ 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



IRIGARAY PLANT – WYOMING HUB & SPOKE OPERATIONS

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

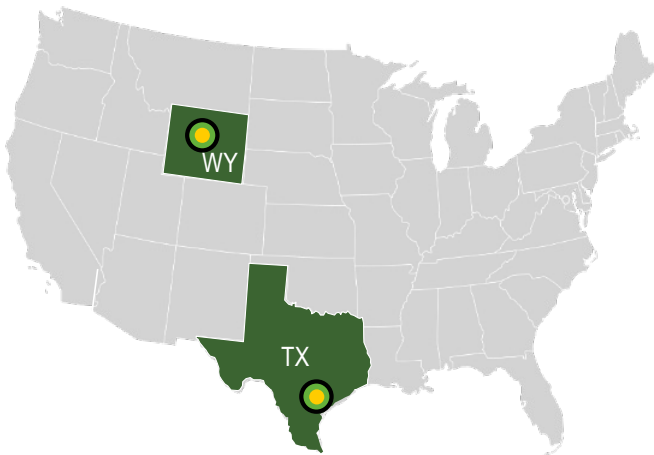


HOBSON PLANT – TEXAS HUB & SPOKE OPERATIONS



Production Restarting in Wyoming, August 2024

7 Fully Permitted Projects in Texas and Wyoming



- 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)

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&I
9.9 M lbs. Inferred
 U₃O₈ resources

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

(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



Environmentally-Friendly, Low-Carbon, and Low Cost



ISR has **little to no impact** on the ground's surface area and local biodiversity and has a **lower emissions than conventional mining**.



ISR produces no tailings and **significantly less solid waste** than conventional mining.



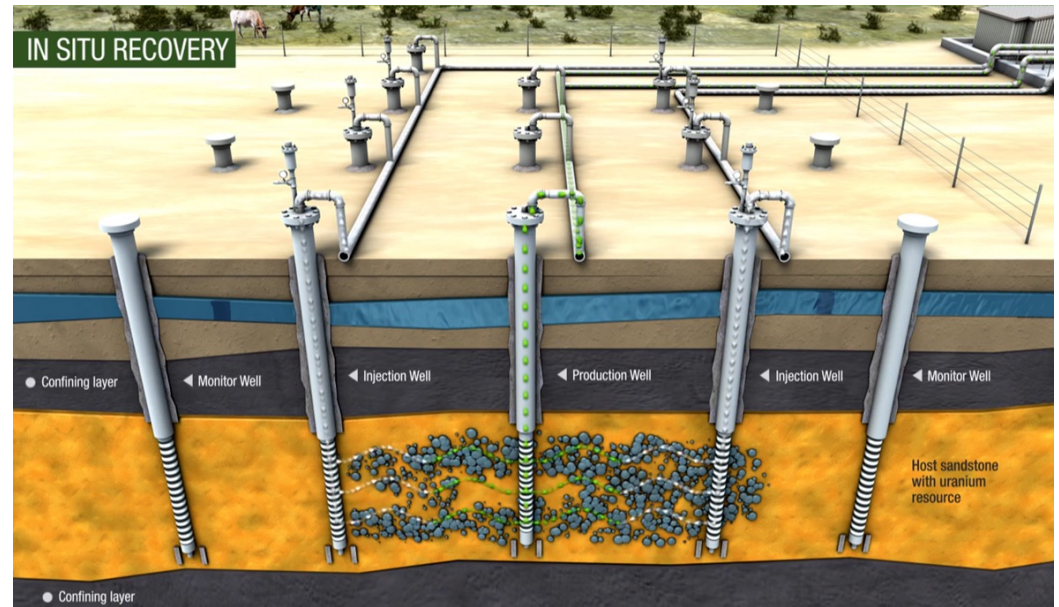
ISR **does not require large volumes of freshwater** compared to conventional mining. We recycle up to approximately 95% of the non-potable water used during ISR production.



ISR is **one of the safer, if not the safest, forms of mining utilized today**.



ISR **does not release potentially hazardous substances** frequently associated with conventional mining, such as mercury and lead.



