



AMERICA'S EMERGING URANIUM PRODUCER

Corporate Presentation – December 2020

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.'

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
Proven U.S. Producer

**Licensed Low-Cost
U.S. ISR Projects**

**Operational Infrastructure –
Ready to Ramp Up**

U.S. Production Profile 4M lbs./yr

**Aggressively Expanded Project
Portfolio Through Acquisitions
During the Downturn**

**Largest U.S. Resource Base of
Fully Permitted ISR Projects in
Texas and Wyoming of any U.S.
Based Producer**

Reactor Demand Significantly Exceeds Primary Production

Spot Prices Below Production Costs and Hedges Falling Off

2020 Demand expected = 180M lbs.

2020 Production expected = 123M lbs.

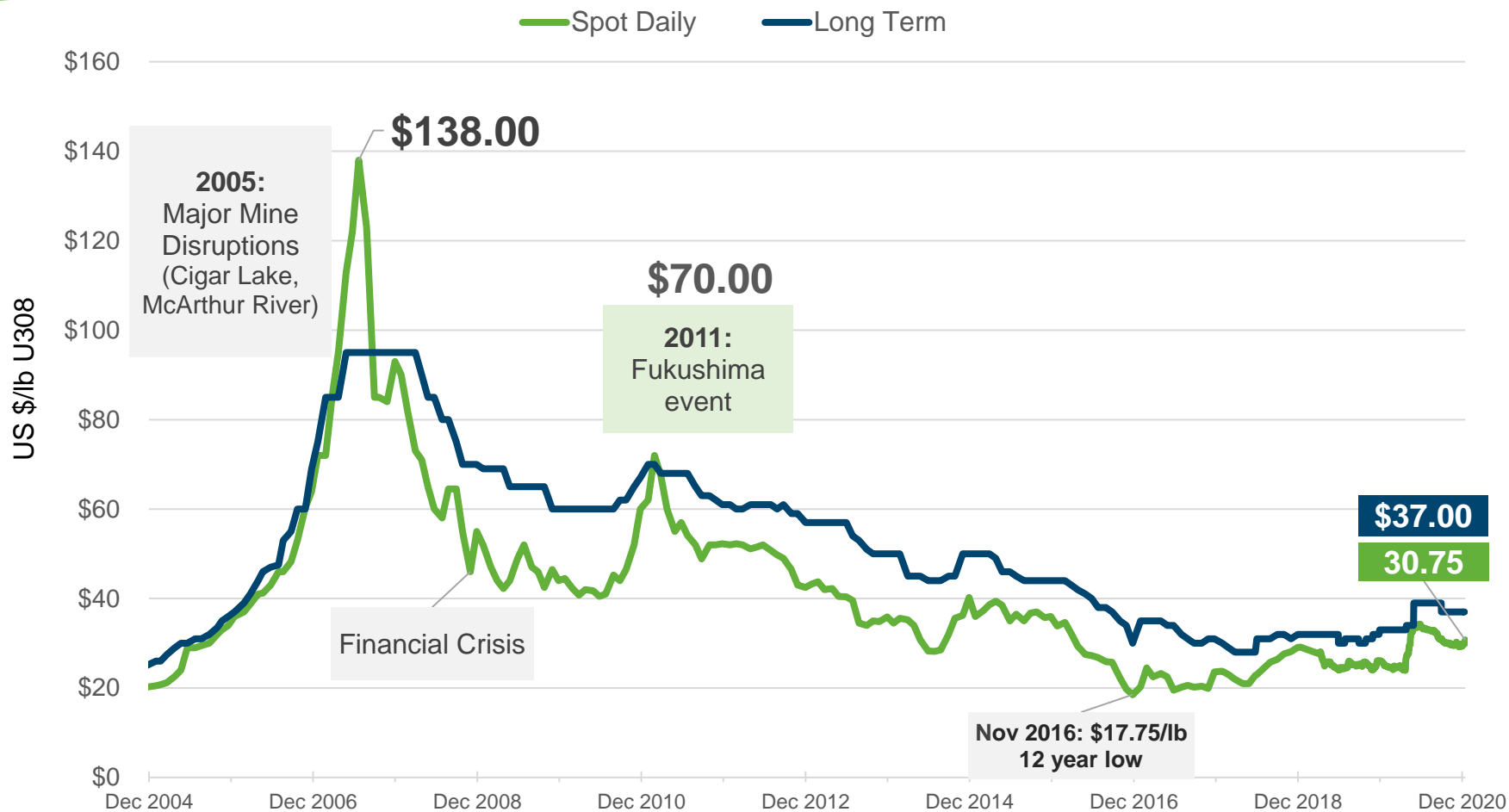
2020 Production Gap is 63M lbs. below requirements

Cumulative Gap is 250M lbs. by 2025



Source: UxC Market Outlook Q4 2019; Q4 2020

Uranium Spot Price \$30.75/lb. Up 23% Year-to-Date 73% Increase Over November 2016 Low (\$17.75/lb)



Source: TradeTech, Numerco, UxC, LLC: www.uxc.com

U.S. Uranium Mining & Nuclear Energy Enjoying Historic Support in Washington D.C.

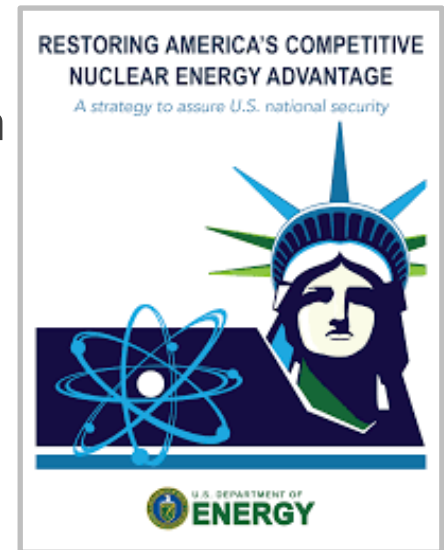
Bi-Partisan Support for Nuclear Energy – First Time in 48 years Democratic Party Platform Supports Nuclear Energy

World's Largest Nuclear Reactor Fleet Over Reliance on Imports
Prompts National Security Concerns – No U.S. Production

Nuclear Fuel Working Group Develops Strategy to Restore America's Nuclear Fuel Supply Chain & Global Market Position

Strategic Uranium Reserve Budget is \$1.5 Billion
over 10 years for Domestic Uranium and Conversion

DOC Amends Russian Suspension Agreement to Limit and Reduce Imports from Russia – up to 75% Compared to Prior RSA



Diversified Asset Portfolio

Low-Cost ISR & Production Ready

58M lbs. Measured & Indicated
45M lbs. Inferred U₃O₈

Infrastructure - Texas

Hobson Processing Plant - Production Capacity of 2M lbs./year

Texas Hub & Spoke ISR Portfolio

Project Name	Stage	Resources (M lbs.)	
		M&I	Inferred
Palangana (Fully Permitted)	(NT)	1.1	1.2
Goliad (Fully Permitted)	(NT)	5.5	1.5
Burke Hollow (Fully Permitted)	(NT)	-	7.1
Salvo	(E)	-	2.8

Reno Creek ISR Project (Approved Permit to Mine)

Project Name	Stage	Resources (M lbs.)	
		M&I	Inferred
Reno Creek	(NT)	26	1.49

Permitted for 2M lbs./year production

- Uranium
- Titanium
- Vanadium

Stage:
(E) Exploration
(D) In Development
(NT) Near Term Production

Canada - Athabasca Basin

Project Name	Stage	Resources (M lbs.)	
		M&I	Inferred
Diabase	(E)	NA	NA

Paraguay ISR Uranium Portfolio

Project Name	Stage	Resources (M lbs.)	
		M&I	Inferred
Yuty	(D)	8.9	2.2
Oviedo	(E)	23-56 Exploration Target	

Paraguay Titanium Business

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

U.S. Hardrock Pipeline (Uranium & Vanadium)

Project Name	Stage	Resources (M lbs.)	
		M&I	Inferred
Anderson	(D)	17.0	12.0
Workman	(D)	-	5.5
Slick Rock (U308)	(D)	-	11.6
Slick Rock (V205)	(D)	-	69.6

