



LARGEST & DIVERSIFIED NORTH AMERICAN FOCUSED URANIUM COMPANY

Corporate Presentation – December 2023

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



Disclaimer

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

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

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

Fastest Growing, 100% Unhedged Pure Play Uranium Company

<p>\$566 Million Accretive Acquisitions⁽¹⁾</p>	<p>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</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>\$213.7 Million Cash & Liquid Assets⁽⁴⁾</p>	<p>Strong Balance Sheet, No Debt</p>
<p>Physical Uranium Portfolio</p>	<p>As of Oct 31, 2023: 866,000 lbs of Inventory on hand at avg cost of \$49/lb 1,300,000 lbs. to be purchased by UEC through Dec 2025 at avg cost of ~\$46/ lb.</p>



HOBSON PLANT – TEXAS HUB & SPOKE OPERATIONS



IRIGARAY PLANT – WYOMING HUB & SPOKE OPERATIONS

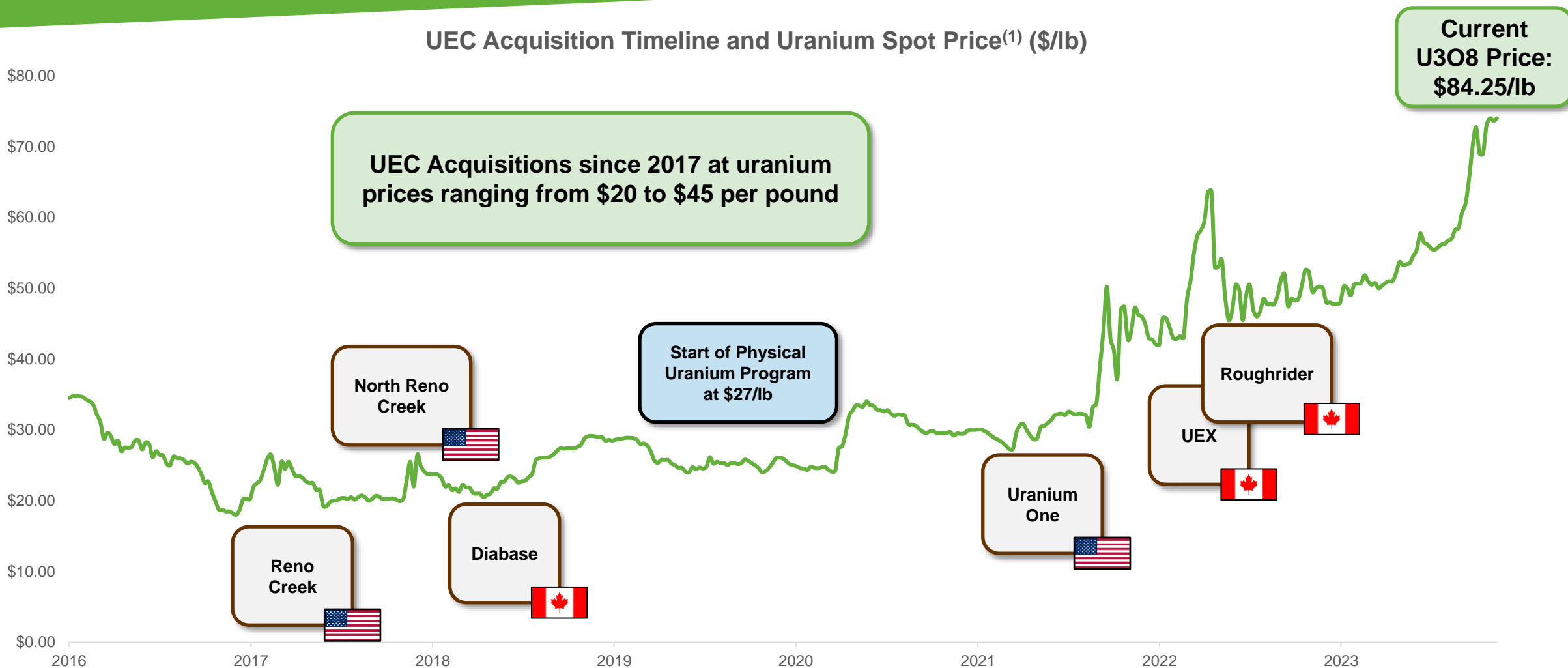


ATHABASCA BASIN , HIGH-GRADE CONVENTIONAL PORTFOLIO

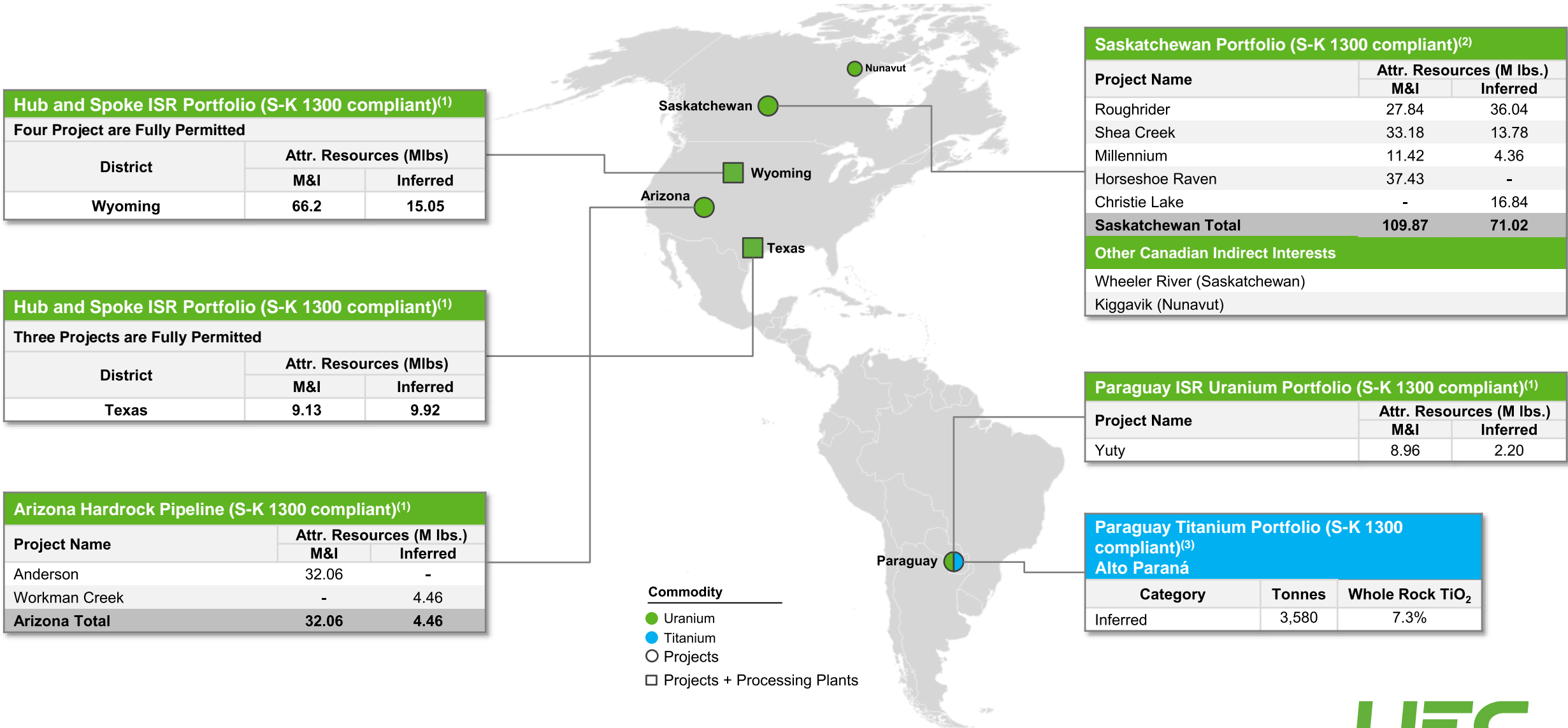
(1) UEC press release dated Oct 12, 2022; \$340 M in acquisitions was completed in the FY 2023 as of July 31, 2023 (2) Does not include the Kiggavik, Wheeler River, or West Bear project resources. Refer to the appendix for a detailed breakdown of resources reported under S-K 1300, note the Disclaimer on Slide 2, and the Company's technical reports on SEDAR+ and EDGAR (3) UEC press release dated Nov 17, 2022 (4) UEC quarterly report for the quarter ended Oct 31, 2023

Disciplined Growth Strategy

Acquisitions through the bottom of the Uranium Cycle

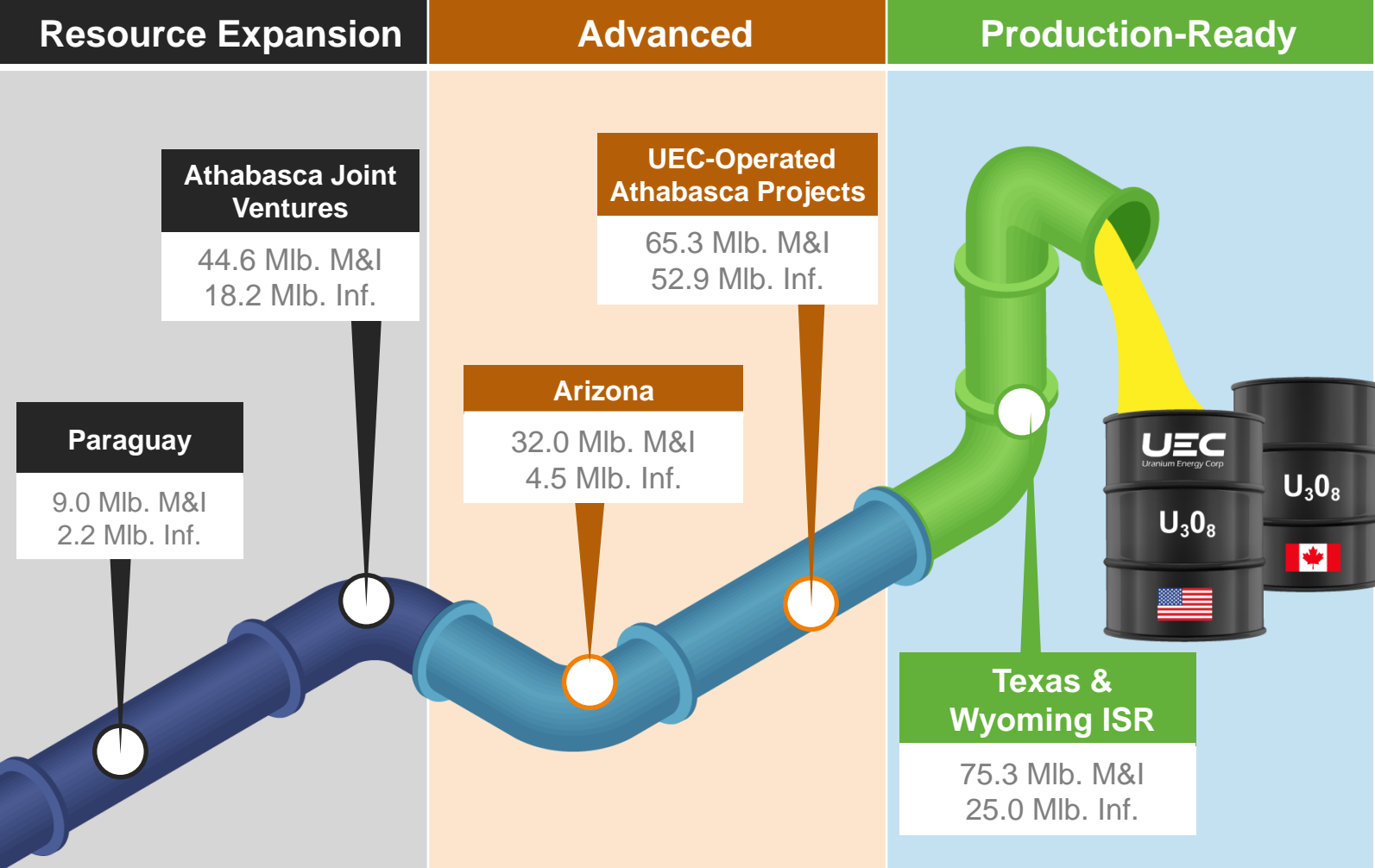


Total Resources of 226.2 M lbs. U₃O₈ as M&I and 102.7 M lbs. U₃O₈ as Inferred Largest, Diversified Resource Base in the Western Hemisphere



Creating Value by Delivering on our Pipeline

328.9 Million lbs. (226.2 M&I / 102.7 Inf.)⁽¹⁾



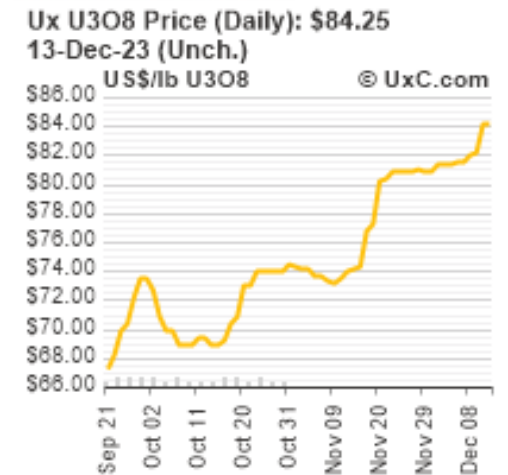
Wyoming Hub & Spoke ISR Portfolio



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

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



Source: (1) UxC, LLC: www.uxc.com Dec 13, 2023, Numerco (2) TradeTech Nov 30, 2023



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 Sodium 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)