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



Irigaray CPP, Wyoming



Christensen Satellite Plant Interior



Irigaray CPP Interior,
North and South Elution Circuits

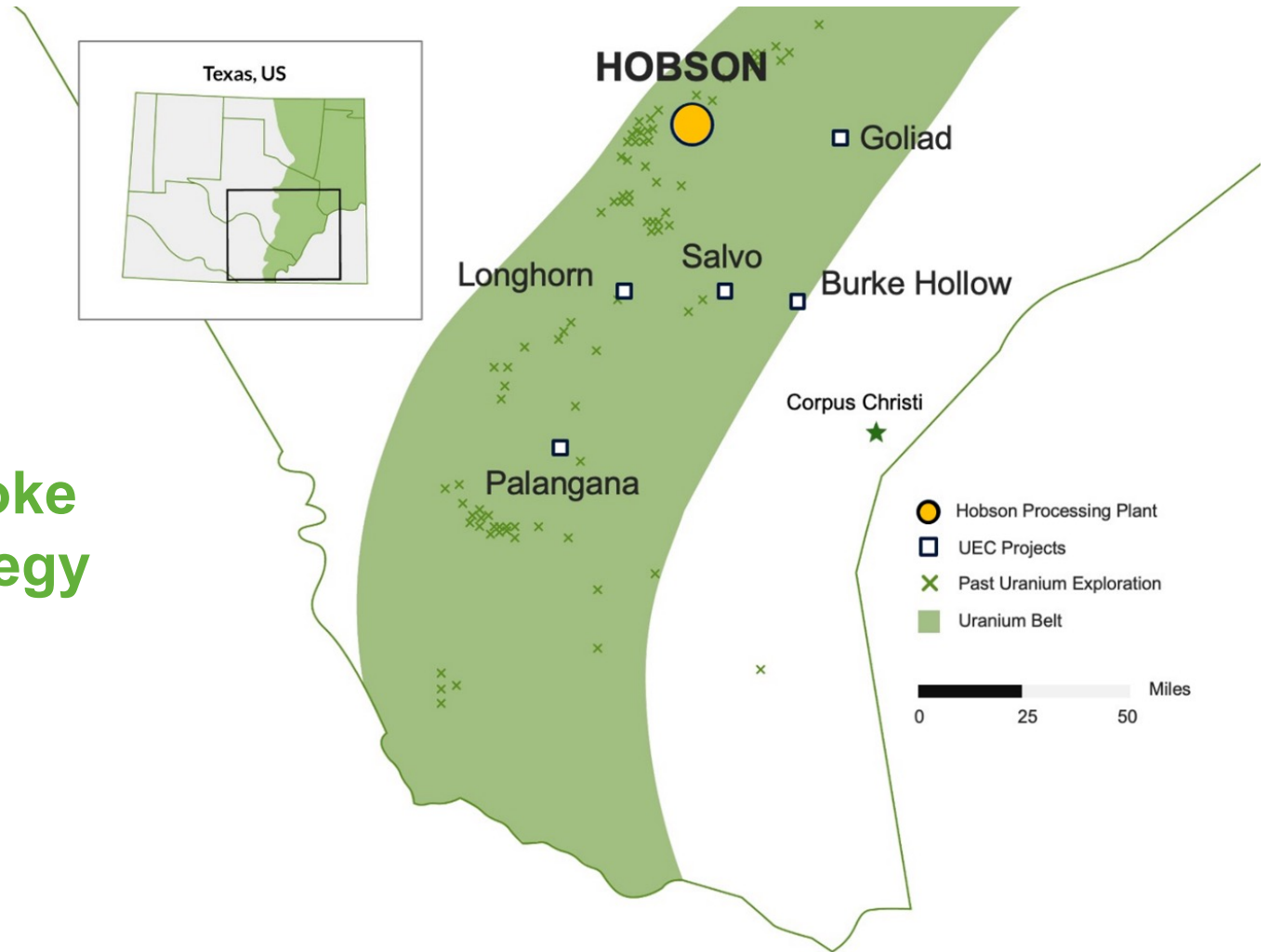


New Wellfield Testing Completed -
Christensen Ranch Mine Unit 8&10

(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

Texas Hub & Spoke Production Strategy





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