Strategic Equity Interest

URANIUM
 ROYALTY CORP

Largest shareholder in Uranium Royalty Corp (Pre-IPO)

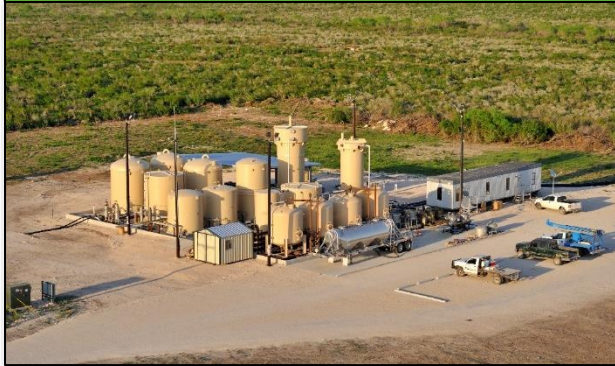
The only pure play uranium royalty and streaming company and major shareholder in Yellow Cake plc

Please refer to a detailed breakdown of NI 43-101 resources and disclaimer in this presentation

U.S. Project Portfolio

Infrastructure, Resources and Permits

Texas Hub & Spoke ISR Portfolio

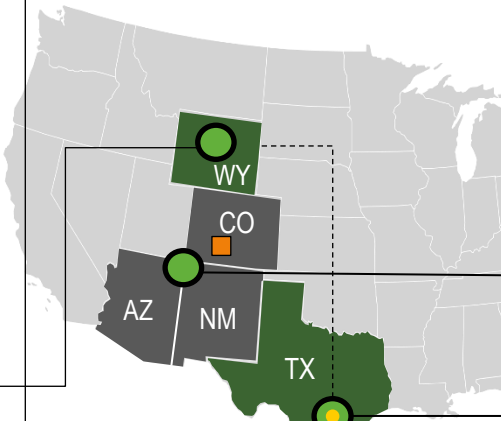


Wyoming Reno Creek ISR Project



● Uranium
■ Vanadium

Stage:
 (E) Exploration
 (D) In Development
 (NT) Near Term Production

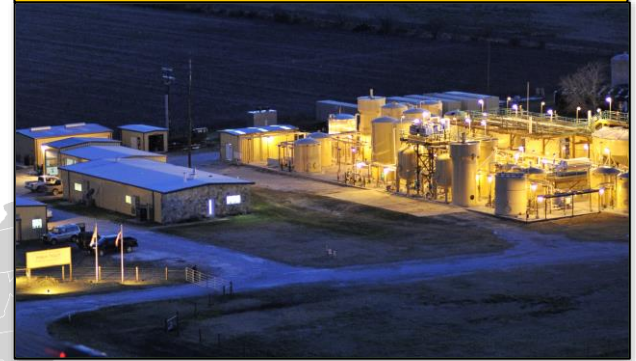


South Texas

ISR Hub & Spoke
Production
Strategy

Hobson Processing Plant

Production Capacity of 2 M lbs./year



U.S. Conventional Portfolio



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

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.



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

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



Robert Underdown

VP of Production

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



Clyde Yancey

VP of Exploration

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



Andy Kurrus

VP of Resource Development

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

UEC At a Glance

Member of the Russell 3000® Index

Cash⁽¹⁾	\$16.7 M			
Securities⁽²⁾	\$11.6 M market value of 14 M shares of Uranium Royalty Corp (URC: TSX-V)			
Share Structure	198.9 M Outstanding	14.5 M Warrants	16.1 M Options ⁽³⁾	229.5 M Fully Diluted
Recent Activity	\$1.60 As of Dec 14, 2020	1,604,904 Avg. Daily Vol. (3-mo)		
Market Cap	\$318 M As of Dec 14, 2020	\$18 M⁽⁴⁾ Long-Term Debt		
Top Shareholders	UEC Team, Blackrock, Vanguard Group, State Street, Fidelity, Northern Trust, UBS, SG Americas Securities, CEF Holdings, Sprott, KCR Fund, and Global X Management			
ANALYST COVERAGE	David Talbot , Eight Capital Heiko Ihle , H.C. Wainwright & Co. Katie Lachapelle , Canaccord Genuity		Colin Healey , Haywood Securities Inc. Joseph Reagor , ROTH Capital Partners	

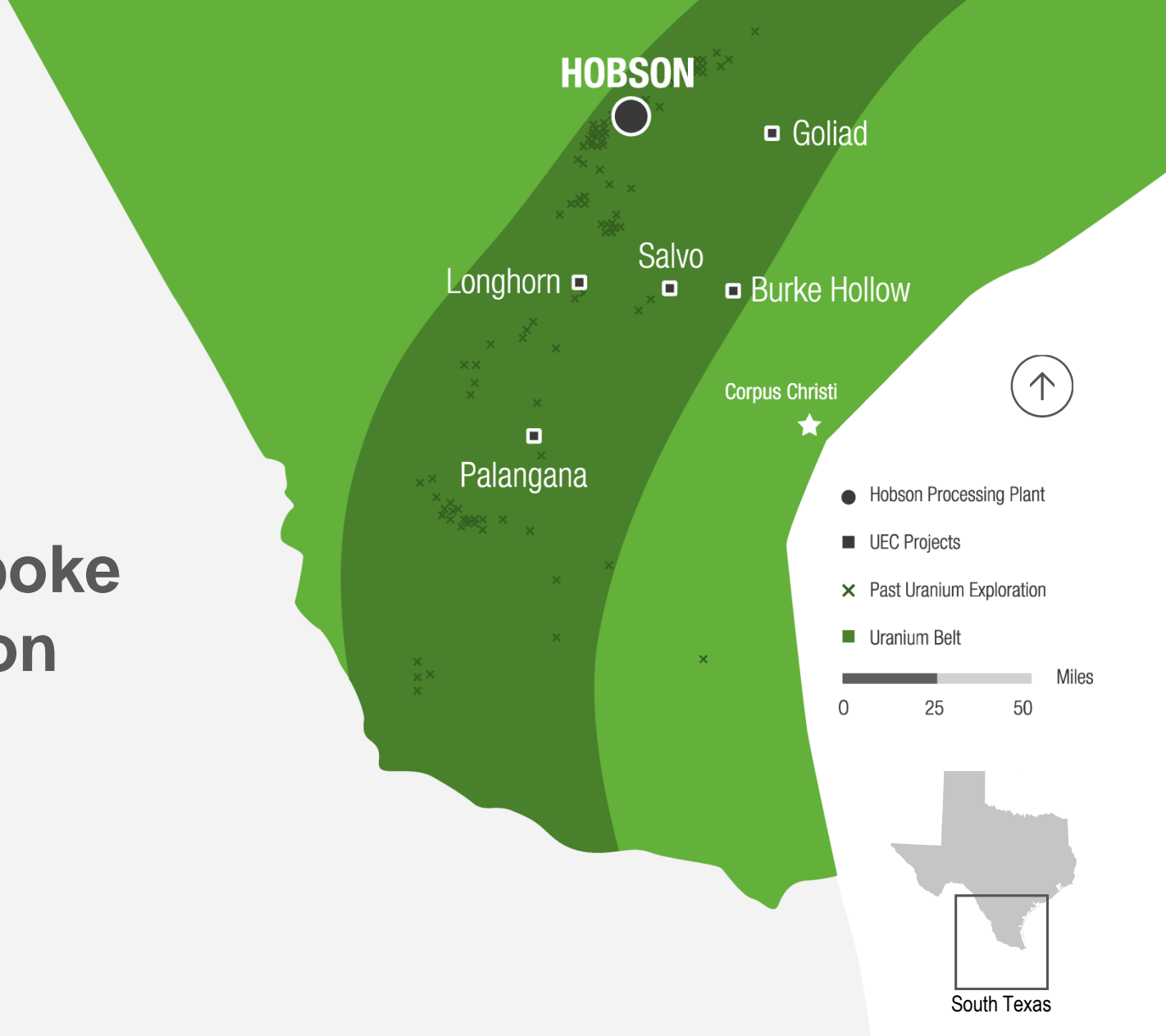
⁽¹⁾ As at the Company's latest filings on Dec 14, 2020

⁽²⁾ Uranium Royalty Corp (URC: TSX-V) having a trading price of CAD\$1.10 at closing on Oct 31, 2020. These shares are subject to escrow and resale restrictions as set forth in URC's final prospectus filing

⁽³⁾ \$43.5 M cash to be received should all warrants and options be exercised

⁽⁴⁾ In Nov 2020, UEC made a voluntary principal repayment of \$2M, reducing the total principal outstanding to \$18M

Hub & Spoke Production Strategy



Hobson is fully licensed and permitted.



