

AMERICA'S EMERGING URANUM PRODUCER

Corporate Presentation – April 2021



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 forwardlooking statement, whether as a result of new information, future event or otherwise.'

Notice to U.S. Investors: The mineral resources referred to herein have been estimated in accordance with the definition standards on mineral resources of the Canadian Institute of Mining, Metallurgy and Petroleum referred to in NI 43-101 and are not compliant with U.S. Securities and Exchange Commission (the "SEC") Industry Guide 7 guidelines. In addition,

measured mineral resources, indicated mineral resources and inferred mineral resources, while recognized and required by Canadian regulations, are not defined terms under SEC Industry Guide 7 and are normally not permitted to be used in reports and registration statements filed with the SEC. Accordingly, we have not reported them in the United States. Investors are cautioned not to assume that any part or all of the mineral resources in these categories will ever be converted into mineral reserves. These terms have a great amount of uncertainty as to their existence, and great uncertainty as to their economic and legal feasibility. In particular, it should be noted that mineral resources which are not mineral reserves do not have demonstrated economic viability. It cannot be assumed that all or any part of measured mineral resources, indicated mineral resources or inferred mineral resources will ever be upgraded to a higher category. In accordance with Canadian rules, estimates of inferred mineral resources cannot form the basis of feasibility or other economic studies. Investors are cautioned not to assume that any part of the reported measured mineral resources, indicated mineral resources or inferred mineral resources referred to herein are economically or legally mineable.

Exploration Target Disclosure: In the Company's subject technical report all tonnages, grade, and contained pounds of uranium should not be construed to reflect a calculated mineral resource (inferred, indicated, or measured). The potential quantities and grades, as stated in the technical report, are conceptual in nature and there has been insufficient work to date to define a NI 43-101 compliant resource. Furthermore, it is uncertain if additional exploration will result in the discovery of an economic mineral resource on the project.



Production ready, licensed, low-cost In-Situ Recovery (ISR) mining in Texas and Wyoming

Largest resource base of fully permitted

ISR projects of any U.S. based producer

Leading Pure Play, American Uranium Producer

Newly established U.S. warehoused inventory of 2.1 M lbs. U₃0₈

Strong balance sheet with ~\$110 million in cash, equity and physical holdings upon closing of recent offering

Developing the newest and largest ISR production-area in the U.S. at Burke Hollow in South Texas



UEC'S HOBSON PLANT -TEXAS HUB & SPOKE OPERATIONS

Nuclear Power is Critical to U.S. Energy

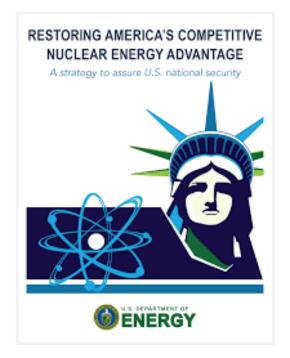
Bi-Partisan Support – First Time in 48 years Democratic Party Supports Nuclear Energy

White House Clean Energy Mandate – Nuclear Energy Welcomed & Included in the Plan

2nd Largest Source of Electricity – Largest Source of Carbon-Free Power Generation

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

Strategic Uranium Reserve – \$1.5 Billion Program Over 10 Years for Domestic Uranium and Conversion (\$75 Million in Appropriations for Fiscal 2021)





Uranium Spot Price is around \$31.00/lb. April 8, 2021 74% Increase Over November 2016 Low (\$17.75/lb)