2023 Drilling Program at Burke Hollow ISR Project, South Texas

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

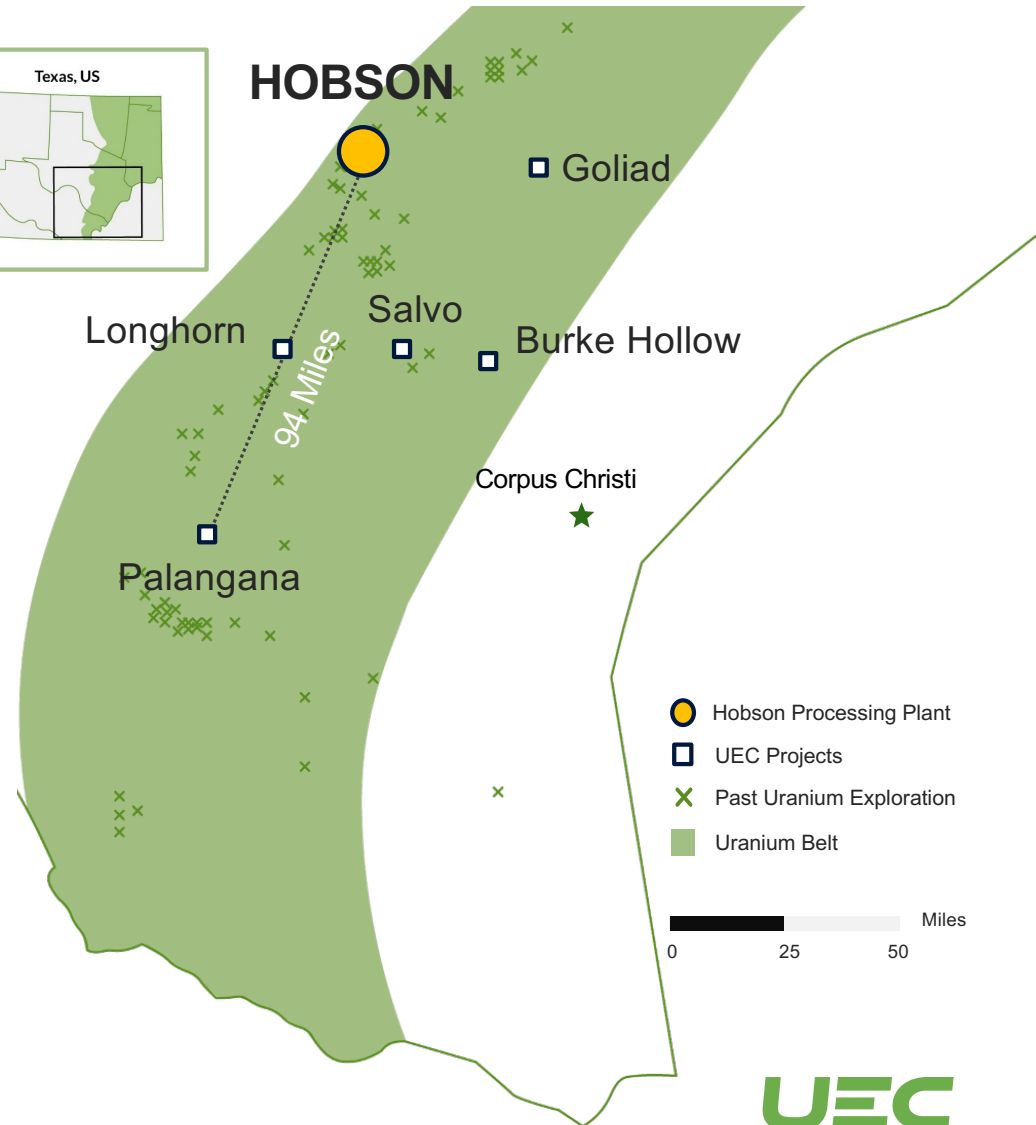
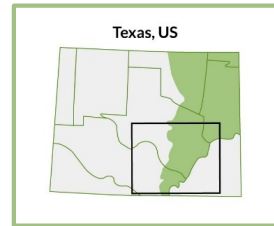
6 months construction timeline

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

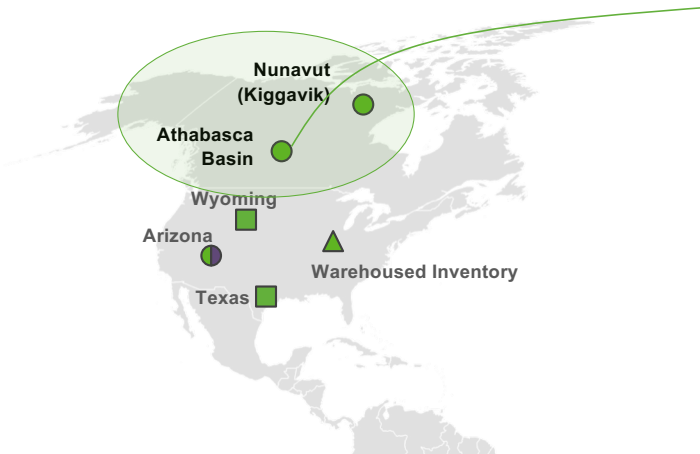
- The major permits for production have been issued for Goliad and Burke Hollow