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

Palangana ISR Mine

First Producing Mine

Proof of Concept

**\$10M
Initial CAPEX**

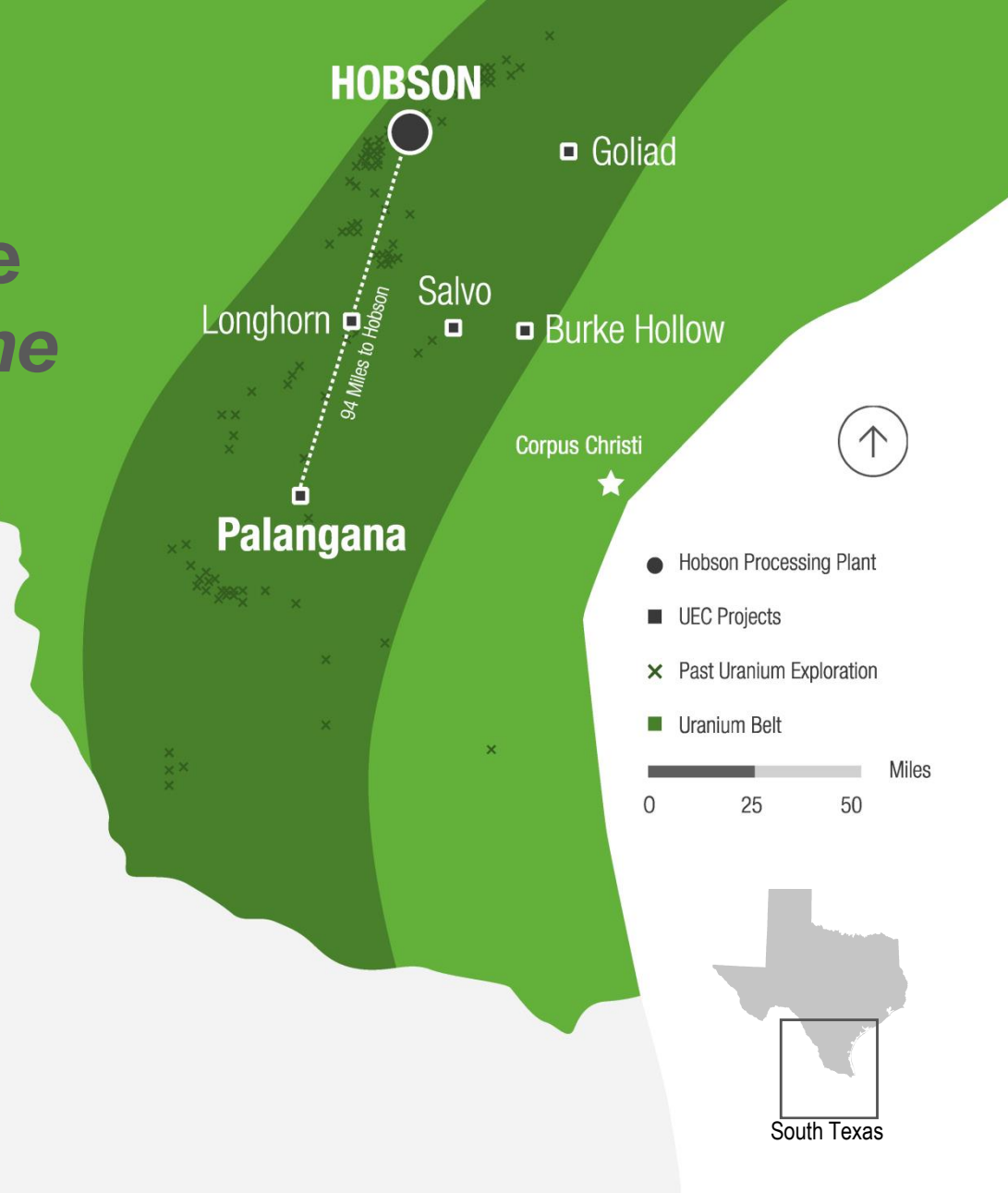
6 months construction
timeline

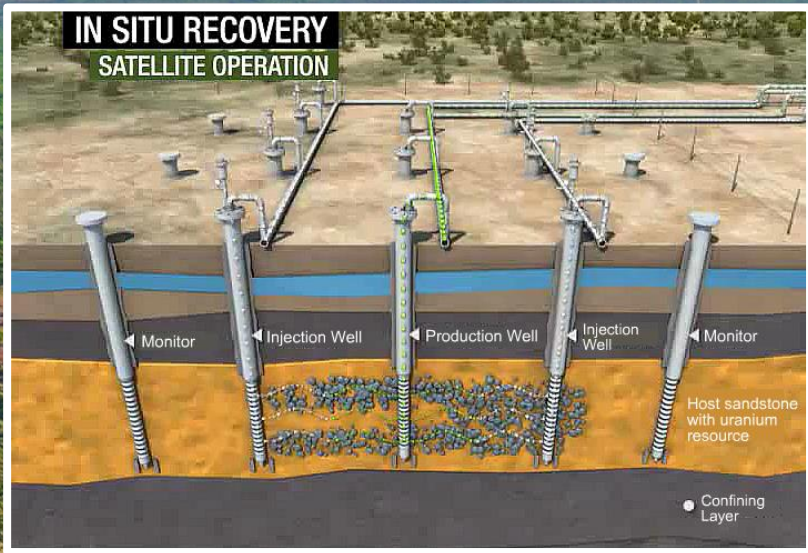
**Production
Ready**

- 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





Palangana Production Area 1 (PA-1)