Diversified Asset Portfolio Low-Cost ISR & Production Ready

	- Andrew	100			
- 5,		Canada - Athabas	sca Basin		
8M lbs. Measured & Inc	licated O	Project Name	Stage	Resourd M&I	ces (M lbs.) Inferred
5M lbs. Inferred U ₃ O ₈		Diabase	(E)	NA	NA
$\mathbf{O}_{\mathbf{M}} = \mathbf{O}_{3} $		Paraguay ISR Ura	nium Portf	olio	
Contracted physical inventory of U.S.		Project Name	Stage	Resourc M&I	es (M lbs.) Inferred
warehoused uranium – 2.1 million lbs.		Yuty	(D)	8.9	2.2
		Oviedo	(E)		8-56 ation Target
Hobson Processing Plant - Production Capacity of 2M Ibs./year		Paraguay Titaniur Alto Paraná	n Business		
		4.94 Billion Tons Gradi	ng 7.41% TiO2	and 23.6%	Fe2O3
Texas Hub & Spoke ISR Portfolio		U.S. Hardrock Pi	Deline (Urani	um & Vanad	lium)
Project Name Stage Resources (M lbs.) M&I Inferred		Project Name	Stage	Resour M&I	ces (M lbs.) Inferred
Palangana (Fully Permitted) (NT) 1.1 1.2	O Uranium Inventory	Anderson	(D)	17.0	12.0
Goliad (Fully Permitted) (NT) 5.5 1.5	O Titanium	Workman	(D)	-	5.5
Burke Hollow (Fully Permitted) (NT) - 7.1 Salvo (E) - 2.8	Vanadium	Slick Rock (U308)	(D)	-	11.6
Salvo (E) - 2.8		Slick Rock (V205)	(D)	-	69.6
Reno Creek ISR Project (Approved Permit to Mine) Project Name Stage Resources (M lbs.) Reno Creek (NT) 26 1.49	(D) In Development (NT) Near Term Production	ROYALTY CORP The o	6 stake in the U nly pure play ur	anium royalt	y and
Permitted for 2M lbs./year production			ning company a v Cake plc	and major sh	areholder in





U.S. Physical Uranium Initiative

Purchasing drummed uranium at prevailing spot prices below most global industry mining costs:

Bolsters UEC
 balance sheet
 as uranium
 prices appreciate

- Provides strategic inventory to support future marketing and production efforts and accelerate cashflows
- Increases the availability of our Texas and Wyoming production capacity for emerging U.S. origin specific opportunities

UEC's physical uranium initiative includes more than <u>2.1M lbs of U.S.</u> warehoused uranium with deliveries in March 2021 through December 2022 at ~\$30/lb U3O8

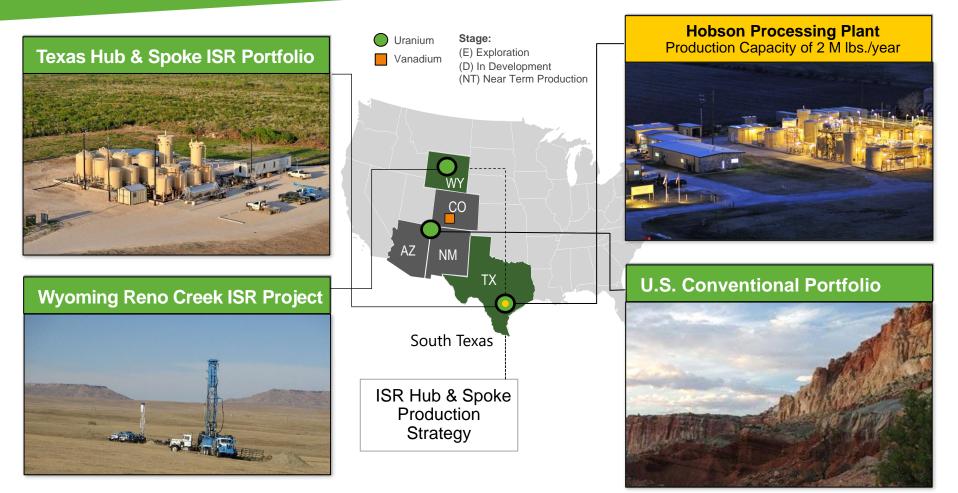




See the Company's news release dated April 9, 2021

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U.S. Infrastructure, Resources and Permits



Please refer to technical reports on SEDAR and Company's website for a detailed breakdown of NI 43-101 resources and disclaimer.