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 |



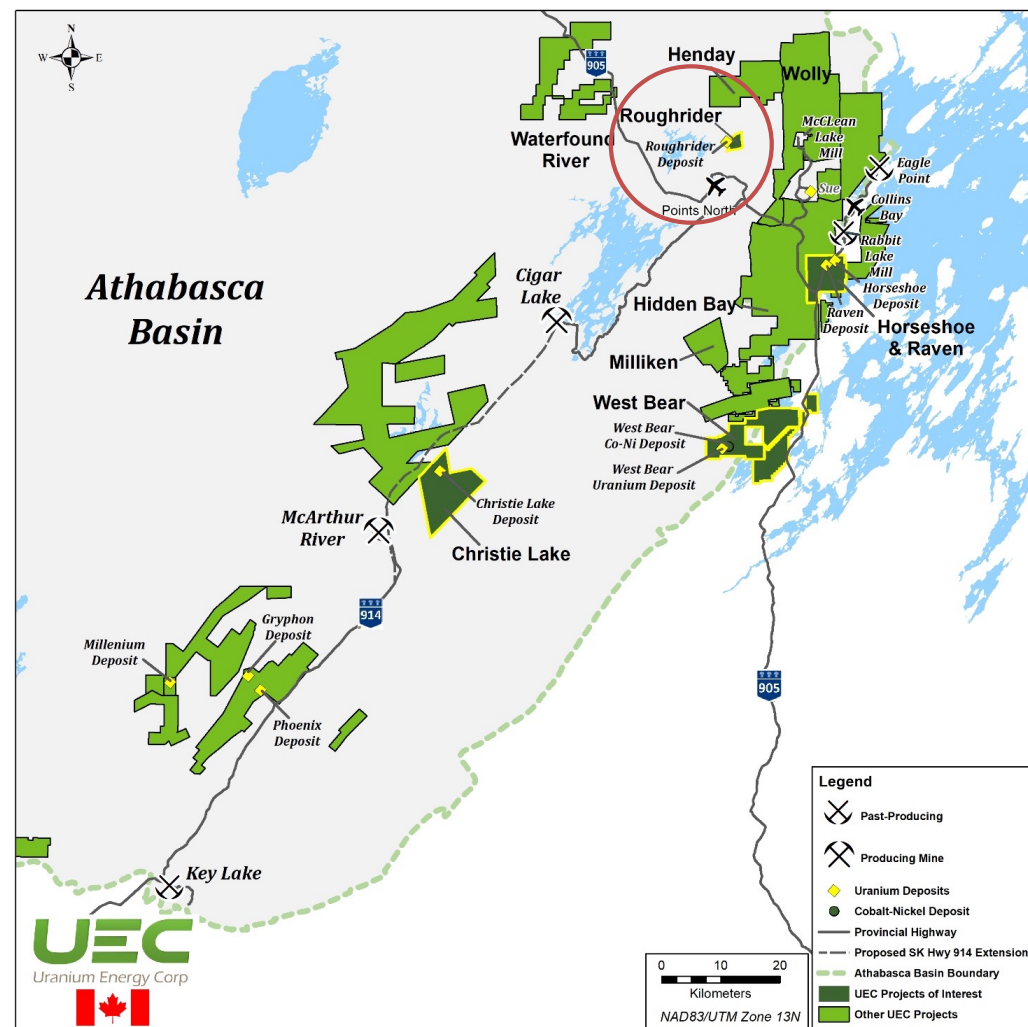
(1) Does not include the Kiggavik, Wheeler River, or West Bear project resources. Refer to the appendix for a detailed breakdown of resources reported under S-K 1300, note the Disclaimer on Slide 2, and refer to the Company's technical reports on SEDAR+ and EDGAR.