In-Situ Recovery (ISR) Technology
Low Cost & Environmentally Friendly

Palangana Ion Exchange Facility

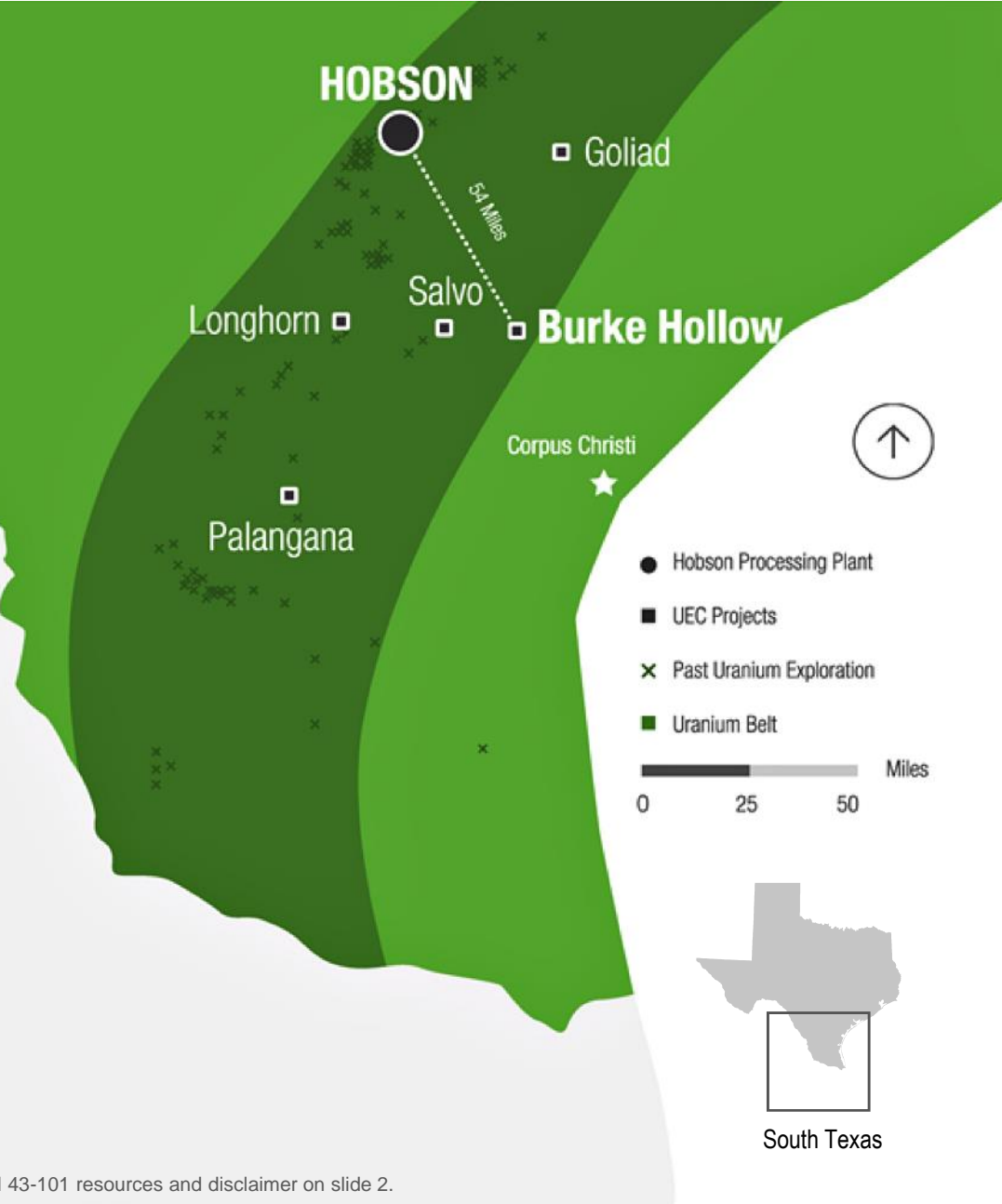




Resin Hauling Truck And Trailer

Burke Hollow ISR Project Growth Ahead

- 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



*See news release dated Nov 5, 2019 and refer to a detailed breakdown of NI 43-101 resources and disclaimer on slide 2.

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*

2019 Drilling Discovers Additional Mineralization in Production Area 1

- ✓ 72 monitor wells installed
- ✓ Enlarged the Production Area 1 (PA-1) zone

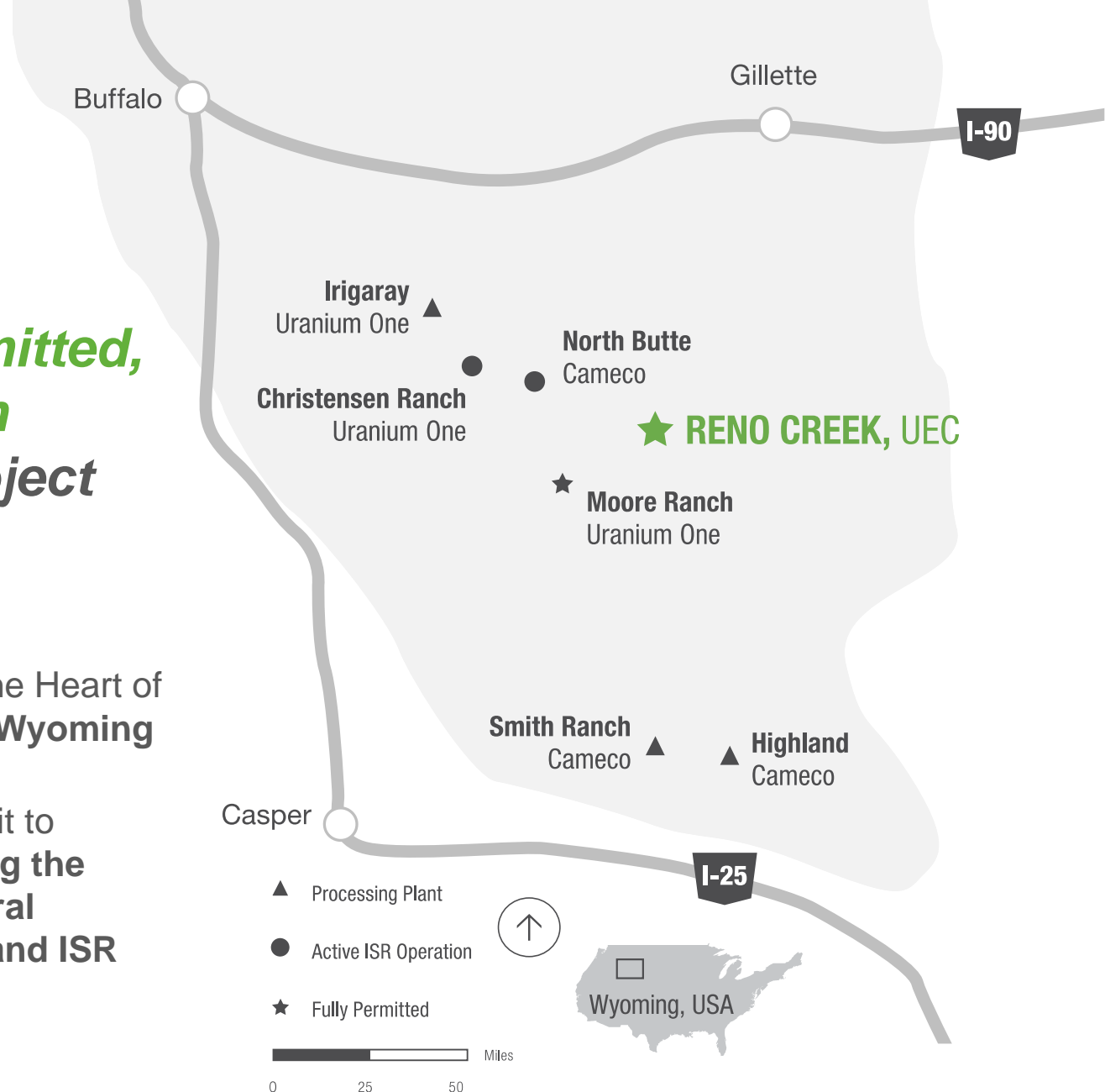
Next Step: Complete the expanded PA-1 delineation drilling and monitor well installation in 2021.