UEC At a Glance

Cash, Equity and Inventory Holdings ^(1,2)	~\$110 million		
Share Structure	230.7 M Outstanding	6.7 M13.1 M250.5 MWarrants + Options & Stock Awards(4)Fully Diluted(1)	
Recent Activity	\$3.31 As of April 8, 2021	5,661,002 Avg. Daily Vol. (3-mo)	
Market Cap	\$751 M As of April 8, 2021	\$10 M ⁽⁵⁾ Debt	
Top Shareholders		guard Group, State Street, Fidelity, Northern Trust, UB R Fund, and Global X Management	S,
ANALYST COVERAGE	Heiko Ihle, H.C. Wainwright & Katie Lachapelle, Canaccord Mitch Vanderydt, Eight Capita	Genuity Joseph Reagor, ROTH Capital Partners	

⁽¹⁾ Equity holdings include 14 million shares of Uranium Royalty Corp (URCCF) having a trading price of US\$3.137 at closing on Apr 6, 2021

⁽²⁾ Inventory holdings include 550,000 pounds delivered U3O8, which is part of 2.1 million pounds physical uranium initiative with multiple deliveries between March 2021 to December 2022

⁽³⁾ \$24.5 M cash to be received should all warrants and options be exercised

⁽⁴⁾ In November 2020 and March 2021, UEC made voluntary principal repayments totaling \$10M, reducing the total principal outstanding to \$10M

Our Team



Amir Adnani President, CEO, Director

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



Robert Underdown

VP of Production

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



Spencer Abraham Chairman, Board of Directors

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



Clyde Yancey

VP of Exploration

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



Scott Melbye

Executive Vice President

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

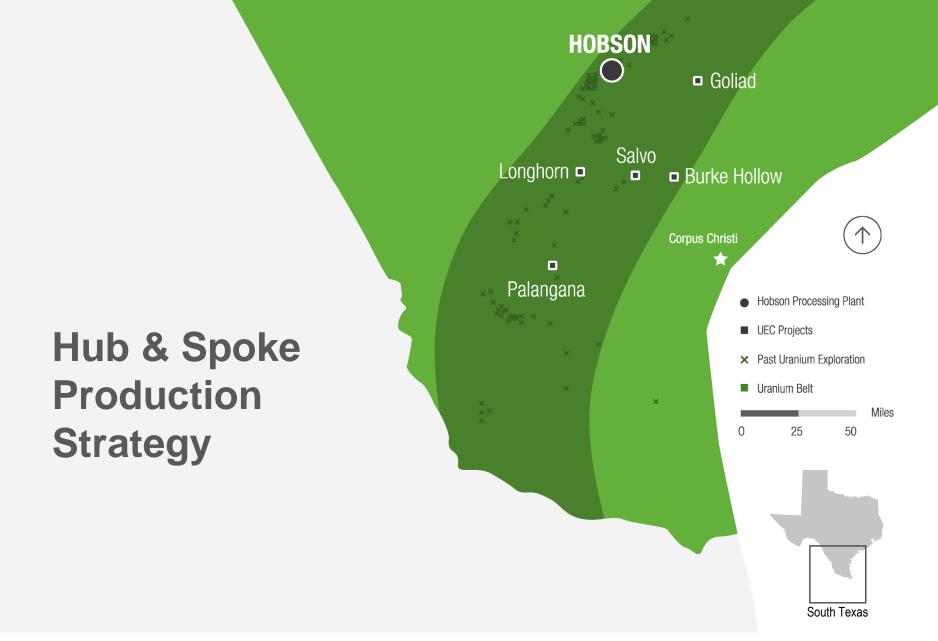


Andy Kurrus

VP of Resource Development

Over 30 years experience with uranium exploration in the United States.







Hobson is fully licensed and permitted.