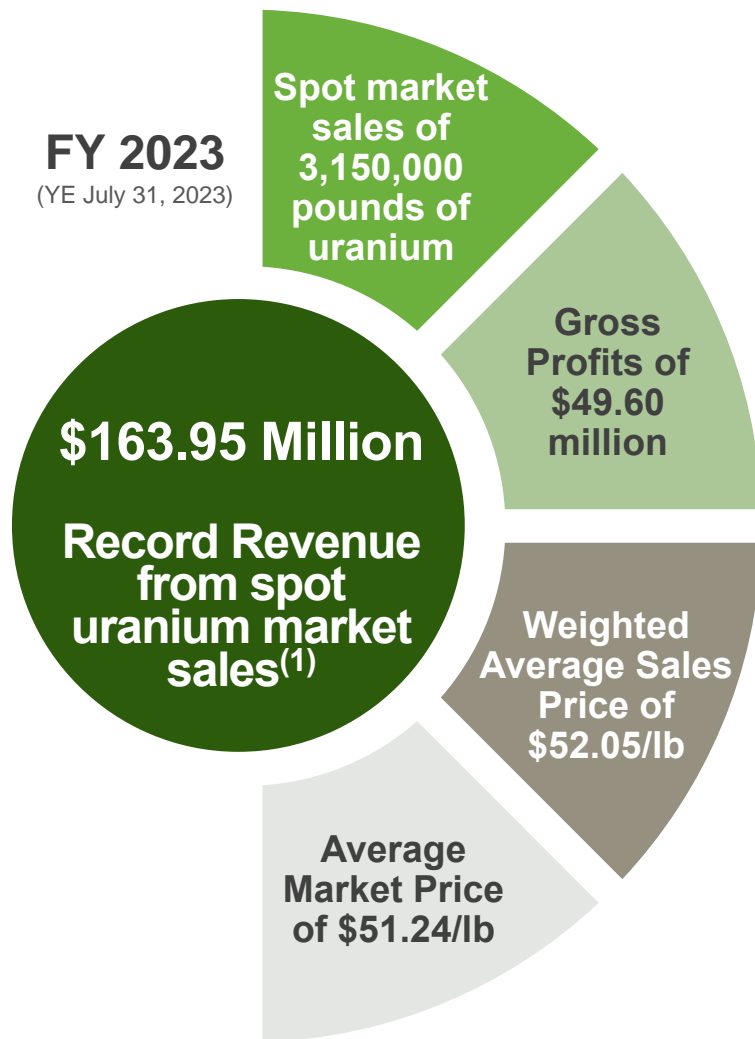
- This award established the U.S. strategic uranium reserve which is part of Government’s goal of supporting America’s nuclear fuel supply chain
- Strategic uranium reserve expected to be a 1.5 billion dollar program



HOBSON PLANT – TEXAS HUB & SPOKE OPERATIONS

Physical Portfolio - North American Warehoused Uranium

Bolsters UEC balance sheet and provides strategic inventory



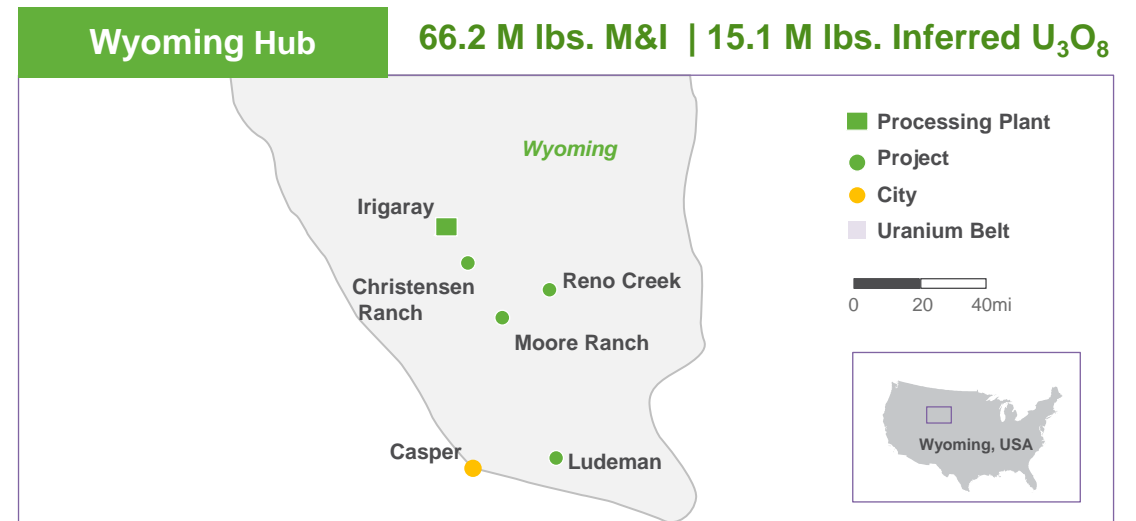
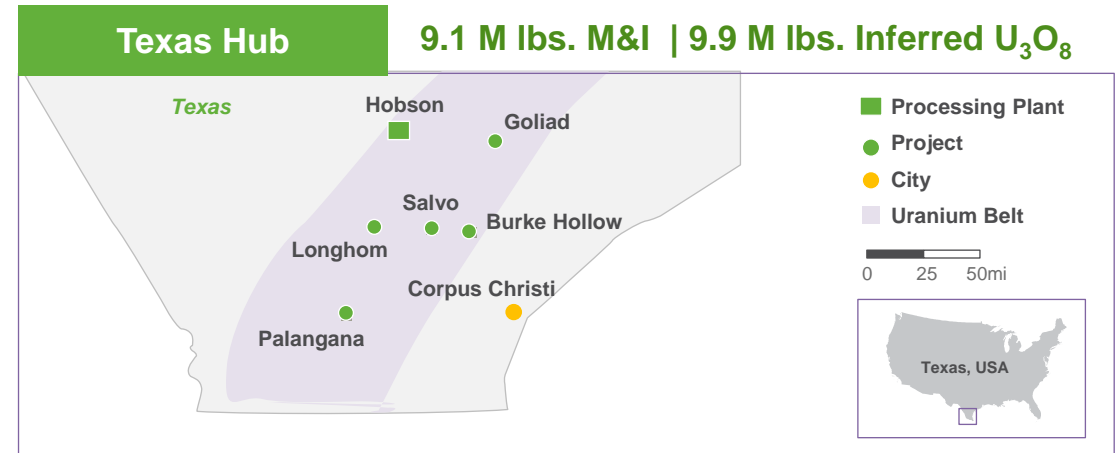
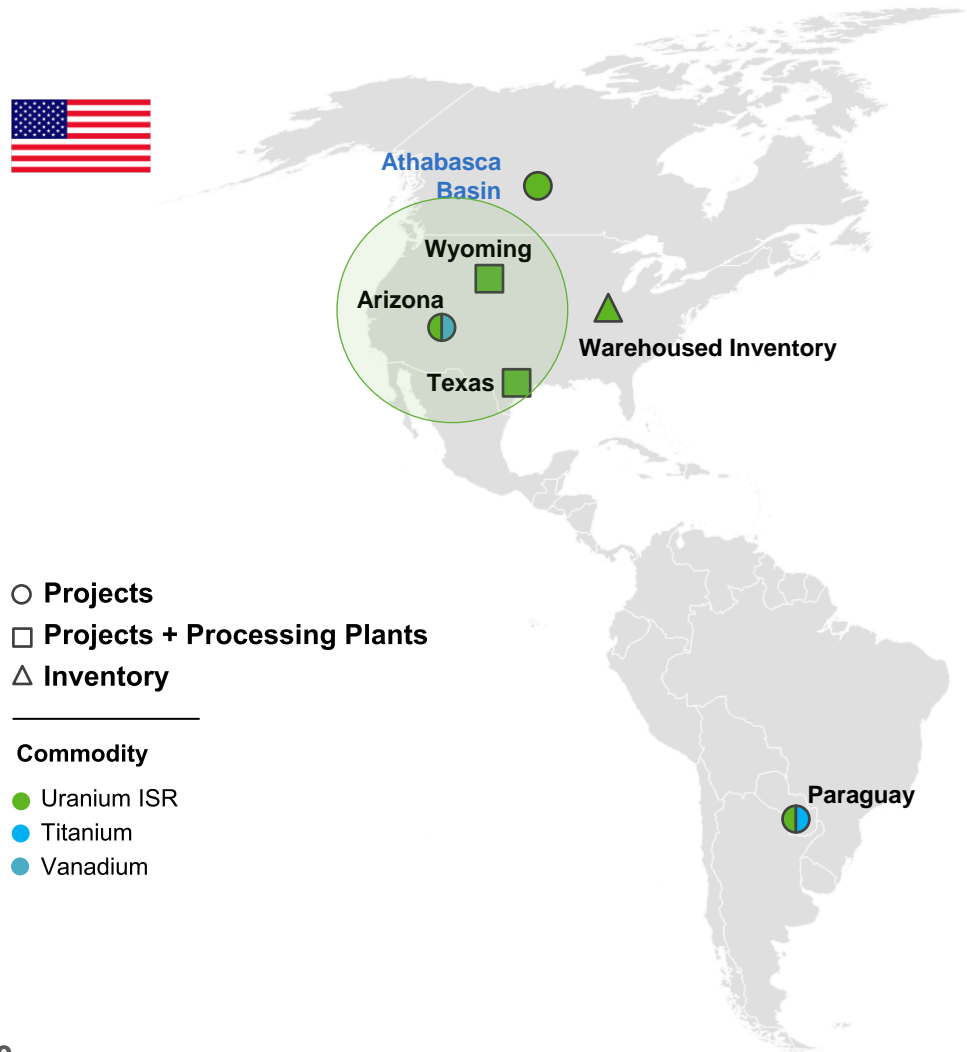
Cumulative from March 2021 Inception - as of October 31, 2023⁽²⁾:

6.1 M lbs Total Uranium Purchases Contracted	866,000 lbs. Inventory on hand	1.3 M lbs. To Be Delivered under Contracted Purchases
6.1M lbs. at ~\$40/lb avg. cost- multiple deliveries between Mar 2021- Dec 2025	At an avg. cost of ~\$49/lb.	At an avg. cost of ~\$46/lb



U.S. ISR Production Platform

7 Fully Permitted Projects in Texas and Wyoming

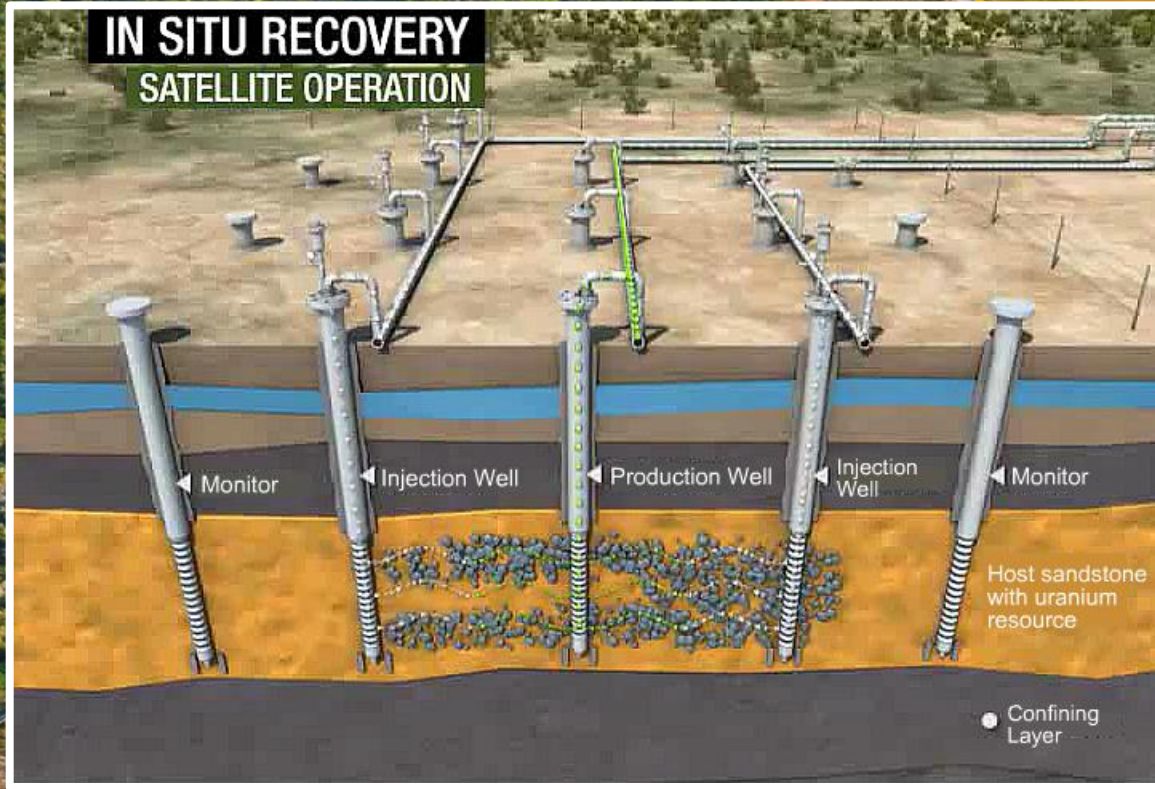


(1) Refer to the appendix for a detailed breakdown of resources reported under S-K 1300, note the Disclaimer on Slide 2, and refer to the Company's technical reports on SEDAR+ and EDGAR



In-Situ Recovery (ISR) Overview

Low Cost & Environmentally Friendly



*Watch how the
In Situ Recovery (ISR)
Technology works*

[Click Here](#)

UEC

UEC Acquires Uranium One Americas for \$112 Million Cash

Transformative Acquisition ➤ Creating America's Leading Uranium Mining Company

UEC

+

uraniumone™
investing in our energy



Highly Accretive Transaction

- Doubling production capacity by total number of permitted U.S. ISR projects, resources and processing infrastructure ⁽¹⁾
- 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



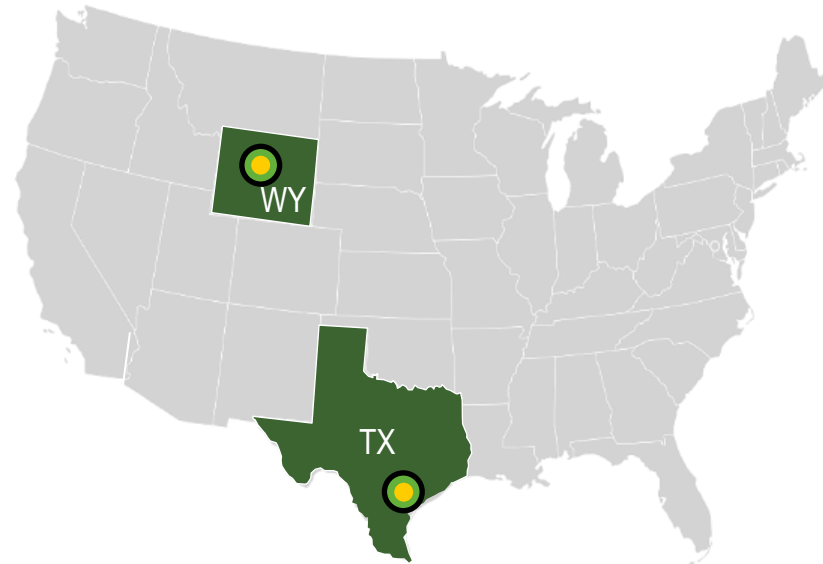
Resource Expansion Potential

- 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

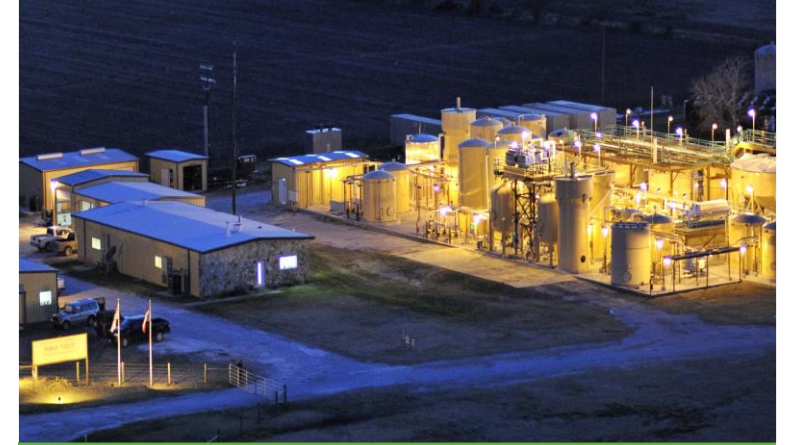
Irigaray Processing Plant

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)