Reno Creek ISR Project

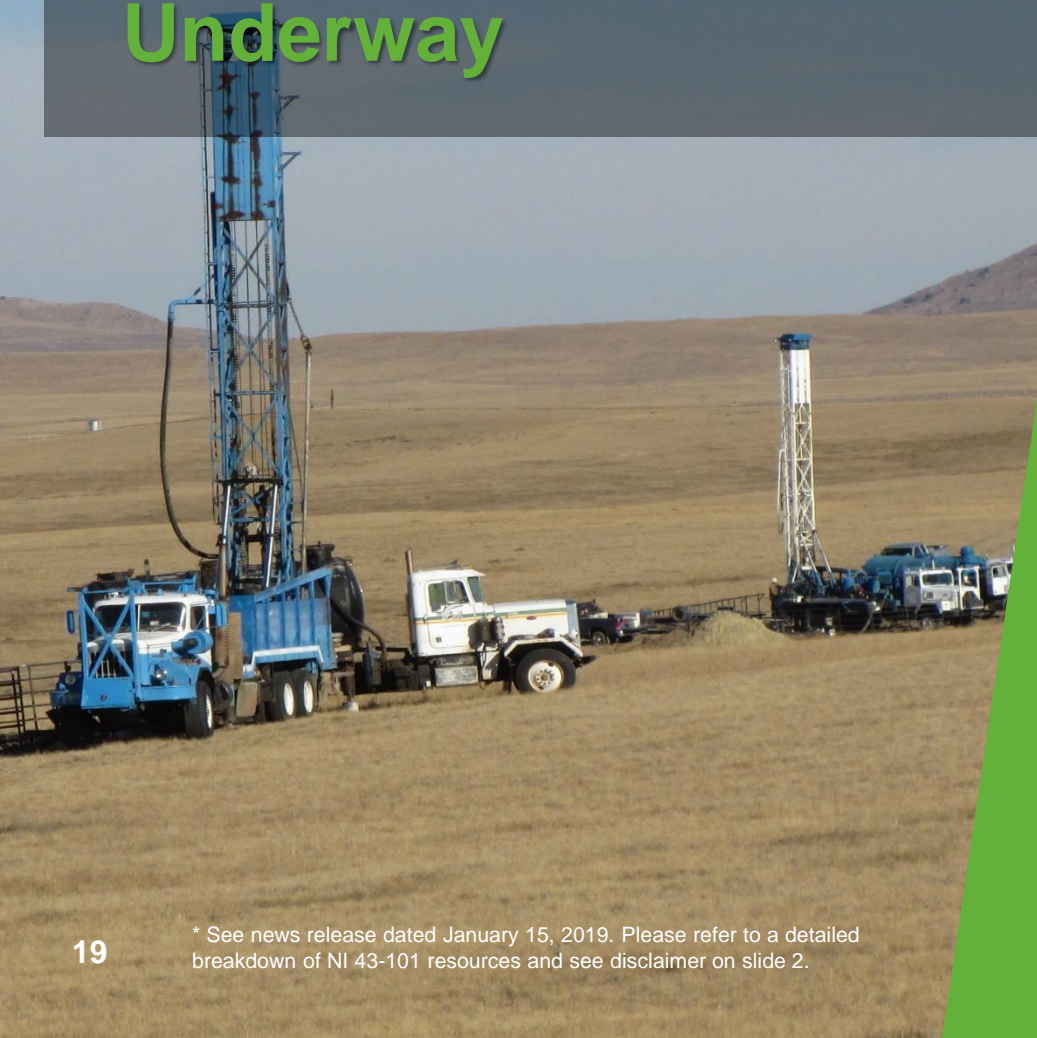
*The largest permitted,
pre-construction
ISR uranium project
in the U.S.*

Strategic Location within the Heart of
the **Powder River Basin, Wyoming**

Received a modified Permit to
Construct in 2019, **allowing the
construction of the Central
Processing Plant (CPP) and ISR
wellfields**



Reno Creek ISR Project Pre-Feasibility Study Underway



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

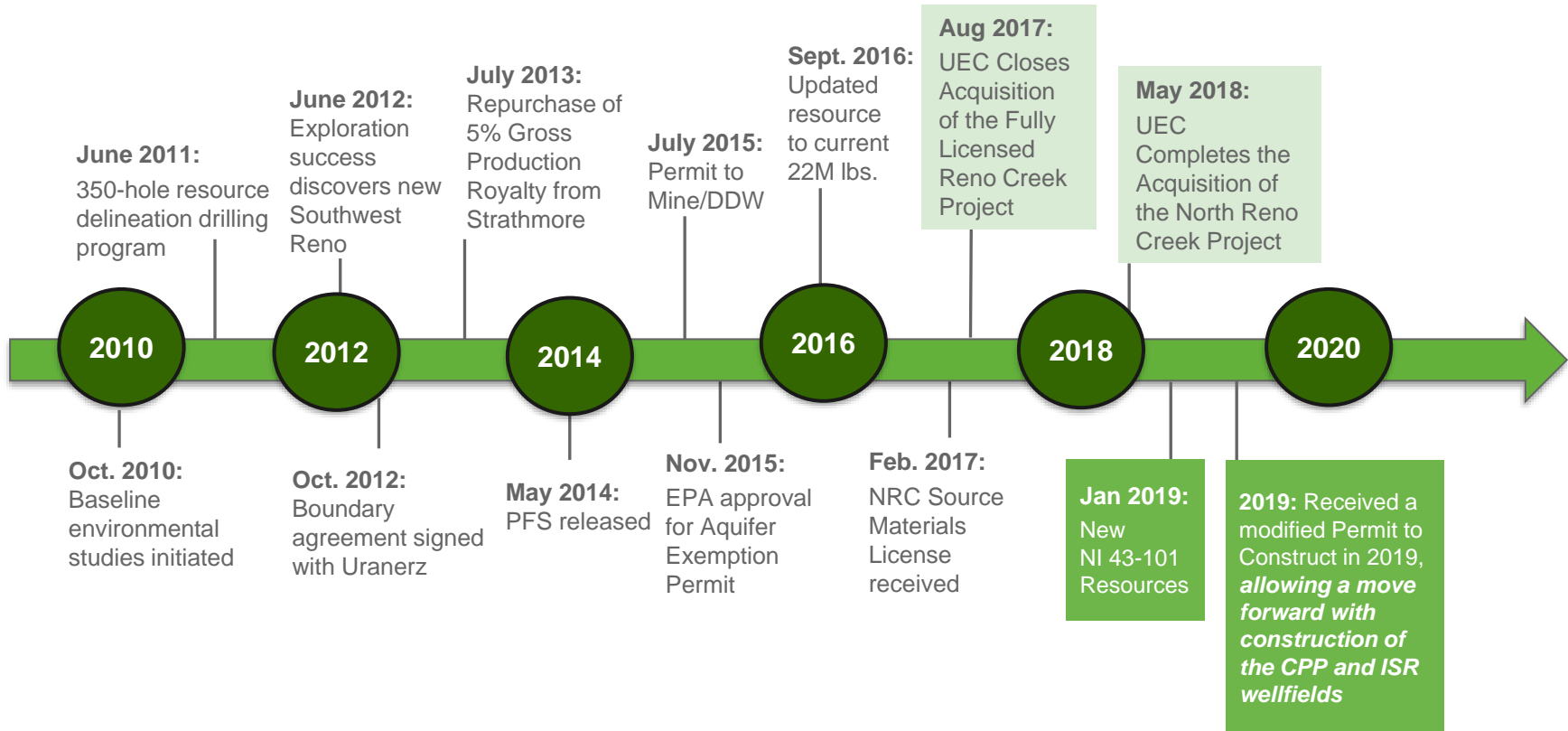
Inferred Resource 1.49M lbs.
of U₃O₈ grading 0.039%
within 1.92Mt*

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*: <ul style="list-style-type: none">▪ 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 CAPEX	<ul style="list-style-type: none">▪ \$21M initial CAPEX with an annual production of 438,000 pounds U3O8 + vanadium inferred
Vanadium Resource	<ul style="list-style-type: none">▪ Resource of 2.549Mt grading 1.37% V2O5 and 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 lbs)
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

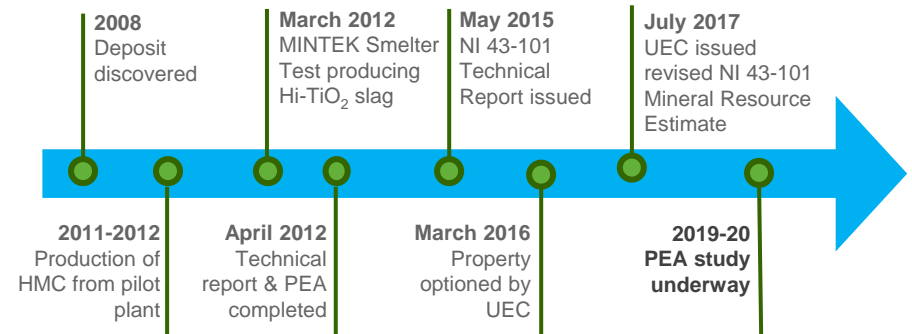
- One of the highest-grade and largest-known Ferro-Titanium deposits in the world
- NI 43-101 compliant resource with a mineral exploration claim of 70,498 hectares
- The PEA's first phase was completed in early 2020 with conclusion of a 49-hole drilling & sampling campaign**
- Follow-up activities include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



Cut-Off %	% TiO ₂	% Fe ₂ O ₃	% Ilmenite calc	Tonnes Billions	Thickness (m)
6.0	7.41	23.58	13.95	4.94	6.61