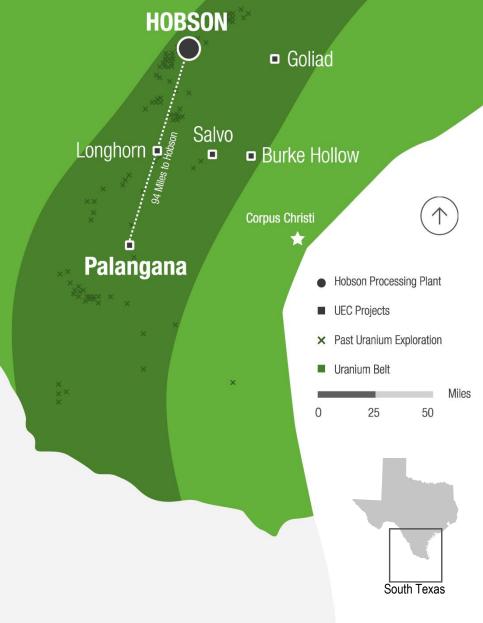
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The Processing Plant has a 2M lbs. / year physical capacity

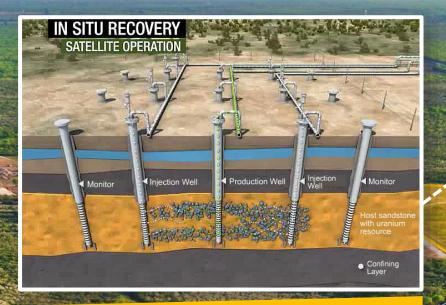


Palangana ISR Mine First Producing Mine **Proof of Concept**

\$10M Initial CAPEX	6 months construction timeline
Production Ready	 Low cash-cost of \$21.77/lb during operation Fully permitted including 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



UEC



In-Situ Recovery (ISR) Technology

Low Cost & Environmentally Friendly

Palangana Production Area 1 (PA-1)

Palangana lon Exchange Facility





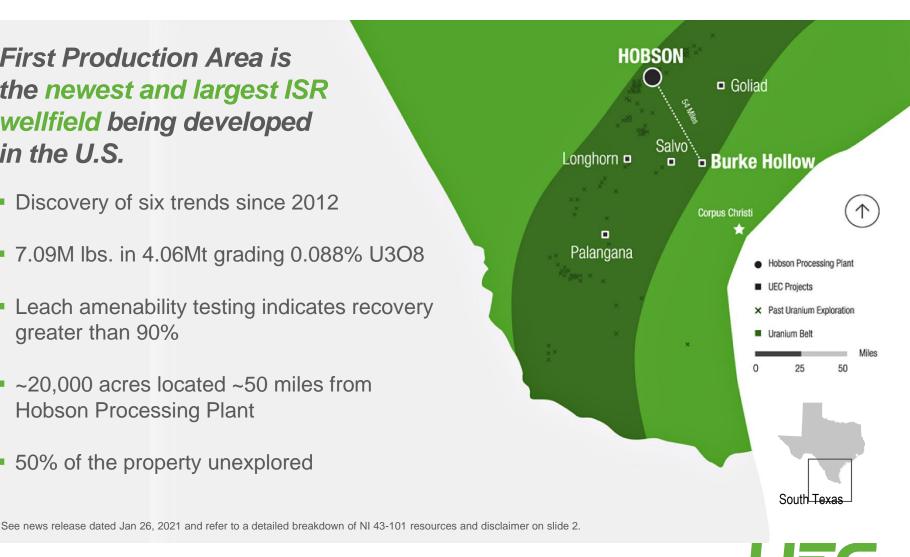
Resin Hauling Truck And Trailer



Burke Hollow ISR Project

First Production Area is the newest and largest ISR wellfield being developed in the U.S.