15.50 M lbs. Indicated and
0.14 M lbs. Inferred U_3O_8 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

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



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

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

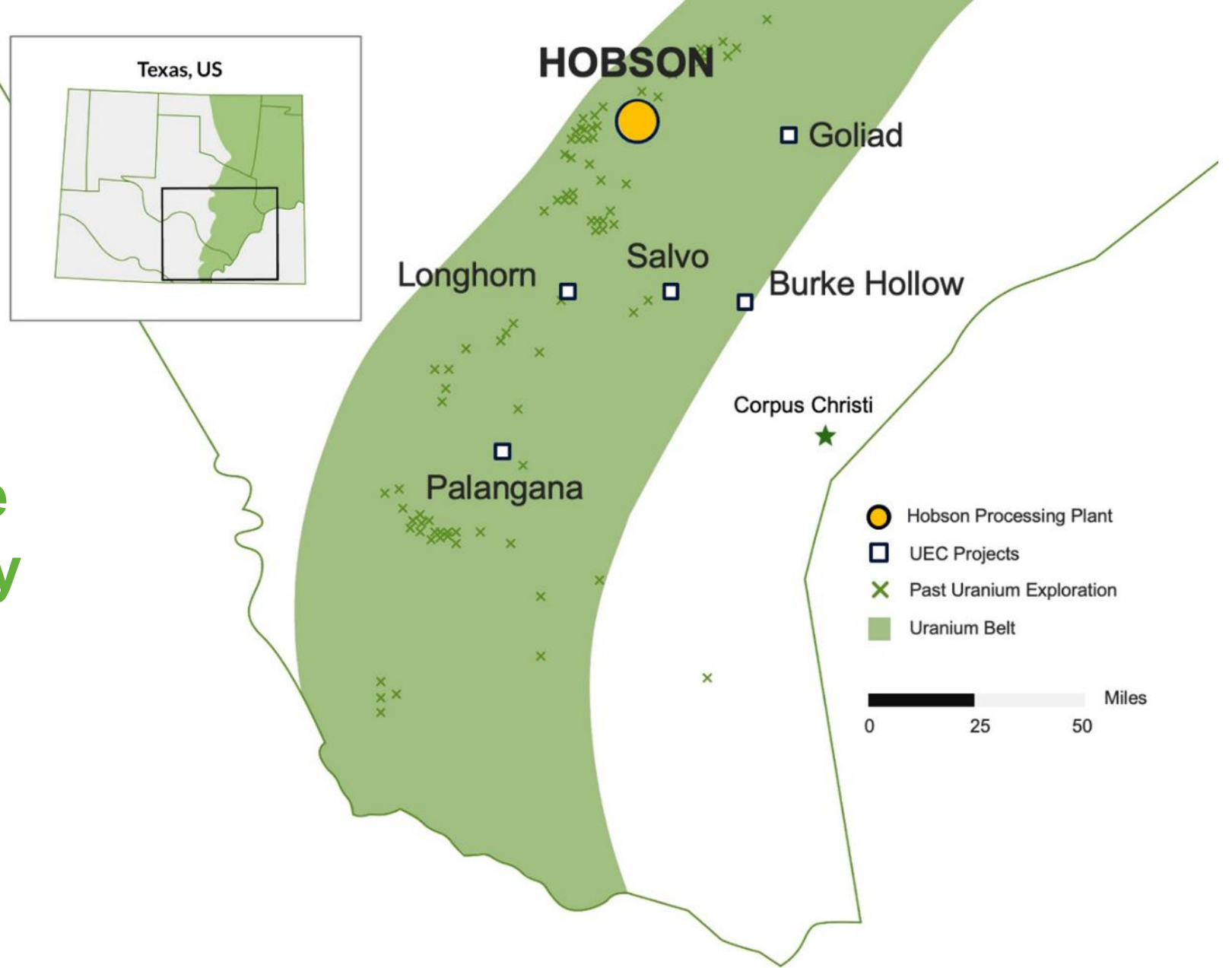
9.7 M lbs. M&I | 1.3 M lbs. Inferred U_3O_8 ⁽¹⁾

- 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



(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

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-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

Burke Hollow ISR Project, South Texas

Advancing Towards Uranium Extraction

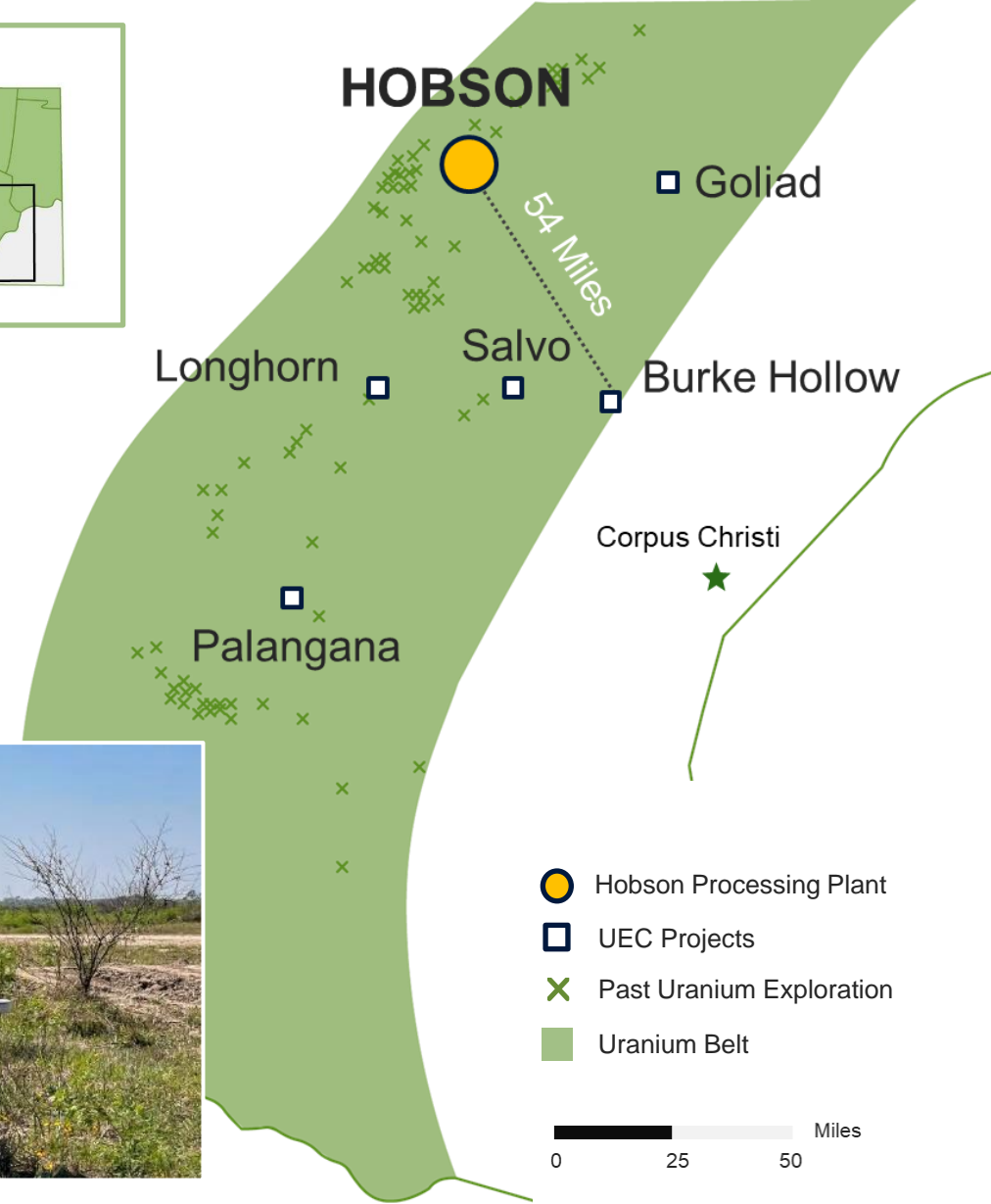
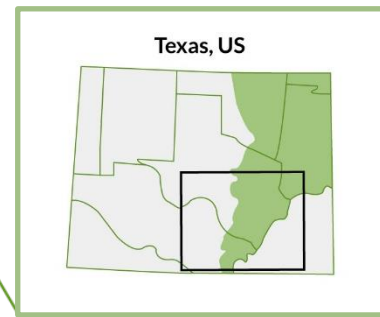
- Discovery of six trends since 2012
- Leach amenability testing indicates recovery >90%
- ~20,000 acres
- ~50 miles from Hobson CPP
- 50% of the property unexplored