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

Project History

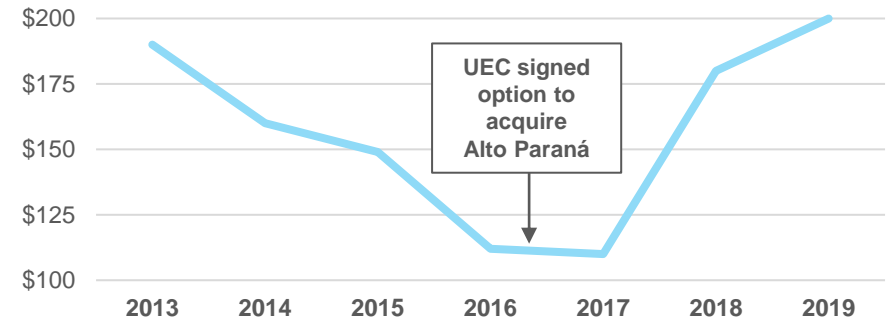


Titanium Feedstock Market – TiO₂ prices hitting 3-year highs

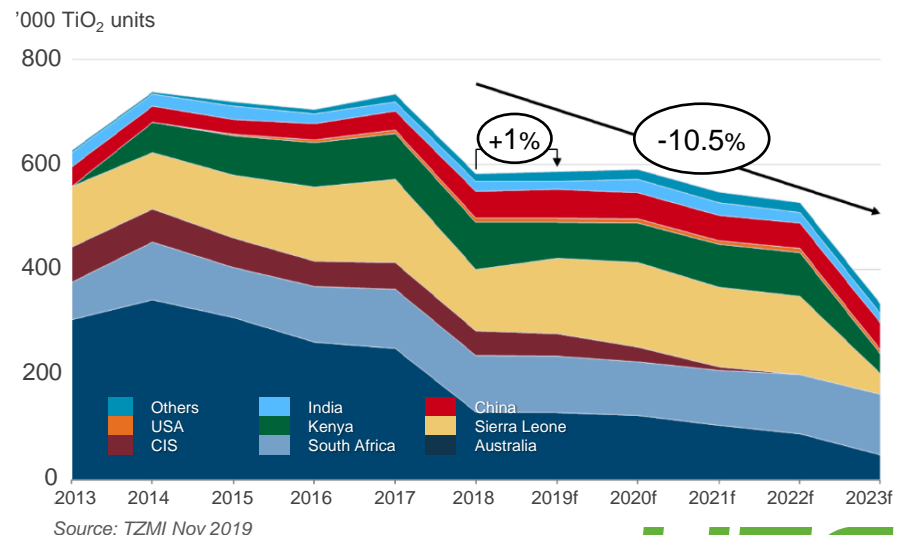
- 90% of TiO₂ feedstocks (ilmenite) used for pigment manufacturing
- Strong price recovery for ilmenite since 2017, with positive outlook, driven by:
 - Strong pigment demand & balanced inventory levels
 - Environmental and yield advantages of high-grade feedstock
 - High-grade feedstock supply deficit

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



Source: TZMI Nov 2019



Investment Summary

- 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
- U.S. projects can provide supply under the NFWG strategy, including \$1.5B Uranium Reserve program starting within the next year
- Advancing production-readiness at Reno Creek and Burke Hollow ISR projects
- Market fundamentals continue to improve with a growing deficit between primary production and reactor requirements



Nuclear Energy Saves Lives – Improves Quality of Life



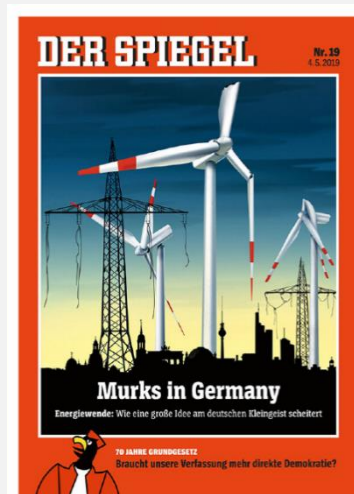
Nuclear is the safest way to make reliable electricity and has saved over 3 million lives that would have been lost prematurely to **deadly air pollution** from energy alternatives.

<https://www.nextbigfuture.com/2019/01/nuclear-power-has-saved-3-4-million-lives.html>

Germany's "Energiewende" "Failed Energy Policy"

160 Billion Euro Investment in "Green Energy" has resulted in:

- Zero Progress in Reducing Carbon Emissions
- Expensive Electricity – 50% higher than Nuclear France
- Reduced Reserve Margins – Reliability Issues
- Reliance on dirty lignite Coal and Russian Gas
- Competitive disadvantage for German Industry
- Loss of confidence in German Government



Translation "A botched job in Germany"

France Gets 72% of its Electricity from Nuclear Power

THEY ENJOY:

- ✓ Per kW carbon emissions 1/10 that of Germany
- ✓ Electricity rates 1/2 that of Germany
- ✓ Clean air with abundant and affordable energy

Policies to reduce nuclear reliance overturned.

Smart move in light of "Yellow Vest" outrage on gas tax.



Nuclear Power Growth Remains Robust

442

Operable Reactors
Worldwide

53

Units Under
Construction

52

New Reactors
Connected since 2012

2.6%

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

U.S. is completing two new AP-1000 reactors in Georgia, 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!



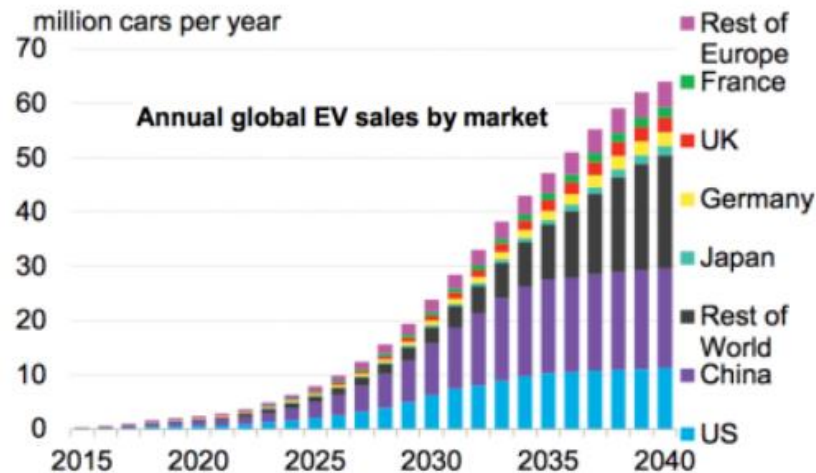
Small Modular Reactor (SMR)

An Important Emerging Market

- **SMR global market: 65-85 GWe by 2035 – small scalable reactors:**
 - Size: 5 up to 300 MWe
 - Simpler design - lower capital and operating cost
 - Cost competitive with natural gas
- **Western U.S. utilities planning for 12 of the NuScale Power SMRs to be in commercial operation by 2025**



Electric Vehicles = Higher Electricity Demand = More Nuclear Power = More Uranium Demand