UEC 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

(1) UEC press release dated Oct 17, 2022, Dec 19, 2022 (2) UEC press release dated May 2, 2023



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⁾



(1) UEC press release dated January 31, 2024 (2) UEC press release dated May 2, 2023

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. U_3O_8 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% eU_3O_8 over 3.8 m) and CB-178-1 (23.22% eU_3O_8 over 3.4 m)

CB-176A

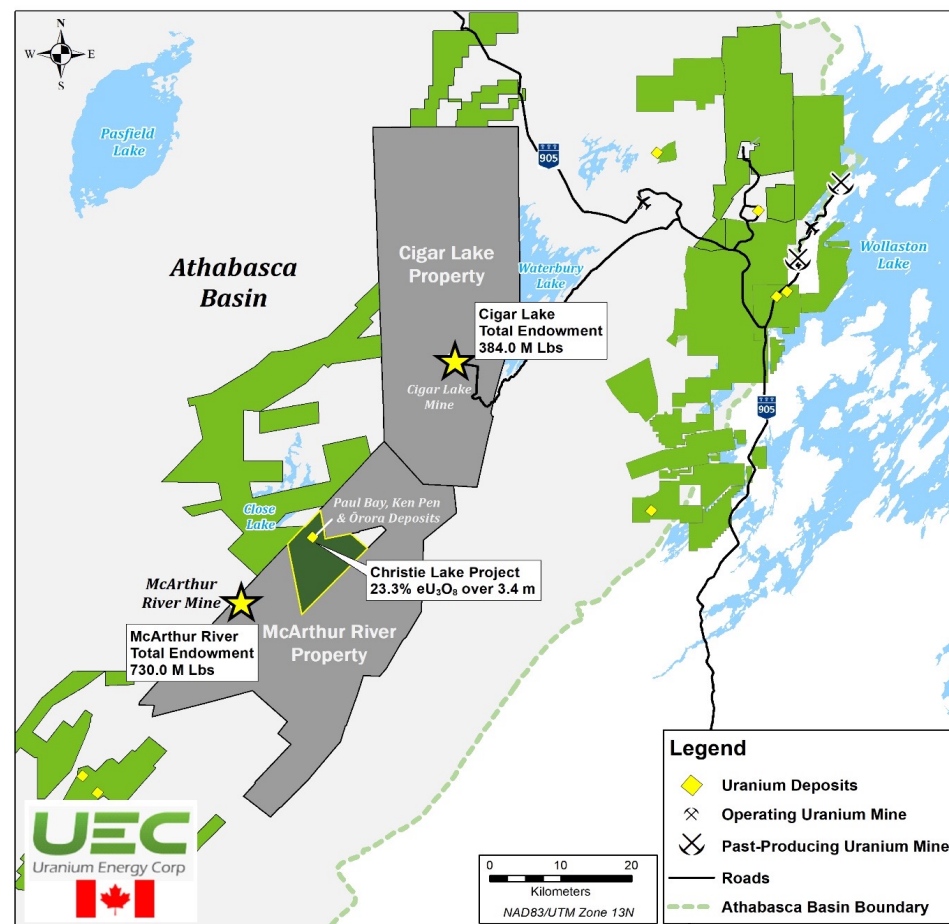


68.7% eU_3O_8 over 2.1 m

CB-173



21.6% eU_3O_8 over 2.3 m



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

(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

(3) Kiggavik resources as reported by Orano in their 2021 Activities Report available on their website at 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.

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) | 7,639,389 |
| Shares Outstanding | 401.1 M |
| Warrants | 3.6 M |
| Options + Stock Awards | 8.9 M |
| Fully Diluted⁽¹⁾ | 413.5 M |
| Recent Activity | \$6.62 As of Apr 24, 2024 |
| Market Cap | \$2.66 B As of Apr 24, 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

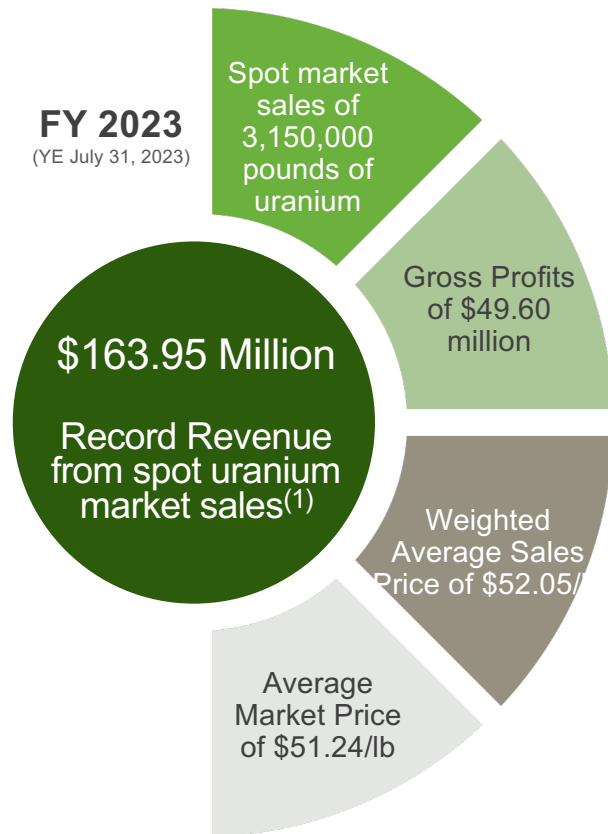
(1) The Company's quarterly report for the quarter year ended Jan 31, 2024