Final Permits Issued

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



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



Palangana ISR Mine

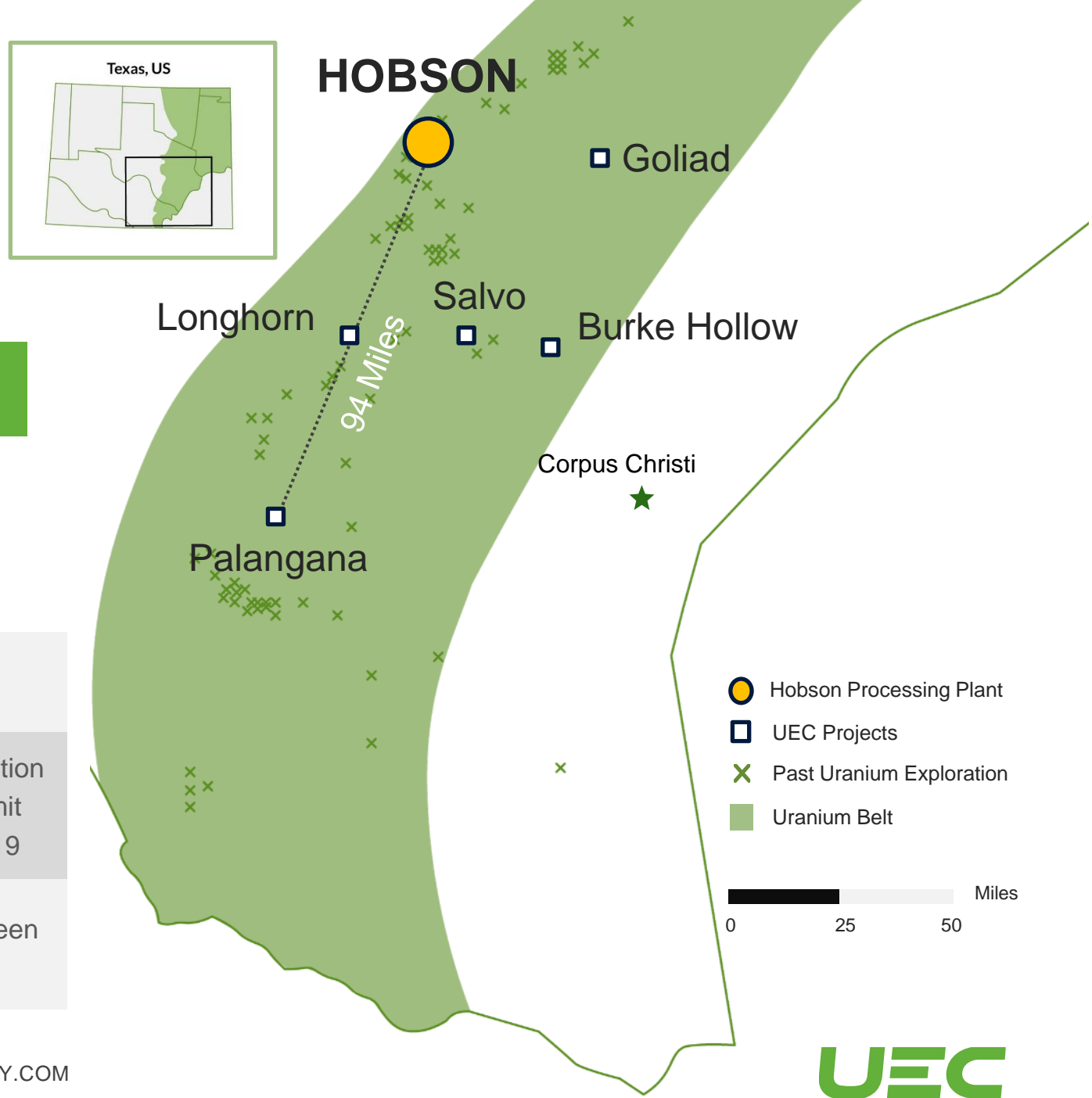
First Producing Mine

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

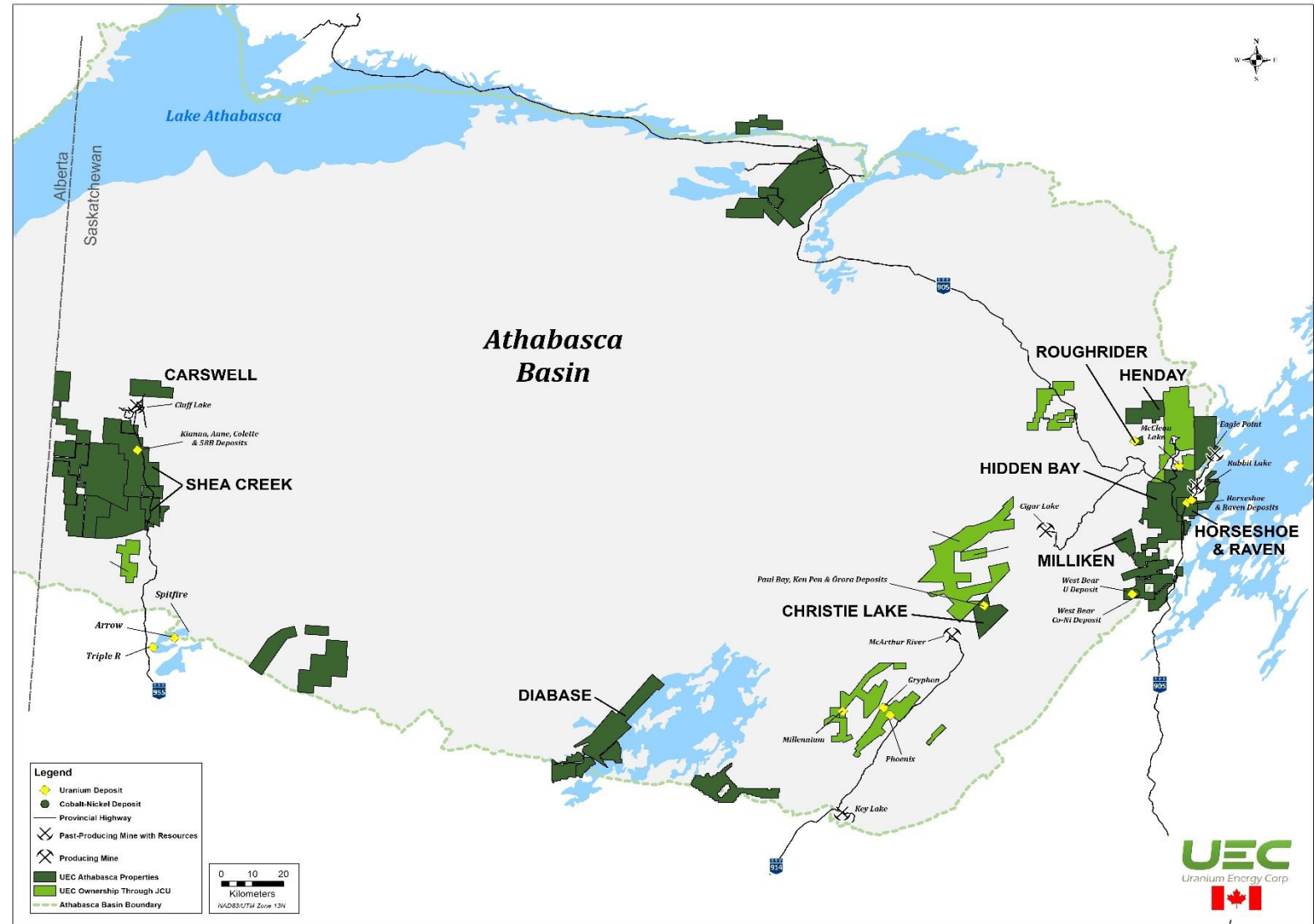
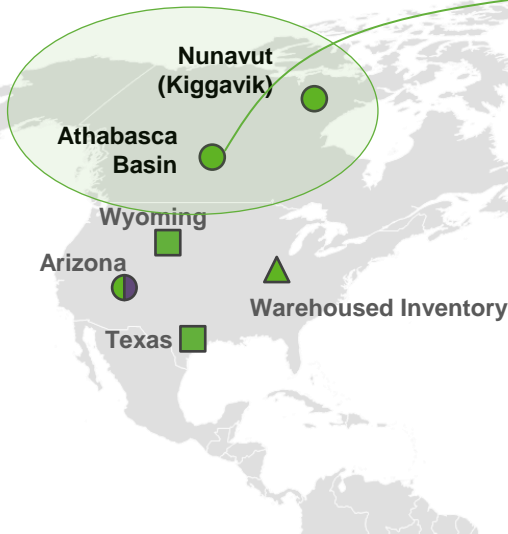
\$10M Initial CAPEX	6 months construction timeline
Production Ready	<ul style="list-style-type: none"> • Low cash cost of \$21.77/lb. during operation • Fully permitted incl. expanded mine permit • Received 10-year renewal permits in 2019
Similar Costs for Future Projects	<ul style="list-style-type: none"> • 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

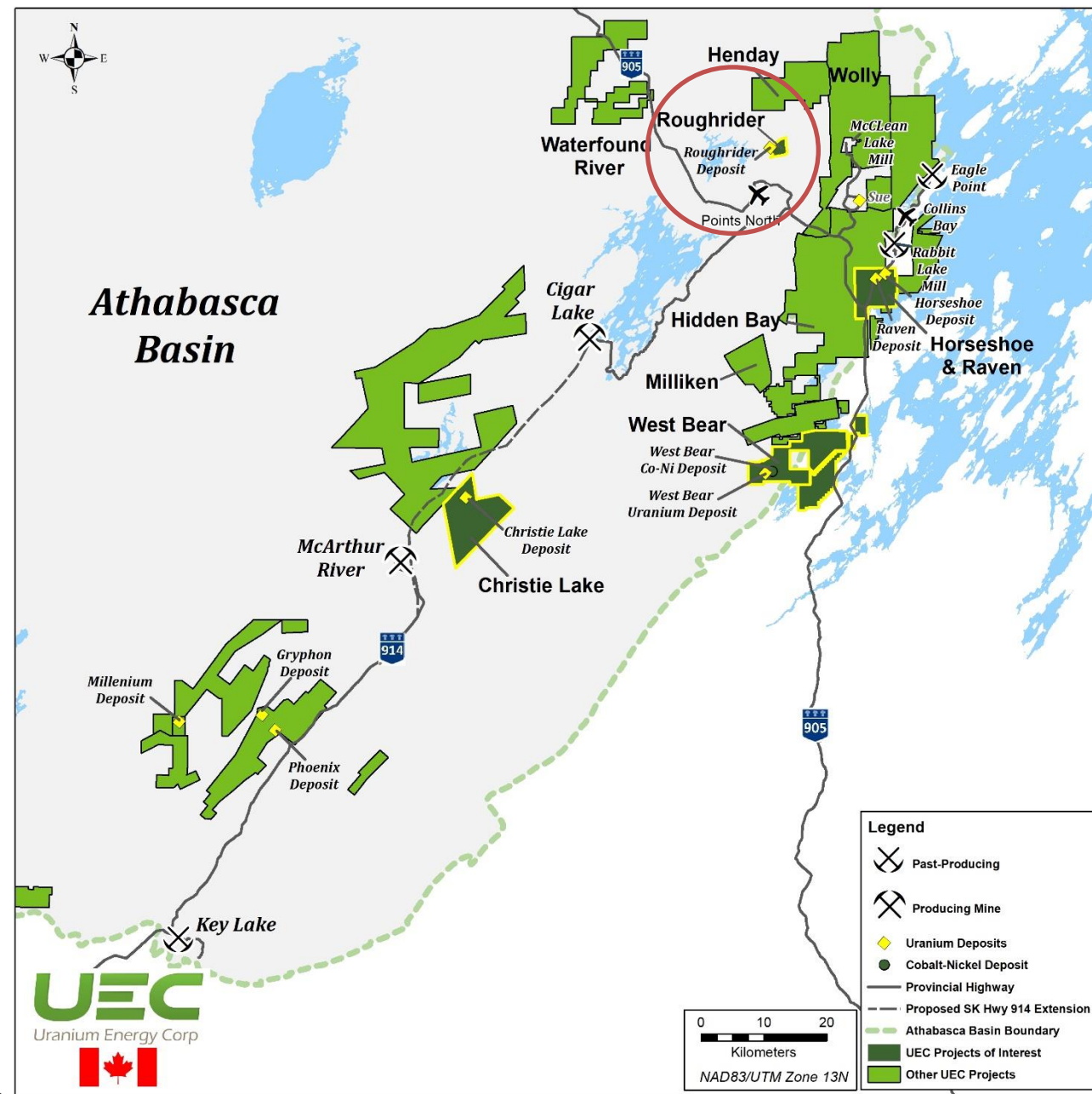


UEC Acquired the World-Class Development-Stage Roughrider Project from Rio Tinto

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

(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, 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
 - ✓ **High voltage power** < 20 km away
 - ✓ **Hydro-electric power** can reduce carbon intensity and footprint during the construction and operation
 - ✓ **Two mills licensed** for toll milling < 50 km by road



(1) UEC press releases dated May 23, 2023 and Oct 4, 2022

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

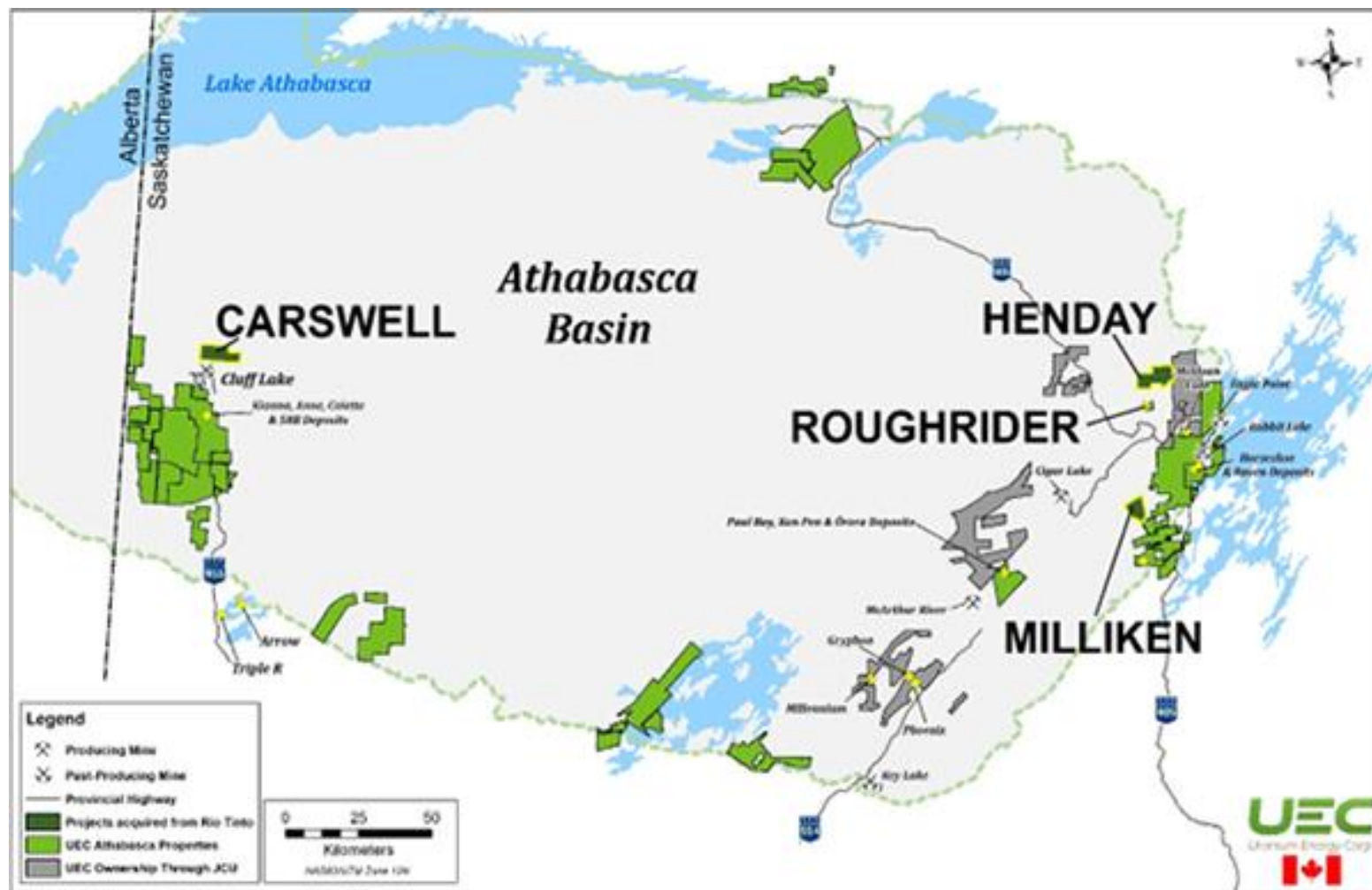
Total Consideration of C\$1.5 million Cash¹

- 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 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. 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