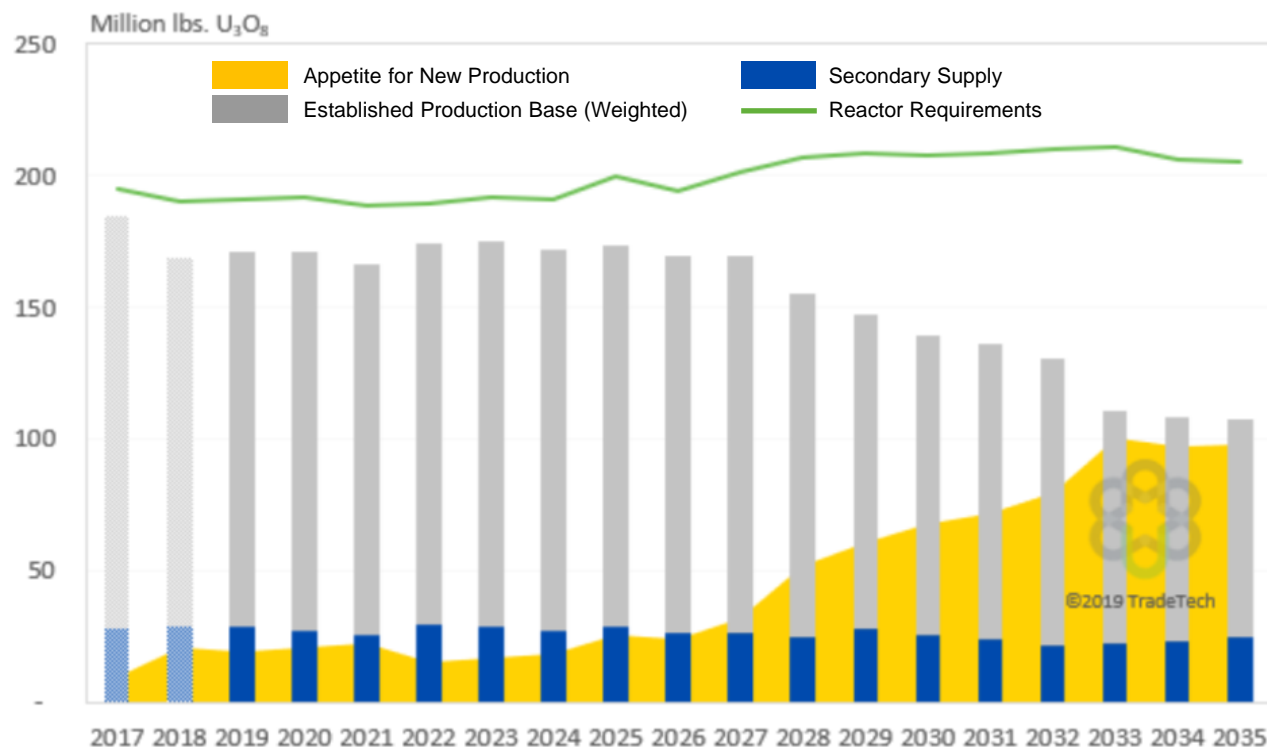
- **Elon Musk** - "#electricity consumption will double if the world's car fleets are electrified, increasing the need to expand #nuclear, solar, geothermal & wind #energy generating sources"
- **DOE** - increased electrification across all sectors of the economy could boost national consumption by as much as 38% by 2050, in large part because of electric vehicles

Need for New Production – Beyond Existing Mines

Trade Tech’s “Market Appetite” for New Production

**Inventory Overhang
Drawing Down**

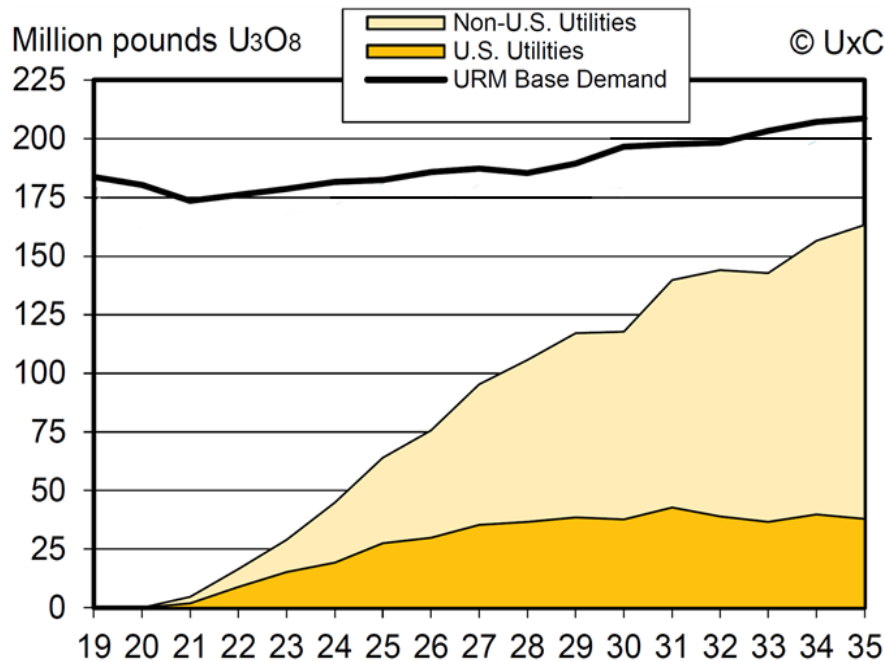
**Uranium Price
Too Low to Stimulate
New Production
Within the Permitting
and Development
Lead Times to Bring
On New Mines**



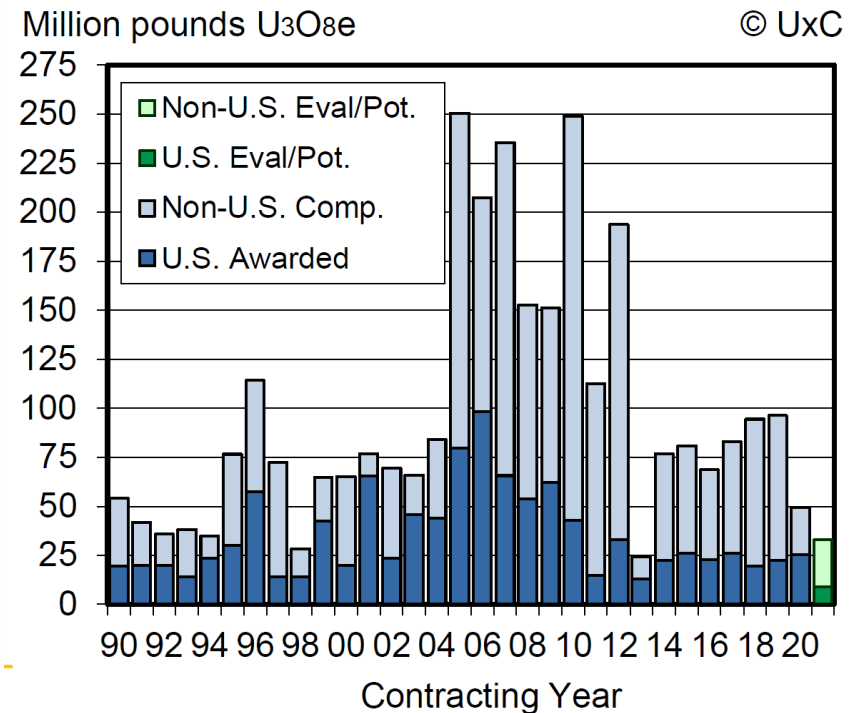
- All assumptions are consistent with TradeTech’s latest proprietary assumptions, August 2019 (i.e. Q2 2019);
- Established Production Base shown is weighted to assimilate the challenge of existing operations remaining at full capacity over Life-of-Mine.