(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)



Physical Portfolio - North American Warehoused Uranium

Bolsters UEC balance sheet and provides strategic inventory

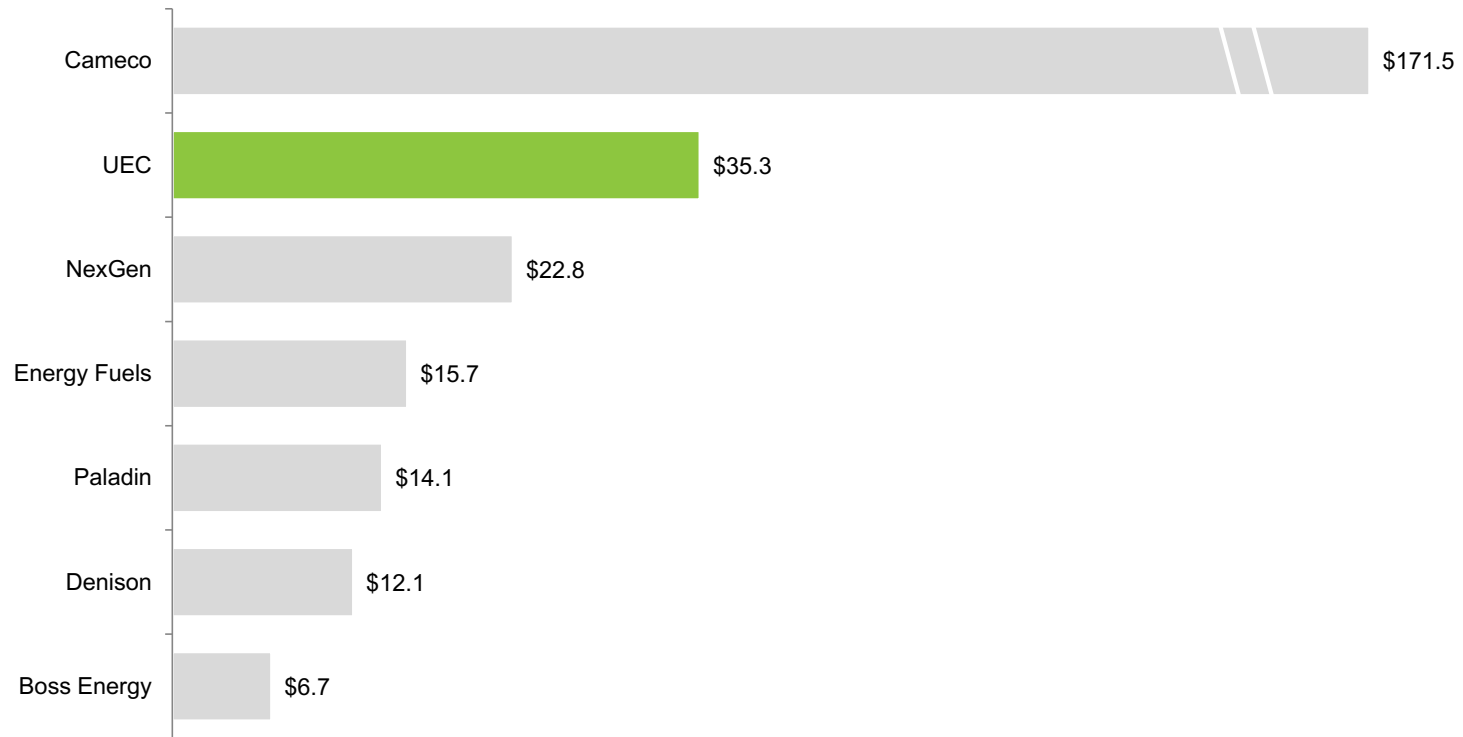


Cumulative from March 2021 Inception - as of January 31, 2024⁽²⁾:

| | | |
|---|----------------------------------|---|
| 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 |

Strengthened Positioning and Liquidity Among Peer Group

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



Source: FactSet

(1) Based on last 1 year of trading across U.S. listings; Paladin and Boss Energy based on Australian listings



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. U_3O_8 (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