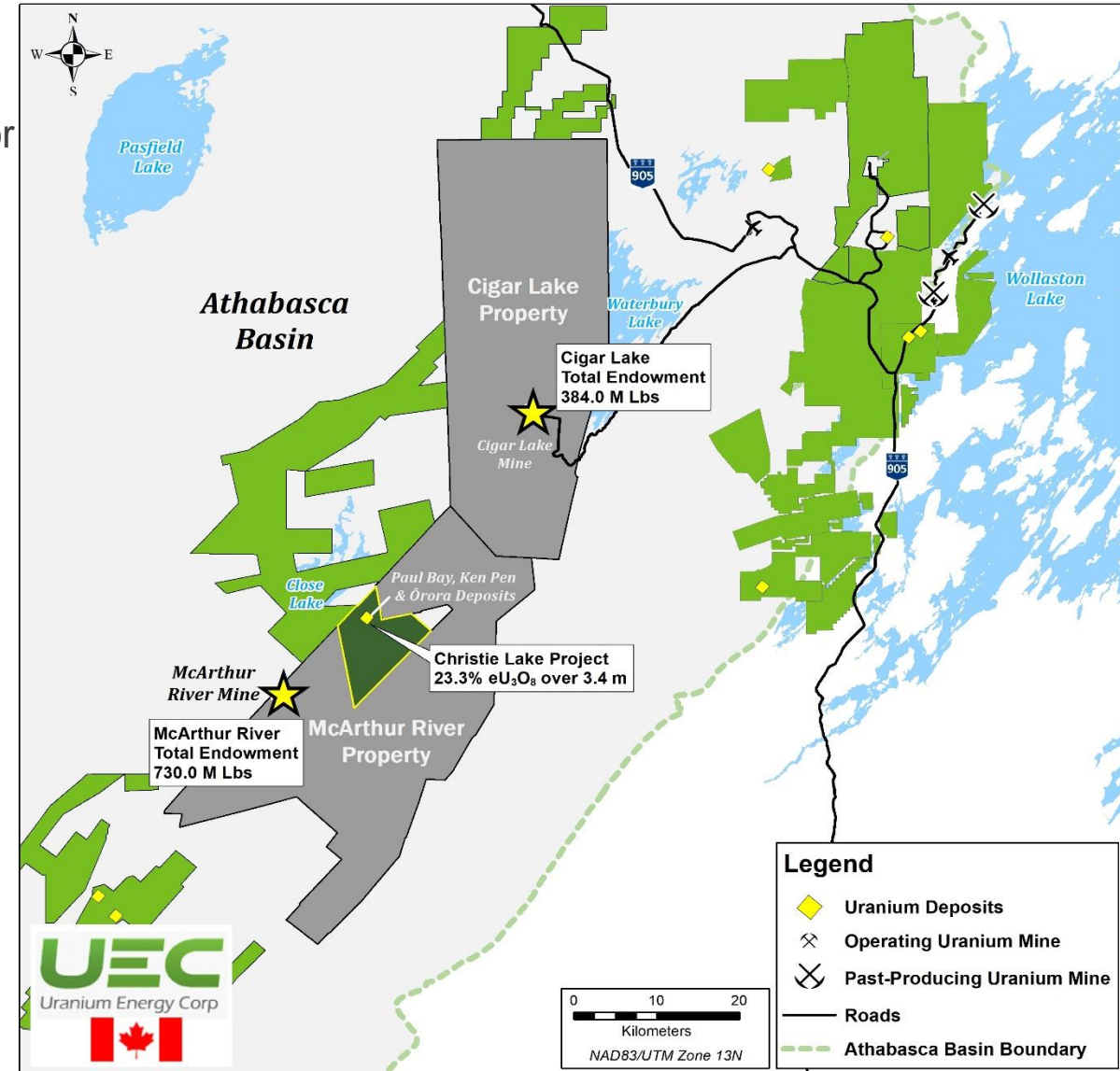


68.7% eU_3O_8 over 2.1 m

CB-173



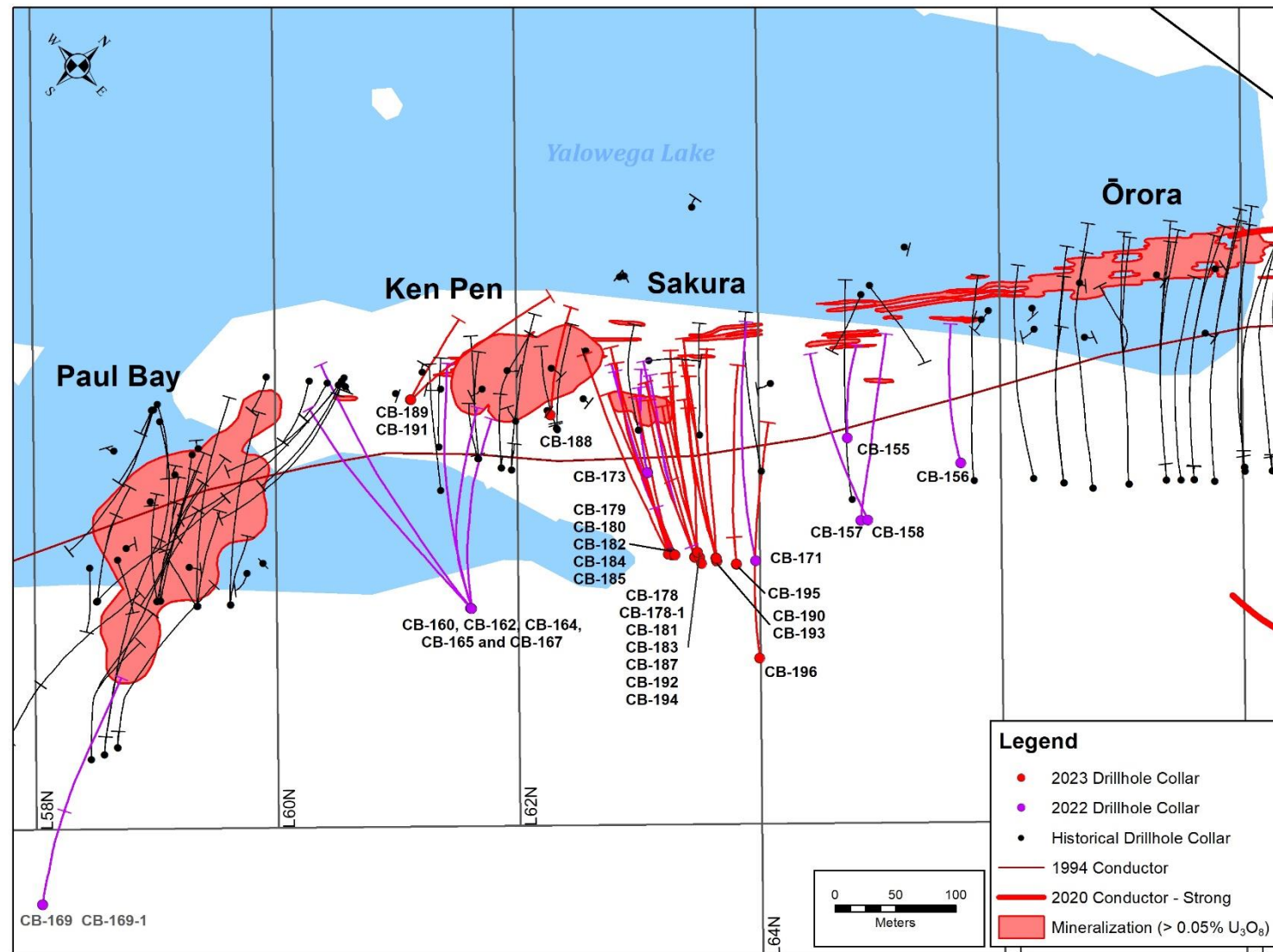
21.6% eU_3O_8 over 2.3 m



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



See UEC press releases dated Jan 23, 2023 & Mar 6, 2023

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. U_3O_8 of Indicated and 29.0 M lbs. U_3O_8 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. U_3O_8 of Indicated and 28.1 M lbs. U_3O_8 of Inferred resources (100% basis)²

Kiggavik

- Kiggavik is a Feasibility Study stage project located in Nunavut, Canada
- Hosts 127.3 M lbs. U_3O_8 of historical Indicated and 5.4 M lbs. U_3O_8 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 U_3O_8 and from %U to % U_3O_8 . 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.

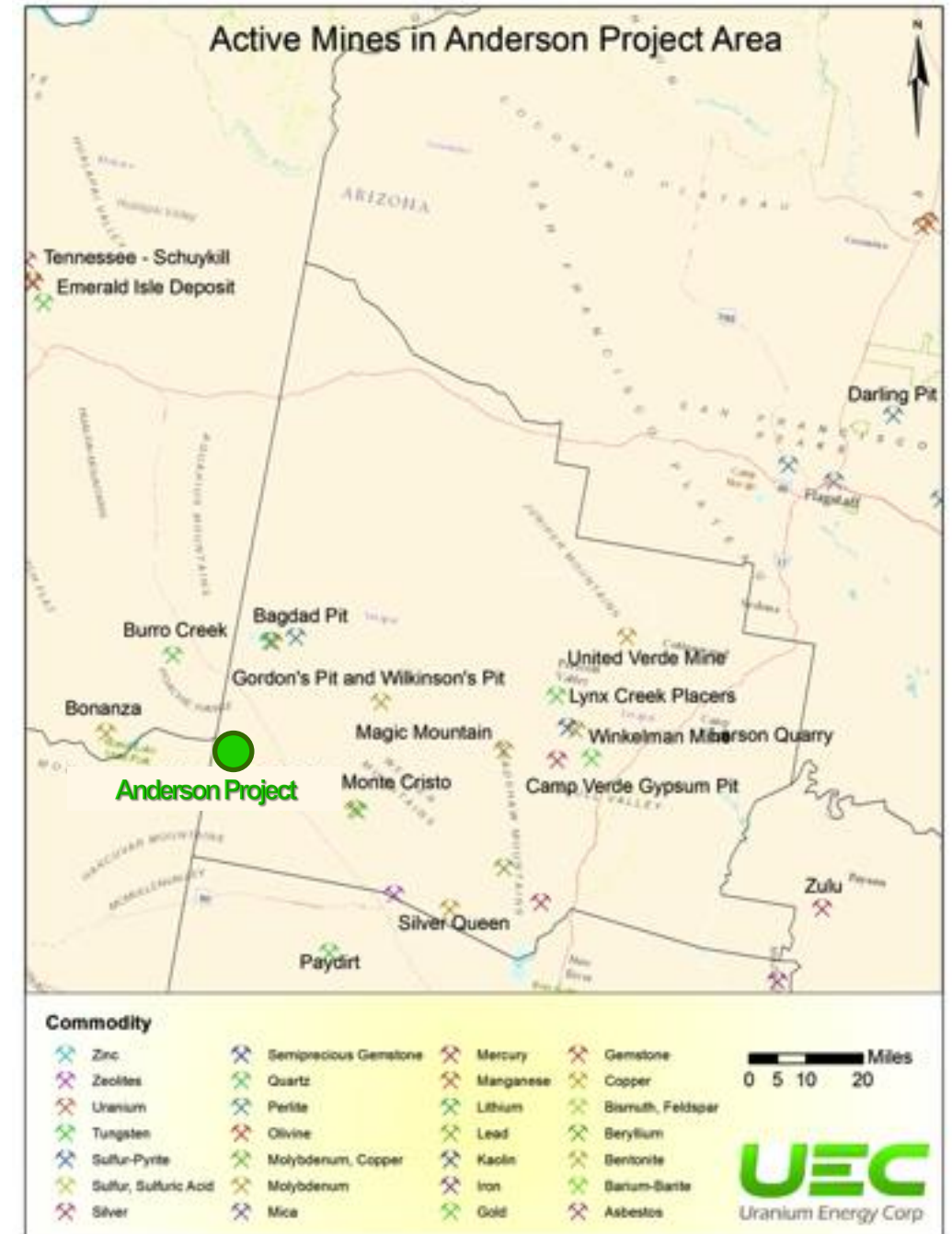
U.S. Conventional Mining

Anderson Project – Arizona

A Large U.S. Resource	S-K 1300 Compliant Resource⁽¹⁾ <ul style="list-style-type: none"> 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 <ul style="list-style-type: none"> Inferred Resource: 4.459 M lbs. within 1.98 Mt, avg. grade of 0.113%
3,620 Acres	<ul style="list-style-type: none"> 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^(2,3)	\$213.7 million, no debt
Avg. Daily Vol. (3-mo)	7,768,494
Shares Outstanding	389.7 M
Warrants	3.9 M
Options + Stock Awards	9.8 M
Fully Diluted⁽¹⁾	403 M
Recent Activity	\$6.33 As of Dec 13, 2023
Market Cap	\$2.47 B As of Dec 13, 2023

Top Shareholders

UEC Team, Blackrock, Vanguard Group, State Street, Fidelity, 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.
Colin Healey, Haywood Securities Inc.
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 Oct 31, 2023

(2) As of Oct 31, 2023, physical holding includes 866,000 lbs. of inventory (\$64.6M in physical uranium inventories based on U3O8 spot price of \$74.55/lb. Source: UxC CVD)

(3) As of Oct 31, 2023, cash totaled \$50.2M

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

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.



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



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. U_3O_8 (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 1.3 M lbs. remaining⁽²⁾ contracted uranium purchases at avg. cost \$46/lb. through to Dec 2025. 866,000 lbs. Inventory on hand at an average cost of \$49/lb.
- \$213.7M of cash and liquid assets & debt free balance sheet⁽²⁾
- 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 quarterly report for the quarter year ended Oct 31, 2023

ISR District Opportunity in Paraguay

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

Project	Historic Operator	Stage	SK-1300 Resource (M lbs)
Yuty	Cue Resources / Cameco	Exploration / Development	8.96 M lbs. in 9.074 Mt grading 0.049% U ₃ O ₈ Indicated 2.20 M lbs. in 2.73 Mt grading 0.040% U ₃ O ₈ Inferred ⁽¹⁾

Project	Historic Operator	Stage	Exploration Target (M lbs)
Oviedo	Anschutz Corp	Exploration	23 – 56 M lbs. in 28.9 - 53.8Mt grading 0.04% to 0.052% U ₃ O ₈ ⁽²⁾

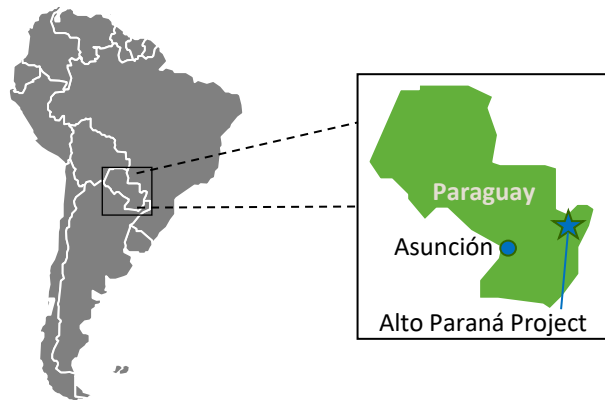


(1) See news release dated July 20, 2022; refer to the SK-1300 TRS filed on July 19, 2022, on SEDAR+ and EDGAR

(2) Refer to slide 2 for definition

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

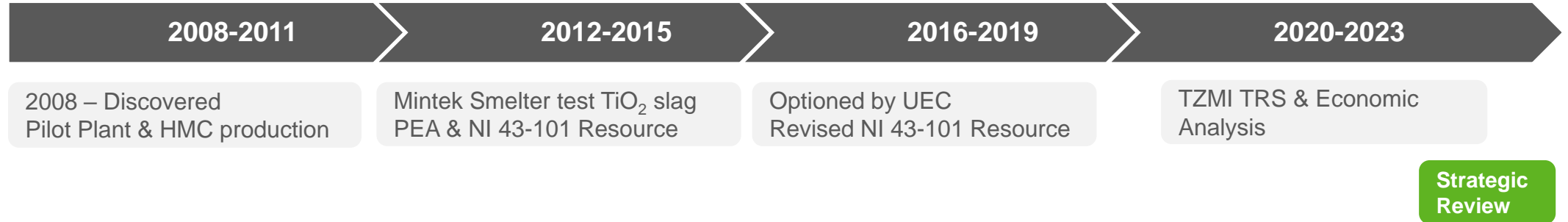
Base Case 150ktpa high titania slag & 100ktpa pig iron		Stretch Case 500ktpa high titania slag & 320ktpa pig iron
US\$419m	NPV _{8%} Post-Tax	US\$1,554m
21%	IRR	25%
4.7 years	Real, Post-Tax Payback	4.2 years
23 years < 4.2%	Regional resource used	< 14.5% 23 years
US\$338m	Startup Capex	US\$918m
US\$712/t	Avg LOM slag cost	US\$681/t
US\$237/t	Avg LOM slag cost (net of pig iron)	US\$202/t
2.2:1	Avg LOM Revenue to Cash Cost	2.3:1