- Discovery of six trends since 2012
- 7.09M lbs. in 4.06Mt grading 0.088% U3O8
- Leach amenability testing indicates recovery greater than 90%
- ~20,000 acres located ~50 miles from Hobson Processing Plant
- 50% of the property unexplored



Burke Hollow Advancing Towards Uranium Extraction

The following final permits have been issued:

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

2021 Production Area Development

PAA-1 amongst the largest uranium ISR wellfields ever developed in the 45-year history of uranium mining in South Texas

- Plan to complete all exterior and interior wells, including installation of ~45 additional monitor wells
- Permitting activities to include sampling and pumping tests in anticipation of commencing production activities



Gillette **Buffalo Reno Creek** 1-90 **ISR** Project Irigaray Uranium One The largest permitted, North Butte Cameco **Christensen Ranch** pre-construction **RENO CREEK,** UEC Uranium One ISR uranium project Moore Ranch in the U.S. Uranium One Strategic Location within the Heart of the Powder River Basin, Wyoming **Smith Ranch** Highland Cameco Cameco Casper Received a modified Permit to Construct in 2019, allowing the 1-25 Processing Plant construction of the Central **Processing Plant (CPP) and ISR** Active ISR Operation wellfields Wyoming, USA **Fully Permitted** Miles

25

50

Reno Creek ISR Project Pre-Feasibility Study Underway



* See news release dated January 15, 2019. Please refer to a detailed breakdown of NI 43-101 resources and see disclaimer on slide 2.

M&I Resource 26M lbs. of U3O8 grading 0.041% within 32Mt*

Inferred Resource 1.49M lbs. of U3O8 grading 0.039% within 1.92Mt*

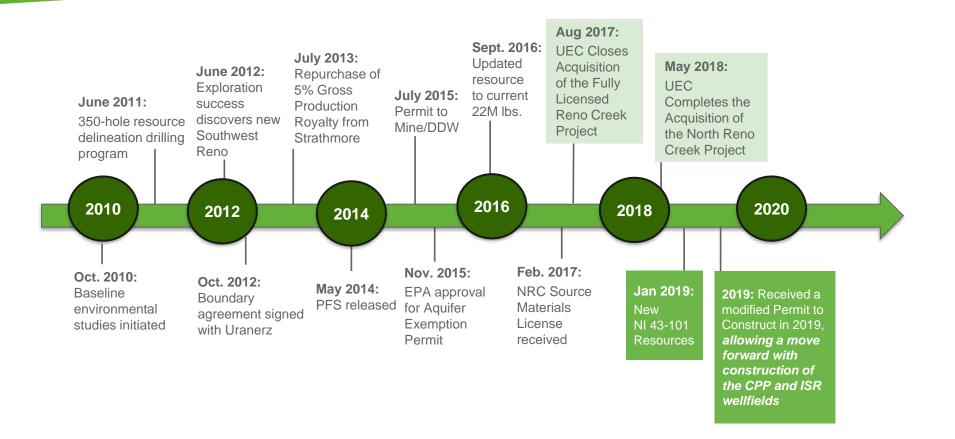
First time since 1980 that the major mineralized trends have been consolidated

Considerable ISR exploration and expansion potential

Production permits in place



Reno Creek: Project Timeline



* See news release dated January 15, 2019. Please refer to a detailed breakdown of NI 43-101 resources and see disclaimer on slide 2.



Anderson Project - Arizona

A Large U.S. Resource	 NI 43-101 compliant resource*: Indicated Resource: 29.5Mt, 17M lbs. avg. grade of 0.029% Inferred Resource: 14.3Mt, 12M lbs. with avg. grade of 0.046%
9,852 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

*NI 43-101 Technical Report completed and available on SEDAR and see disclaimer on slide 2