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

Utility Uncommitted Demand



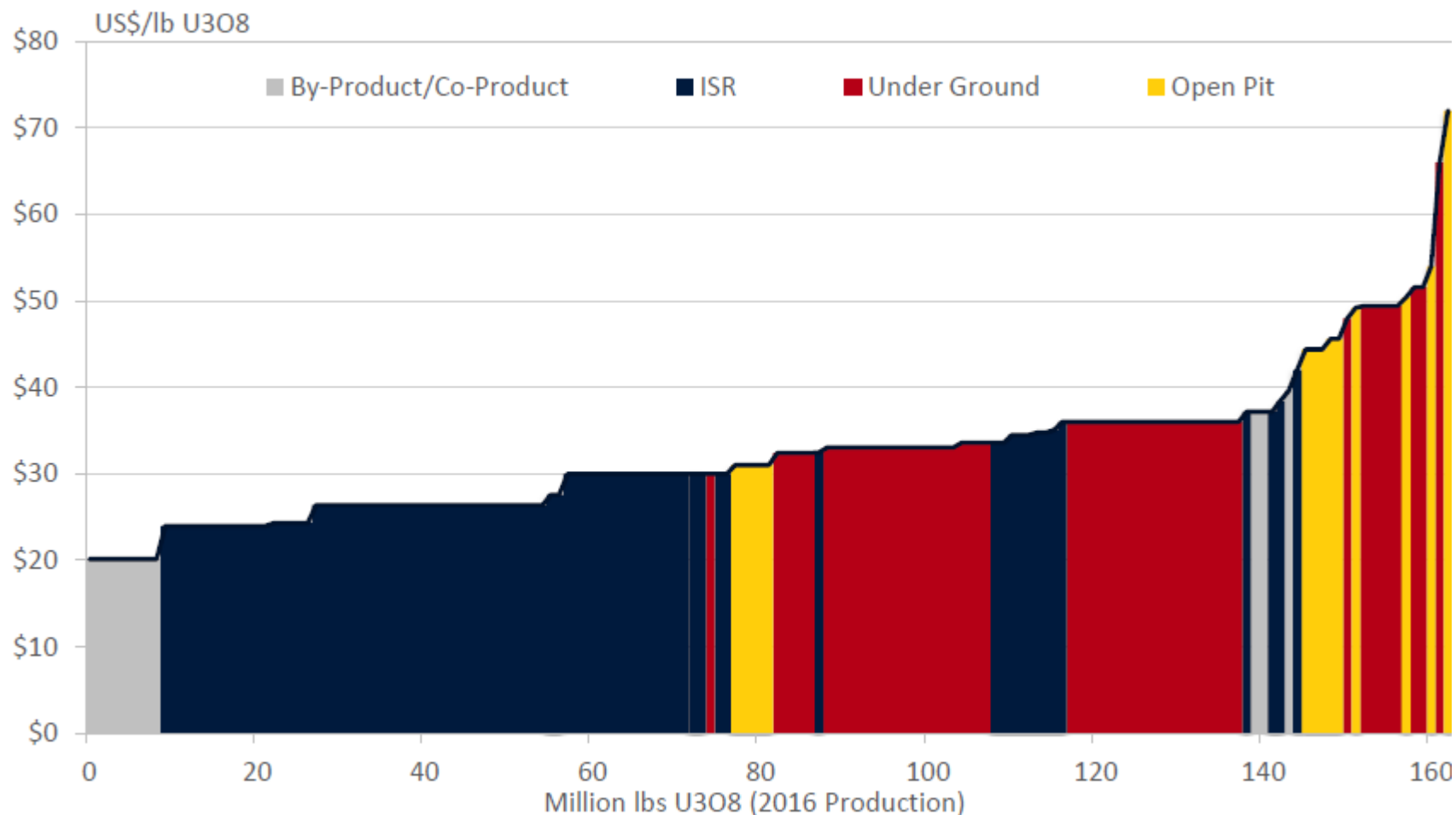
Historic Long Term Contracting



Source: UxC Market Outlook Q4 2020



Global Cost Curve – Most U.S. Production is ISR



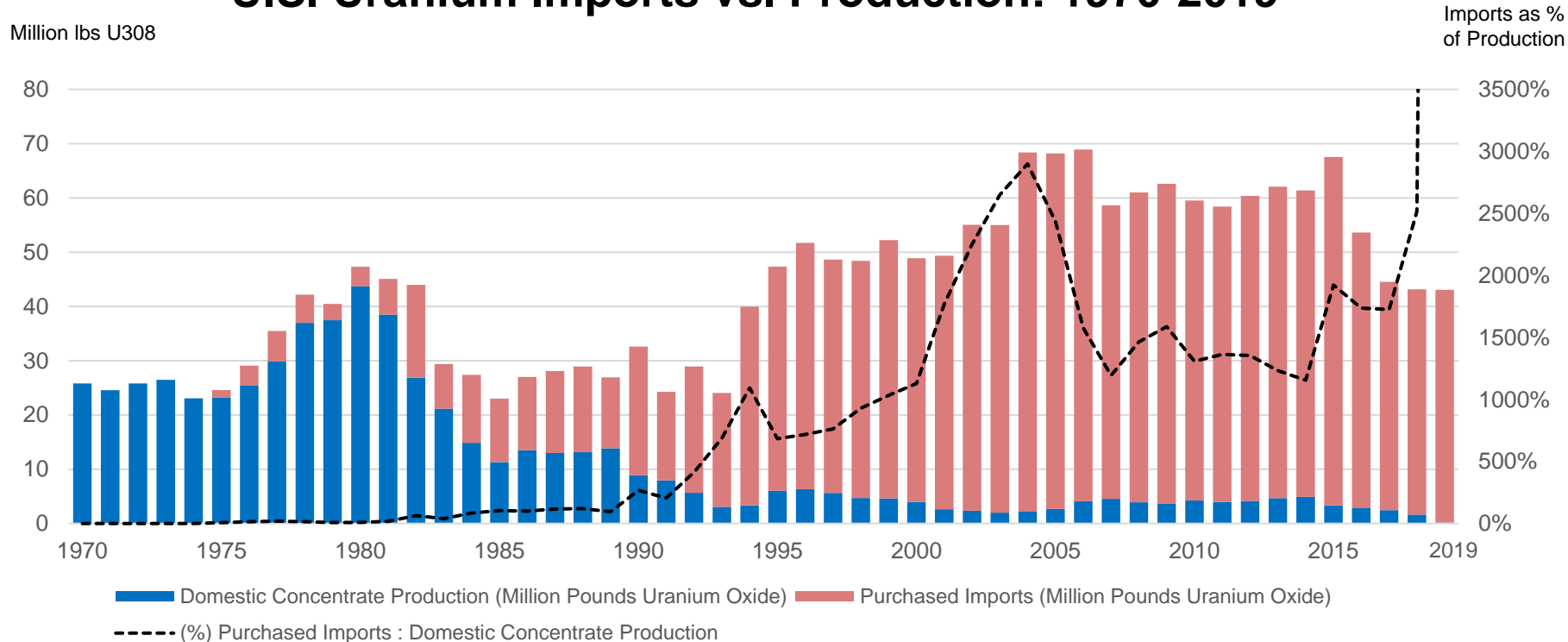
Source: TradeTech

Overdependence on Foreign Supplies

“ The Department of Energy is working to end U.S. reliance on Russia for nuclear fuel, plans to begin processing U.S. uranium as early as next year ”

Secretary Dan Brouillette

U.S. Uranium Imports vs. Production: 1970-2019



Source: U.S. EIA- July 2020 Monthly Energy Review – Uranium overview – Table 8.2

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



Bottom Line - Positive Market Outlook

- ✓ **Demand Growth** – 52 reactors added to grid in past 8 years - generation has recovered to pre-Fukushima levels. Global Nuclear Power Growth is expected at a CAGR of 2.6% over the period 2020-2027. IEA sees future installed nuclear capacity growth of over 15% to 2040
- ✓ **Underinvestment and Supply Cutbacks** – Kazakhs, Cameco, Orano, and others, resulting in significant primary supply deficit. Mine depletions are increasing
- ✓ **Lead Time to Advance Large New Mines** can be 7 to 10 years (or longer), approx. \$60/lb + incentive price
- ✓ **Accelerated Market Re-Balancing** – Growing primary production shortfall exists. COVID removed about 20M pounds from 2020 production – will not be made up
- ✓ **Utility Procurement Cycle Looming** – “New” fundamentals have not been tested
- ✓ **Speculative Interest in Physical** – Throwing “gasoline on the fire”
- ✓ **Upward Volatility in Uranium Price is Inevitable** – despite pullbacks
- ✓ **The NFWG announced strategy to purchase 17-19M lbs. U.S. mined U3O8 starting within the next year**

Combined Resource Summary⁽¹⁾



Projects	Measured & Indicated			Inferred		
Hub & Spoke ISR Portfolio	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)
Texas ISR						
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	<i>Developmental with historical resources</i>					
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 U ₃ O ₈ ('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	<i>Developmental with historical resources</i>					
C de Baca, NM	<i>Developmental with historical resources</i>					
Dalton Pass, NM	<i>Developmental with historical resources</i>					
Long Park, CO	<i>Developmental with historical resources</i>					
U.S. Conventional Total	29,532	0.03*	17,000	20,066	0.12	29,142
Canadian Conventional Portfolio						
Diabase, SK	<i>Developmental with historical resources</i>					
Paraguay ISR						
Yuty	8,621	0.05*	8,914	2,353	0.05	2,226
Coronel Oviedo	<i>Developmental with historical resources</i>					
Paraguay ISR Total	8,621	0.05*	8,914	2,353	0.05	2,226
Company Total	58,446 ('000 lbs. U ₃ O ₈)			45,445 ('000 lbs. U ₃ O ₈)		

(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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