(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



(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

Alto Paraná Titanium Development Strategy

Salient Points

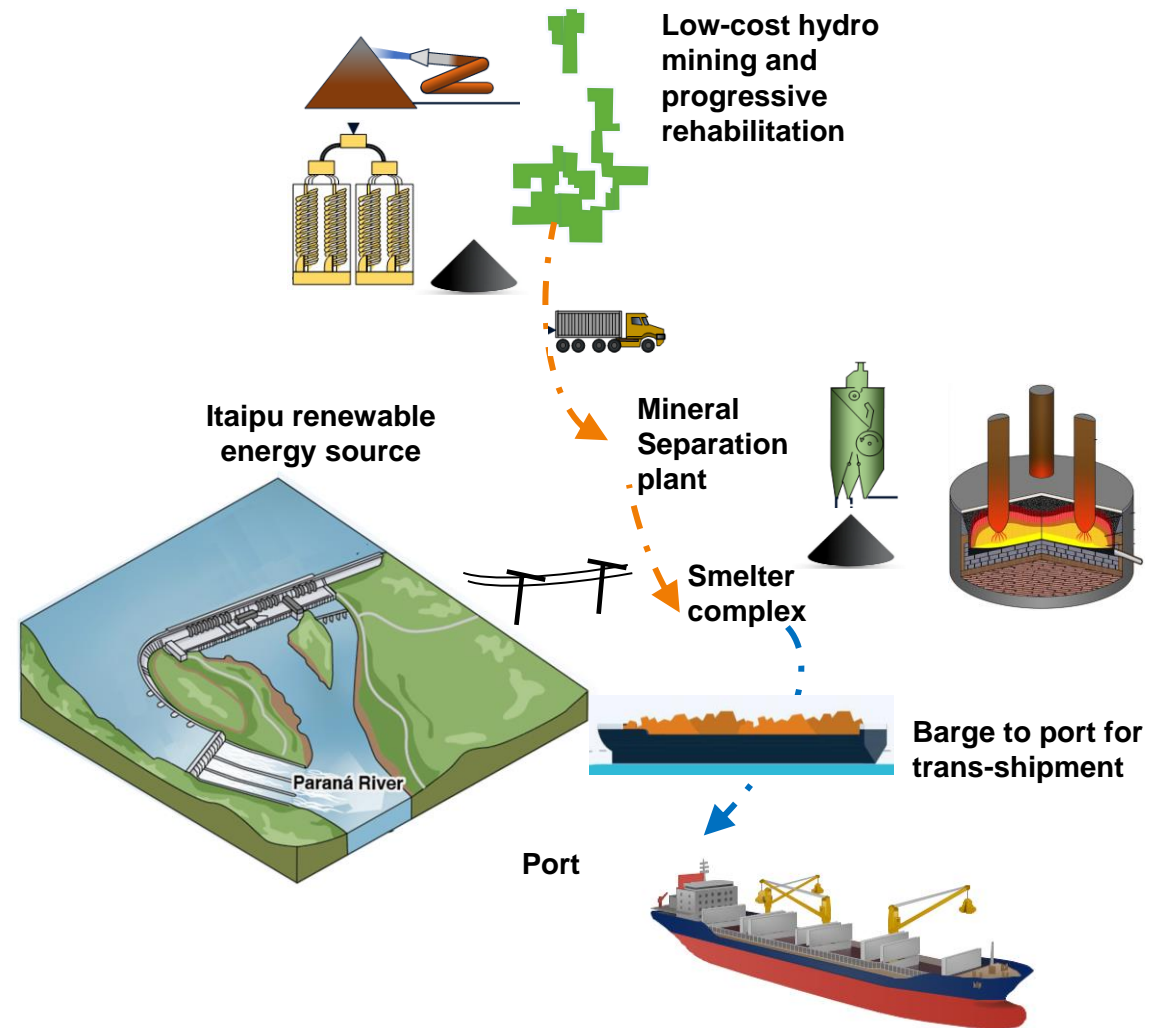
- Fully integrated and powered by renewable energy
- Low-cost mining operation
- Proven conventional process producing an ilmenite smelter feed
- Arc furnace/s to produce a high titania slag and high purity pig iron
- Significant expansion potential

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



(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

Investing in UEC Supports ESG Goals and a Low Carbon Future

Nuclear is the largest carbon-free electricity source in the U.S., uranium is fueling ~18% of total electricity produced today¹

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

To achieve net zero by 2050, the world needs nuclear⁴

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

Source: (1) world-nuclear.org July 2023 (2) NEI.org (3) Leading research institutions: Harvard, MIT and the OECD (4) IAEA's Annual Report Oct 2022



Nuclear Energy

Clean, Safe, Reliable & Economic

Perfect Compliment to Renewable Wind and Solar

Saves Lives and Improves Quality of Life



Reactor Demand Significantly Exceeds Primary Production

2024 Global⁽¹⁾

Demand expected ~ 198 M lbs.

Production expected ~ 162 M lbs.

Production gap is ~ 36 M lbs. below requirements

Cumulative gap:⁽¹⁾

In 2025 is >54 M lbs.

By 2033 is ~402 M lbs.

U.S. Uranium Production Needed to Fill Gap

2023 U.S. Demand – 44.4 M lbs.⁽²⁾

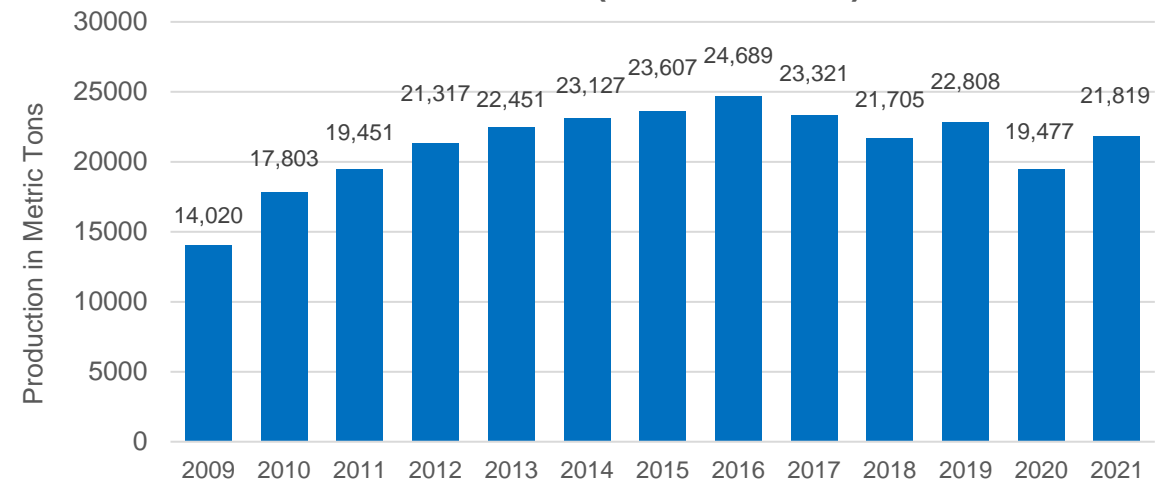
Former Soviet Union Production Region:⁽²⁾

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)



Source: (1) UxC Market Outlook Q4 2023 (2) EIA 2023 Uranium Annual Report

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

437

Operable Reactors
Worldwide*

63

Units Under
Construction*

69

New Reactors Connected
since 2013**

441

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 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 net-zero 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. 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

SWEDEN announced plans to construct 2 large-scale 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 32 new reactors – 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.



July 27, 2023 - U.S. Senate passed the National Defense Authorization Act (NDAA) - The Accelerating Deployment of Versatile, Advanced Nuclear for Clean Energy (ADVANCE) Act of 2023 would help modernize the Nuclear Regulatory Commission and head off threats to US national and energy security ²

May 16, 2023 - Bill Banning Uranium Imports from Russia Passes US House Subcommittee³

“It should be a bipartisan, national security objective to wean the United States industry off Russian uranium imports”

Feb 3, 2023 - The European Parliament passed a resolution with 489 votes in favour that:⁴

“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 advanced 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

Nuclear Fuel Security Act Approved by House Energy and Commerce Subcommittee⁽²⁾

Oct 24, 2023 – The bill will establish and expand critical U.S. nuclear fuel programs to boost domestic uranium mining, production, enrichment, and conversion capacity.



"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. Representative 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.

(1) [WNA.org, Sep 28, 2023: US Senate votes to 'onshore' nuclear fuel production](https://www.wna.org/news/2023/09/28/us-senate-votes-to-onshore-nuclear-fuel-production) (2) [Congressman Bob Latta - press release Oct 24, 2023](https://www.house.gov/representatives/press-releases/2023/10/24/congressman-bob-latta-press-release-oct-24-2023)

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

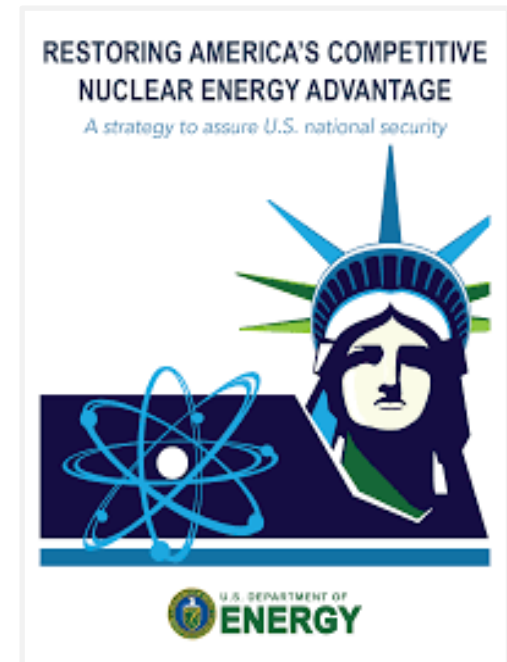
Biden Administration wants Congressional support to revitalize domestic fuel cycle - end U.S. reliance on nuclear fuel from Russia for existing and new advanced reactors. Strategic Uranium Reserve would likely be rolled into the new program. HALEU already appropriated \$400 million – Industry Consortium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

The U.S. has set a goal to reach 100% carbon pollution-free electricity by 2035 –

"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

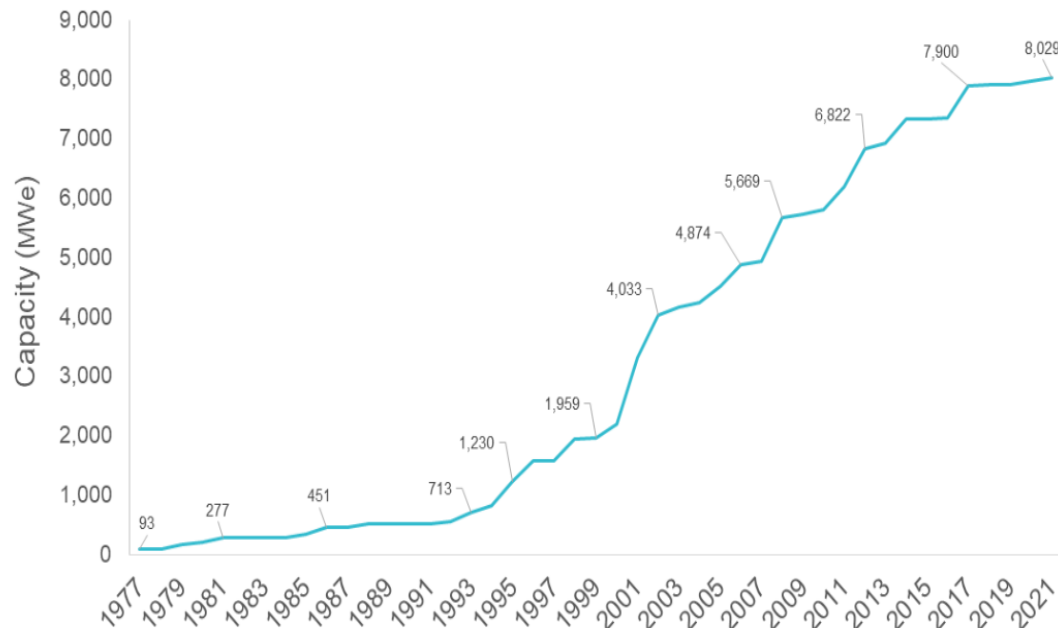


Reversal of Early Retirements - Plant Life Extensions - Uprates

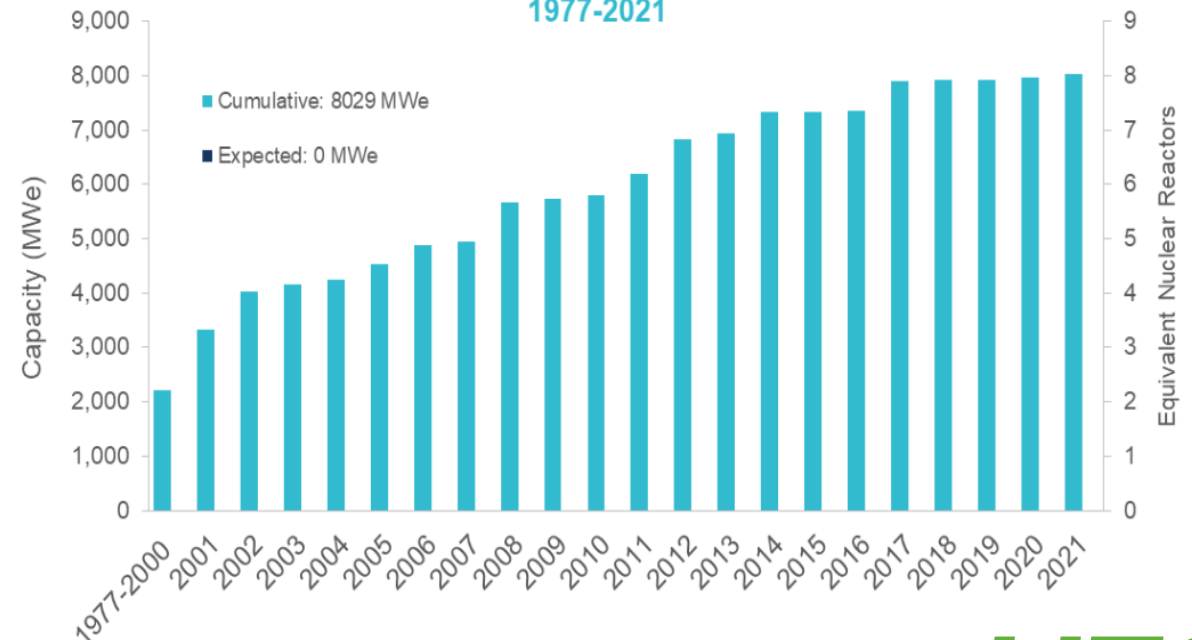
- Nuclear phase-outs or reductions are being abandoned
- License renewals – Operational extensions to 80 years
- Power uprates – Equivalent to 8 new, large-scale reactors in the U.S. alone



U.S. Nuclear Industry Cumulative Power Uprates



U.S. Nuclear Industry Cumulative and Expected Capacity Additions, 1977-2021



Global Approval for Nuclear Power Continues to Grow

EU Taxonomy Includes Nuclear as an Environmentally Sustainable Investment



Nuclear energy is an EU asset

- Member States operating nuclear power plants
- Other Member States
- Non EU countries

14
Member States
operating nuclear
power plants

130
reactors
in operation
(2018)

4
reactors under
construction
(source PRIS, PINC 2017)