Slick Rock Project - Colorado

Technical Report	 NI 43-101 Compliant Resource*: Inferred Resource: 2.5Mt, 11.6M lbs. avg. grade of 0.228% Inferred Resource: 2.5Mt, 69.6M lbs. vanadium with avg. grade of 1.37%
Low	 \$21M initial CAPEX with an annual production
CAPEX	of 438,000 pounds U3O8 + vanadium inferred
Vanadium	 Resource of 2.549Mt grading 1.37% V2O5 and
Resource	containing 69.6M lbs.
Nearby Infrastructure	Projected sale of mined product to the White Mesa mill in nearby Blanding, UT

*NI 43-101 Technical Report completed and available on SEDAR and see the Company's disclaimer





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	Resource (M Ibs)
Yuty	Cue Resources / Cameco	Exploration / Development	8.9M lbs. in 7.8Mt grading 0.052% U3O8 M&I and 2.2M lbs. in 2.1Mt grading 0.047% U3O8 Inferred*
Project	Historic Operator	Stage	Exploration Target (M lbs)
Oviedo	Anschutz Corp	Exploration	23 - 56M lbs. in 28.9 - 53.8Mt grading 0.04% to 0.052% U3O8*

*NI 43-101 Technical Report completed and available on SEDAR and see Company's disclaimer



Alto Paraná Titanium Project

Project Overview

- One of the highest-grade and largest-known Ferro-Titanium deposits in the world
- NI 43-101 compliant resource with a mineral exploration claim of 70,498 hectares
- The PEA's first phase was completed in early 2020 with conclusion of a 49-hole drilling & sampling campaign
- Follow-up activities include laboratory analyses and new resource estimation



Cut-Off	%	%	% Ilmenite	Tonnes	Thickness
%	TiO ₂	Fe ₂ O ₃	calc	Billions	(m)
6.0	7.41	23.58	13.95	4.94	

*NI 43-101 Technical Report completed and available on SEDAR and see disclaimer on slide 2

Project History

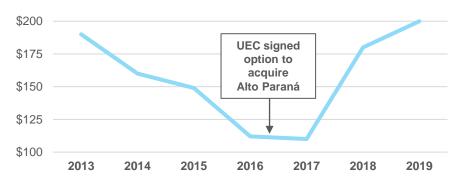


Titanium Feedstock Market – TiO2 prices hitting 3-year highs

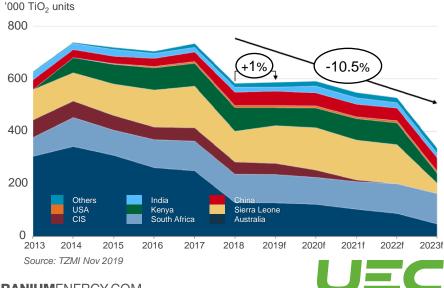
- 90% of TiO2 feedstocks (ilmenite) used for pigment manufacturing
- Strong price recovery for ilmenite since 2017, with positive outlook, driven by:
 - Strong pigment demand & balanced inventory levels
 - Environmental and yield advantages of high-grade feedstock
 - High-grade feedstock supply deficit

Good fit for Alto Parana – capable of producing high-grade TiO2 feedstock for both sulfate or chloride slag production

Price of TiO2 Feedstock - ilmenite (USD per tonne)



Significant Supply Deficit – High Grade TiO2 Feedstocks



Investment Summary

- Strong balance sheet with ~\$110 million in cash, equity and physical holdings upon closing of recent offering
- Fully permitted and state of the art infrastructure advantage with Hobson Processing Plant
- Pipeline of fully licensed, low-cost ISR projects - potential production profile of 4M lbs./year in **Texas and Wyoming**
- Physical uranium initiative includes 2.1M lbs. of U.S. warehoused uranium
- Advancing production-readiness at Reno Creek and Burke Hollow ISR projects
- Only U.S. mined uranium can supply the Department of Energy \$1.5B Uranium Reserve -\$75M in FY2021 Appropriations