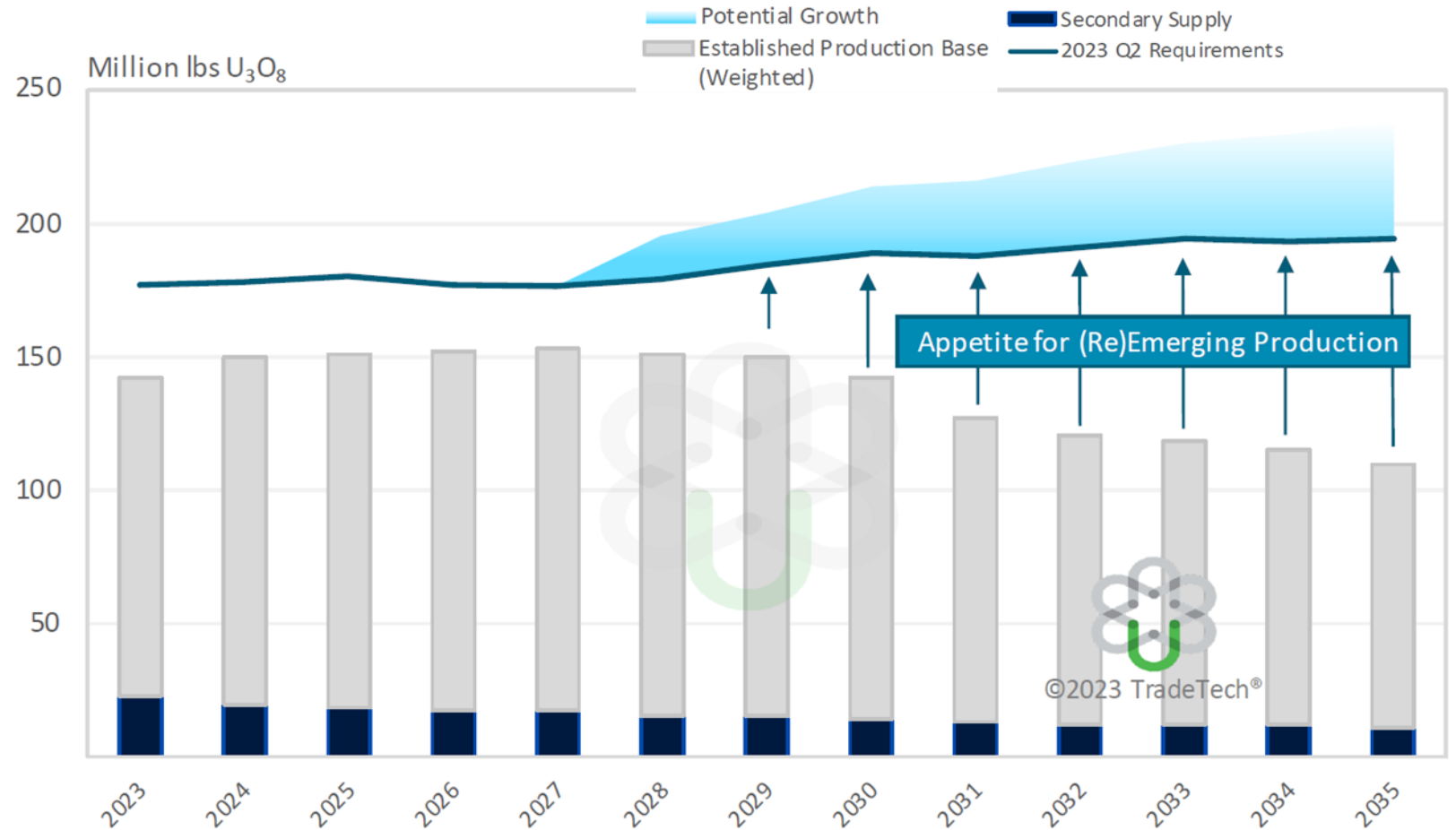
24
new reactors
planned
(source PRIS, PINC 2017)



Global Supply & Demand

Existing Primary Production + Secondary Market Supply

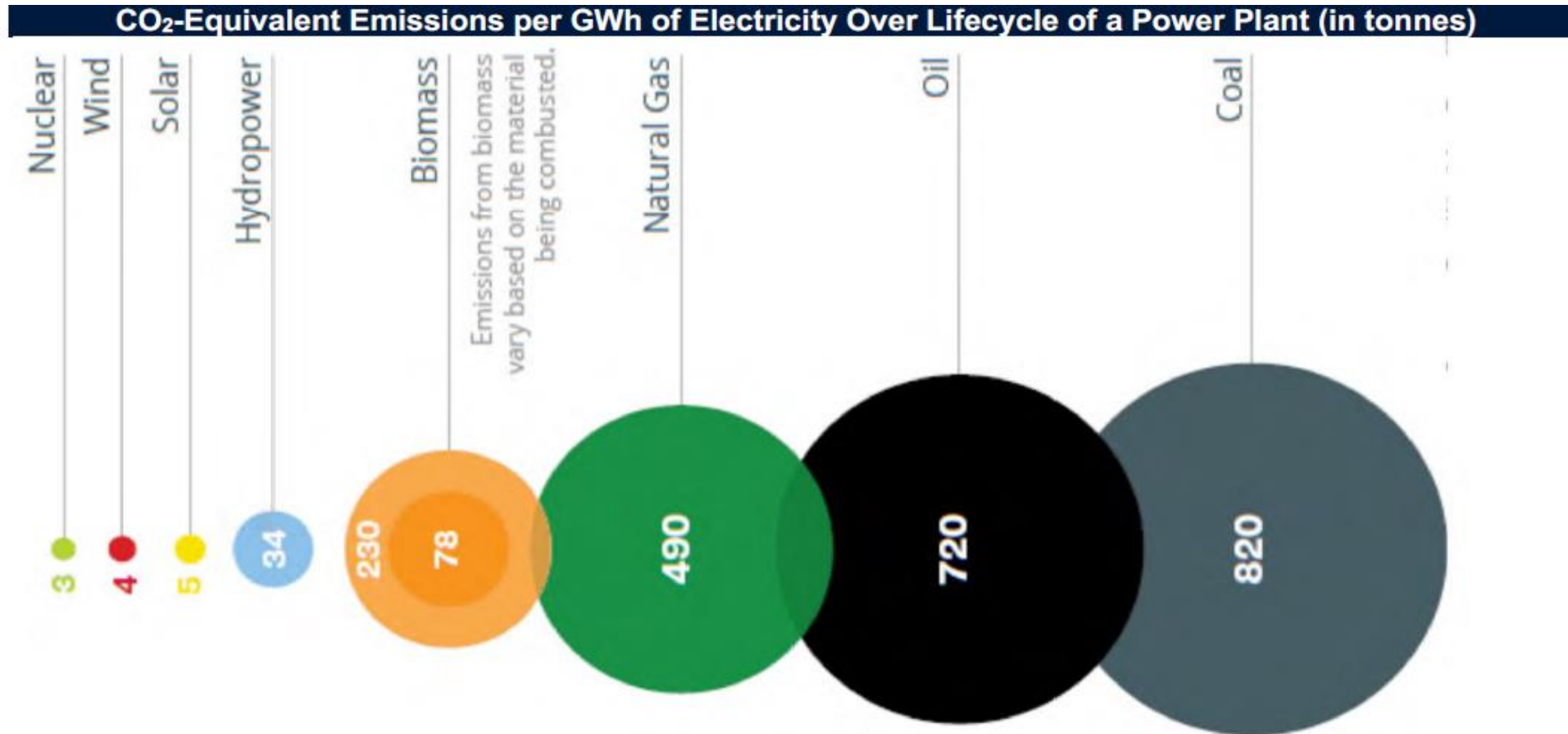
- Inventory overhang drawing down more rapidly than expected
- Secondary supply from Russia to western nations will be reduced/ eliminated
- Enrichment underfeeding is changing to overfeeding- increasing uranium demand
- New production requires permitting and development lead times for new mines



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

Source: TradeTech September 2023

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

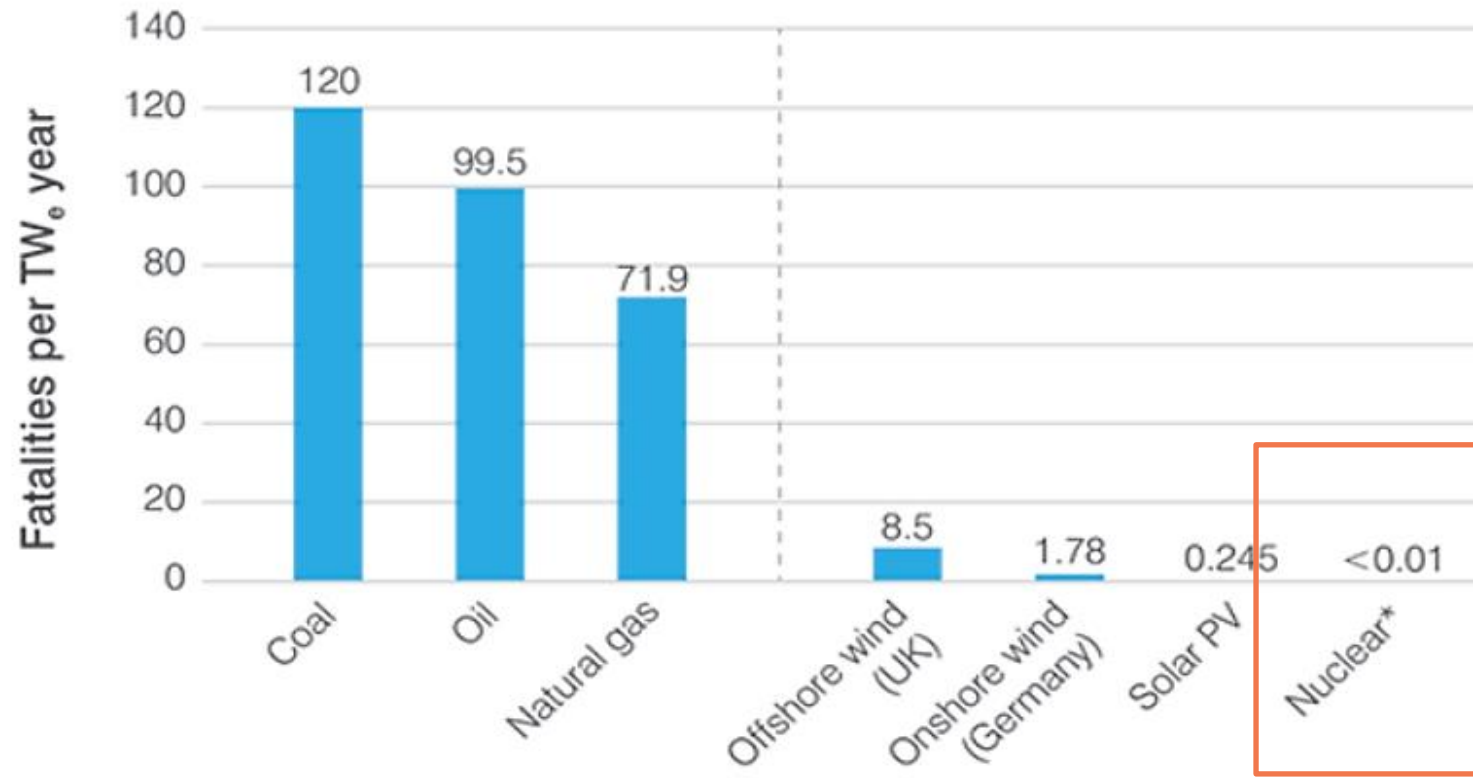


Source: Our World in Data, 2022

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



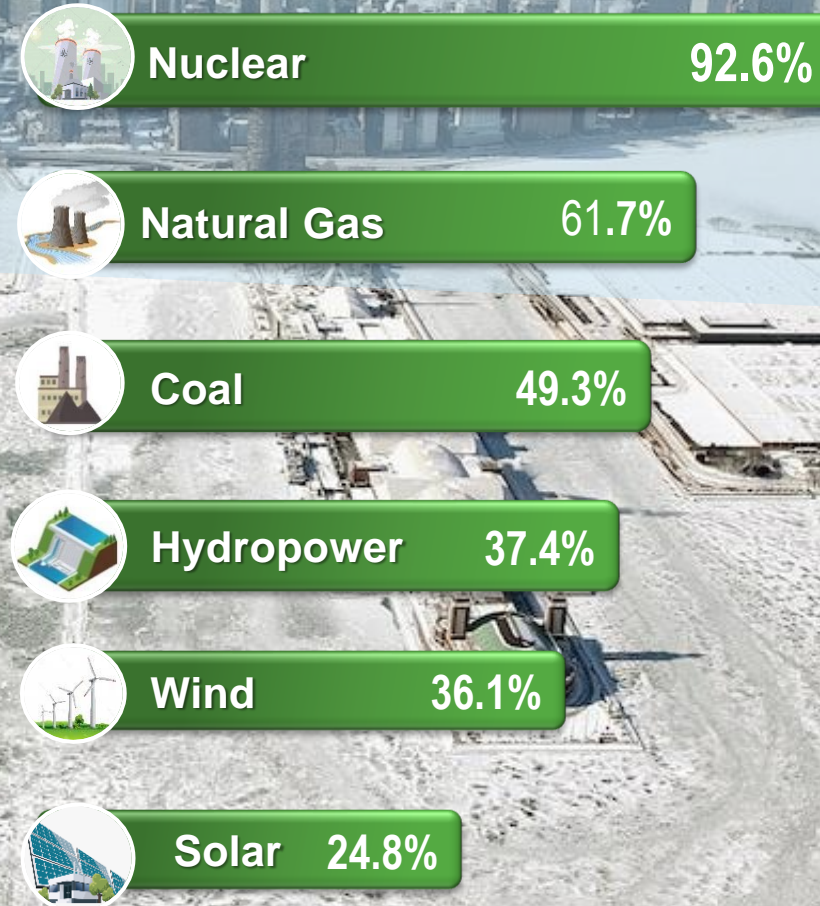
“Nuclear energy is the safest of all the electricity technologies we have.”

- Patrick Moore, former director of Greenpeace⁽¹⁾

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

2022 Polar Vortex – Nuclear Reliability at 93%

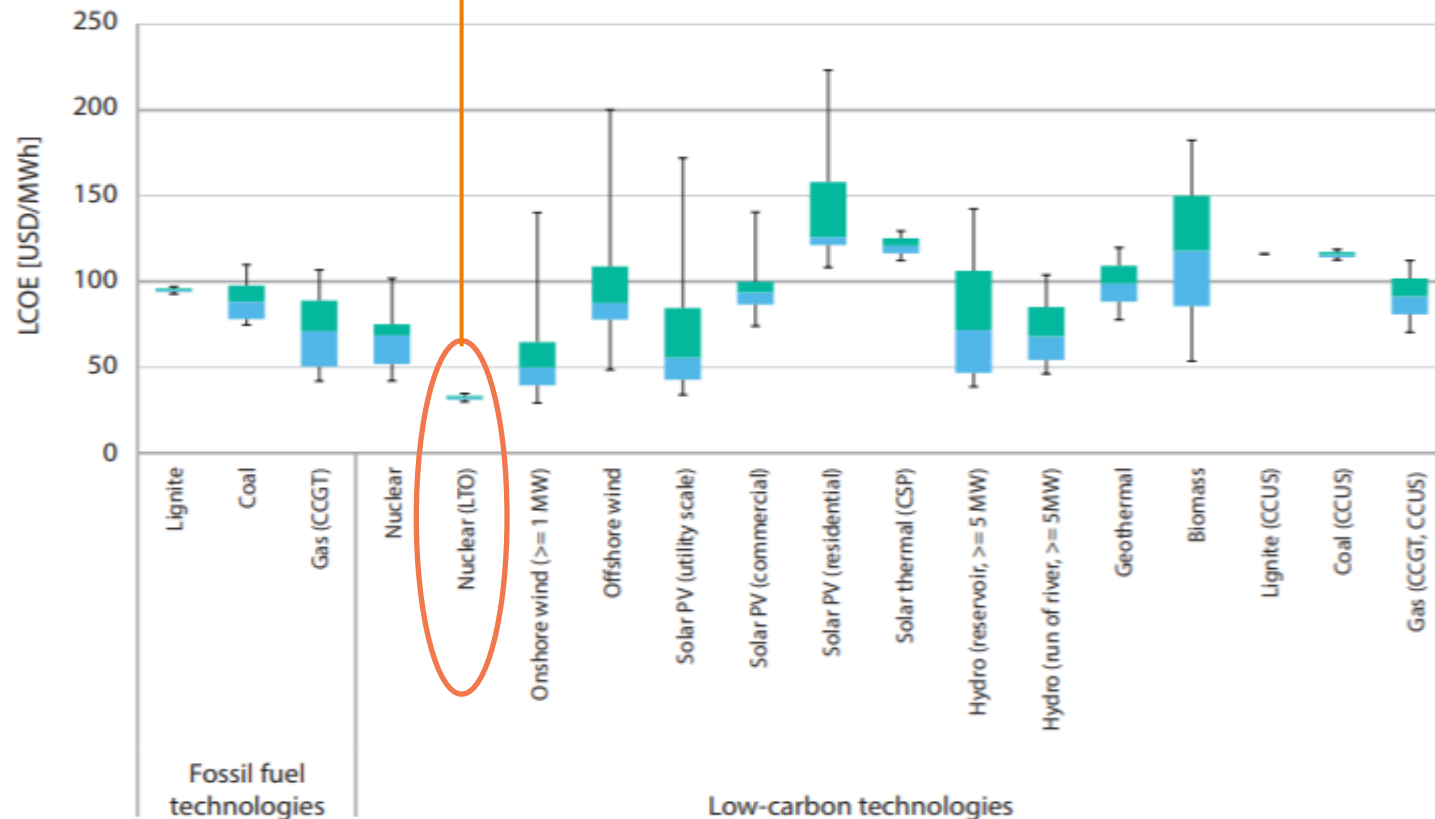
Capacity Factor by Energy Source in 2022



Source: Stout bit.ly/3Qrop2v

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 nuclear operating costs²

(1) Projected Costs of Generating Electricity, 2020 Edition, International Energy Agency and Nuclear Energy Agency

(2,3) WNFC Apr 2022, Constellation Presentation "A Utility View on Nuclear Fuel Supply Risk Management"



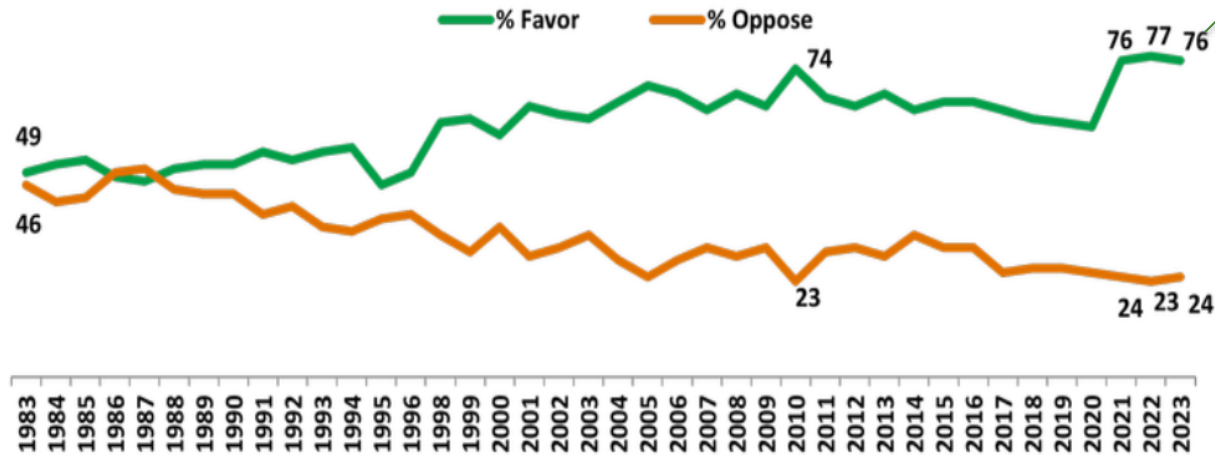
Support for Nuclear Energy is Strong and Increasing

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

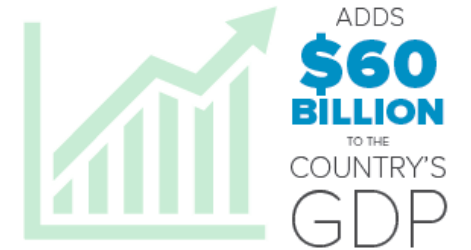
Overall, do you strongly favor, somewhat favor, somewhat oppose, or strongly oppose the use of nuclear energy as one of the ways to provide electricity in the United States? (%)



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



SAVES CONSUMERS
AN AVERAGE OF
6 PERCENT
ON ELECTRICITY BILLS



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

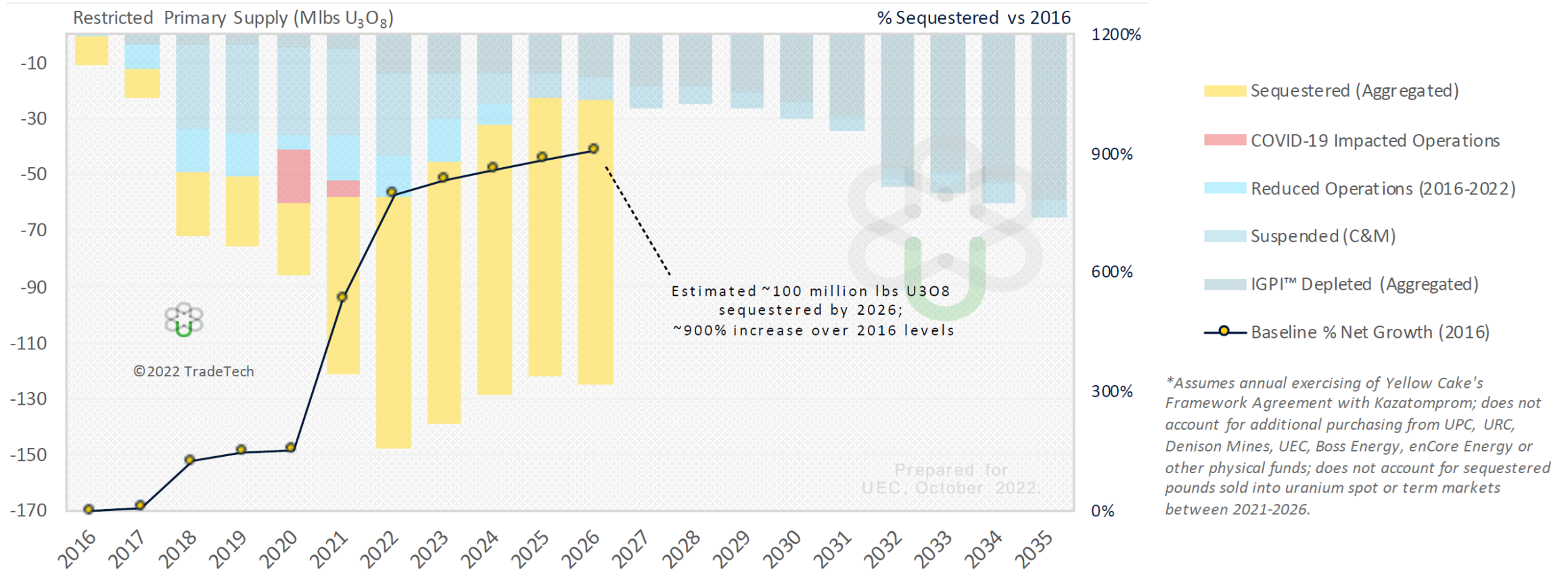
300 SMRs (99 GWe of nuclear power) expected to be added to the U.S. grid over the next 25 years - would double today's U.S. nuclear output, NEI recent Chief Nuclear Officers poll ⁽¹⁾



(1) NEI 2023: The Future of Nuclear Power 2023 Baseline Survey; Photo: Wyoming Gov. Mark Gordon (left), with U.S. John Barrasso, R-Wyo., at the Wyoming Capitol announcing efforts to advance a Sodium reactor demonstration project in Wyoming

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

Sequestered, Suspended, Covid, Operational & Depletion Reductions



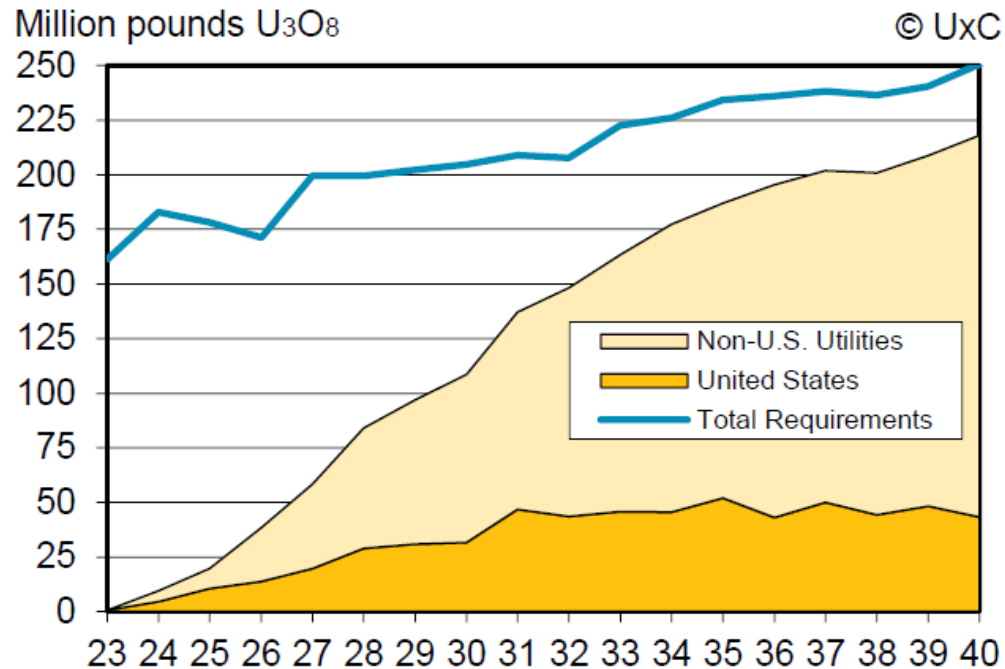
Source: TradeTech, October 2022



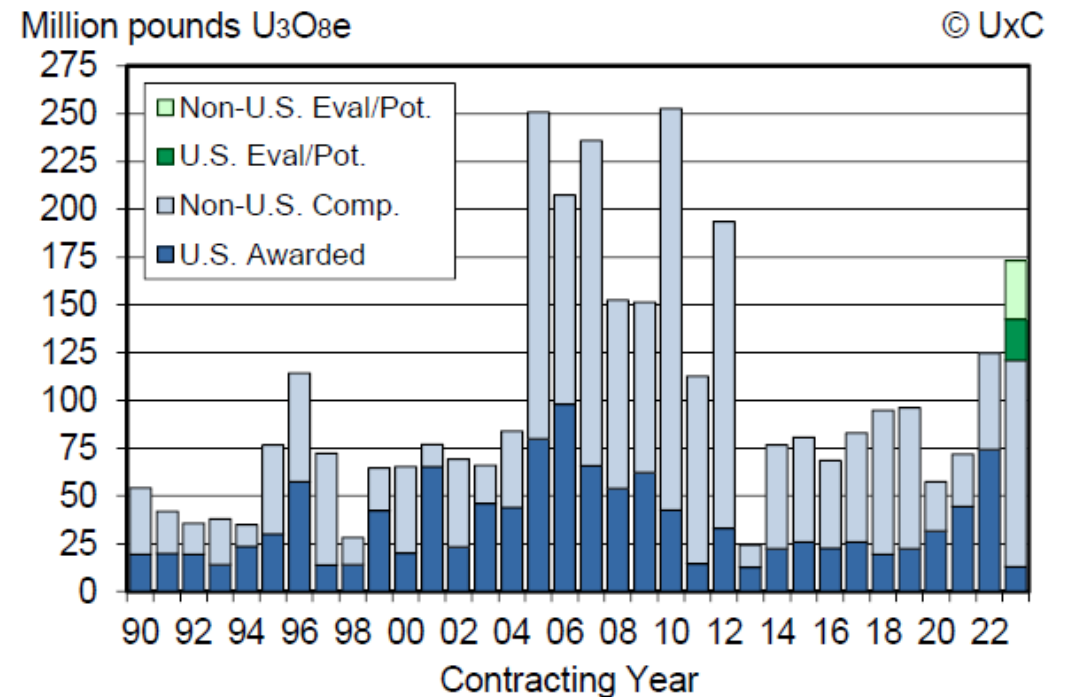
Utility Procurement Cycle: Old Contracts Rolling Off...New Contracts Need to be Signed

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 U₃O₈**
– UEC wins 300,000 lbs of DOE’s initial 1 M lbs. domestic uranium purchase
- ✓ **Strong Bipartisan Support for Nuclear Energy, Included in U.S. Energy Carbon Free Goals, Clean Energy Standard, American Jobs Plan**
- ✓ **Utility Procurement Cycle 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

Canadian Attributable Resource Summary

S-K 1300 Resources ⁽¹⁾						
Project	Indicated Resources			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