Nuclear Energy

Clean, Safe, and Reliable

Perfect Compliment to Renewable Wind and Solar

Saves Lives and Improves Quality of Life





Utility Demand Significantly Exceeds Primary Production

Spot Prices Below Production Costs and Hedges Falling Off

2021 Demand expected = 175M lbs.

2021 Production expected = 128M lbs.

2021 Production gap is 47M lbs. below requirements

Cumulative gap through 2025 is 205M lbs., 334M lbs. by 2028











2021 Polar Vortex – Nuclear Reliability at 95%

Resilient 24/7 carbon-free energy

Reminder that overreliance on any single energy source brings risks





Robust Nuclear Power Growth

443

Operable Reactors Worldwide

53

Units Under Construction

53

New Reactors Connected since 2012



CAGR Nuclear Growth Expected (2020-2027)¹

CHINA announced that it is likely to triple nuclear power capacity by 2030

INDIA plans for 21 new nuclear reactors by 2031

U.A.E. completed 1 reactor; 3 units under construction, 4 more reactors under consideration

U.K. upgrading nuclear fleet to new advanced reactors

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

JAPAN 33 operable reactors, Energy Plan targeting 20-22% nuclear power, nuclear deemed essential to achieve net-zero target by 2050

U.S. is completing two new AP-1000 reactors in Georgia and has maintained a 20% market share for 30 years with power uprates and efficiency = to 32 new reactors as electricity demand grew over 36% from 1989-2019 – A Stealth Growth Story!







Source: IAEA PRIS Mar 2021; ⁽¹⁾ Global Nuclear Power Industry Sep 2020; NEI Dec 2020, March 2021 URANIUM ENERGY CORP | NYSE AMERICAN: **UEC** | **URANIUM**ENERGY.COM

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

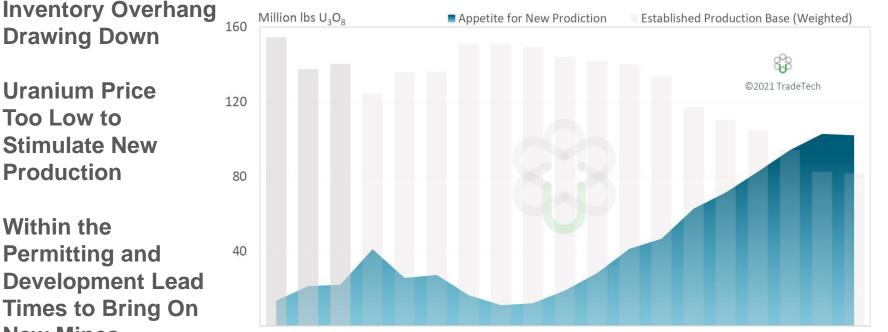
New Applications

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





Need for New Production – Beyond Existing Mines



TradeTech's "Market Appetite" for New Production

2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035

- All assumptions are consistent with TradeTech's latest proprietary assumptions, February 2021;
- Established Production Base shown is weighted to assimilate the challenge of existing operations remaining at full capacity over Life-of-Mine.



Uranium Price Too Low to Stimulate New **Production**

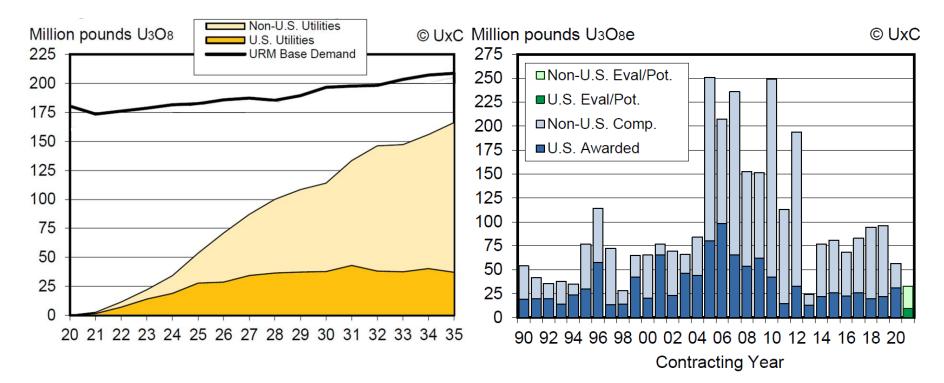
Drawing Down

Within the **Permitting and Development Lead Times to Bring On New Mines**

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

Utility Uncommitted Demand

Historic Long-Term Contracting



UEC

Source: UxC Market Outlook Q1 2021

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Bottom Line - Positive Market Outlook

- Demand Growth 53 reactors added to grid in past 8 years; 53 reactors under construction – nuclear generation has recovered to pre-Fukushima levels
- Strategic Interest in Physical Inventory Producers, Developers, Financial buyers
- The Department of Energy's historic announcement to purchase 17-19M lbs. U.S. mined U3O8 starting within 2021 (\$75M in Appropriations have been approved for fiscal 2021)
- Strong Bipartisan Support for Nuclear Energy, Included in White House Clean Energy Standard, American Jobs Plan
- ✓ **Utility Procurement Cycle Looming** "New" fundamentals have not been tested
- Underinvestment and Supply Cutbacks significant primary supply deficit and mine depletions are increasing
- Lead Time to Advance Large New Mines can be 10 years or longer. Industry incentive price of \$60/lb.
- Accelerated Market Re-Balancing Growing primary production shortfall exists. COVID removed about 20M pounds from 2020 production, with some shutdowns continuing



Combined Resource Summary⁽¹⁾



Projects		Measured & Indicated Inferred				
Hub & Spoke ISR Portfolio Texas ISR	Tons ('000)	Grade (% U ₃ O ₈)	Lbs U ₃ O ₈ ('000)	Tons ('000)	Grade (% U ₃ O ₈)	Lbs U ₃ O ₈ ('000)
Palangana	393	0.14	1,057	328	0.18	1,154
Burke Hollow	-	-	-	4,064	0.088	7,093
Goliad	3,790	0.05	5,475	1,547	0.05	1,501
Salvo	-	-	-	1,200	0.08	2,839
Longhorn			Developmenta	I with historical resource	S	
Texas ISR Total	4,183	0.095	6,532	7,139	0.10	12,587
Wyoming ISR			•			
Reno Creek	32,000	0.041	26,000	1,920	0.039	1,490
Wyoming ISR Total	32,000	0.041	26,000	1,920	0.045	1,490
U.S. Conventional Portfolio	Tons ('000)	Grade (% U ₃ O ₈)	Lbs U ₃ O ₈ ('000)	Tons ('000)	Grade (% U ₃ O ₈)	Lbs U₃O₈ ('000)
Anderson, AZ	29,532	0.03*	17,000	14,295	0.04*	12,000
Workman Creek, AZ	-	-	-	3,222	0.09	5,542
Slick Rock, CO	-	-	-	2,549	0.228	11,600
Los Cutaros, AZ		Developmental with historical resources				
C de Baca, NM			Developmenta	I with historical resources	S	
Dalton Pass, NM				I with historical resource		
Long Park, CO			Developmenta	I with historical resource	S	
U.S. Conventional Total	29,532	0.03*	17,000	20,066	0.12	29,142
Canadian Conventional Portfolio						
Diabase, SK		Developmental with historical resources				
Paraguay ISR						
Yuty	8,621	0.05*	8,914	2,353	0.05	2,226
Coronel Oviedo		Developmental with historical resources				
Paraguay ISR Total	8,621	0.05*	8,914	2,353	0.05	2,226
Company Total		58,446 ('000 lbs. U3O8) 45,445 ('000 lbs. U3O8)				

(1) Cautionary Note to US Investors. The Company is without known mineral reserves under SEC Industry Guide 7. Measured, Indicated and Inferred Resources are estimated in accordance with NI 43-101 and do not constitute SEC Industry Guide 7 compliant reserves. (*) Weighted averages



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