

AMERICA'S EMERGING URANIUM PRODUCER

Corporate Presentation – September 2021



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

Newly established U.S. warehoused inventory of 2.3 M lbs. U₃0₈

Strong balance sheet with over \$123 million in cash, equity and physical holdings

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



Robust Nuclear Power Growth

443

Operable Reactors
Worldwide

51

Units Under Construction

56

New Reactors
Connected since 2012

3.1%

CAGR Uranium
Demand Growth
Expected (2020-2040)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!









Nuclear Power is Critical to U.S. Energy

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

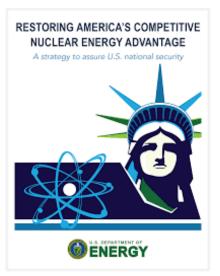
The U.S. Senate has passed a **Bipartisan infrastructure bill** that provides a \$6B nuclear credit program for qualifying nuclear plants with priority given to reactors using uranium produced in the United States

The U.S. has set a goal to reach 100% carbon pollution-free electricity by 2035 – Nuclear Energy "Absolutely Essential" (US Energy Secretary Jennifer Granholm)

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 Accelerating with Entry of Financial Players led by Sprott Uranium Trust

At \$40.25/lb, price still well below 2011 at \$70 high and incentive levels for new primary production



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



Diversified Asset Portfolio Low-Cost ISR & Production Ready

58M lbs. Measured & Indicated •

45M lbs. Inferred U₃O₈

Contracted physical inventory of U.S. warehoused uranium – 2.3 million lbs.

Infrastructure - Texas

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

Texas Hub & Spoke ISR Portfolio

| Project Name | Ctoro | Resour | Resources (IVI IDS.) | | |
|-------------------------------|---------|--------|----------------------|--|--|
| Floject Name | Stage | M&I | Inferred | | |
| Palangana (Fully Permitted) | (NT) | 1.1 | 1.2 | | |
| Goliad (Fully Permitted) | (NT) | 5.5 | 1.5 | | |
| Burke Hollow (Fully Permitted | d) (NT) | - | 7.1 | | |
| Salvo | (E) | - | 2.8 | | |

Reno Creek ISR Project (Approved Permit to Mine)

| Project Name | Stogo | Resources (M lbs.) | | |
|--------------|--------------|--------------------|-----------------|--|
| Project Name | Stage | M&I | Inferred | |
| Reno Creek | (NT) | 26 | 1.49 | |
| | Permitted fo | r 2M lhe | vear production | |

Uranium Resources

Uranium Inventory

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

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.) | | |
|-------------------|-------|--------------------|----------|--|
| 1 Toject Ivaille | Stage | 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

18% stake in the Uranium Royalty Corp

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





Exploration Target

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

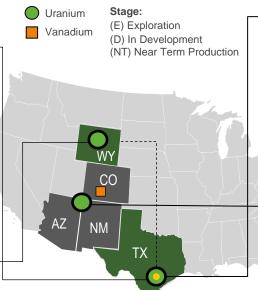
UEC's physical uranium initiative includes more than 2.3M lbs of U.S. warehoused uranium with deliveries in March 2021 into June 2023 at ~\$30/lb U3O8





U.S. Infrastructure, Resources and Permits







Hobson Processing Plant

Wyoming Reno Creek ISR Project



ISR Hub & Spoke Production Strategy

South Texas

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.



UEC At a Glance

| Cash, Equity and Inventory Holdings ^(1,2,3) | ~\$123.4 million | | | |
|---|---|--------------------------------------|--|--|
| Share Structure | 233.2 M Outstanding | | 12.6 M Options & Stock Awards ⁽⁴⁾ | 251.2M Fully Diluted ⁽¹⁾ |
| Recent Activity | \$2.93 As of Sep 8, 2021 | 5,074,024 Avg. Daily V | ol. (3-mo) | |
| Market Cap | \$683 M As of Sep 8, 2021 | \$10 M ⁽⁵⁾ Debt | | |
| Top Shareholders | UEC Team, Blackrock, Vanguard Group, State Street, Fidelity, Northern Trust, UBS, CEF Holdings, Sprott, KCR Fund, and Global X Management | | | |
| ANALYST COVERAGE | Heiko Ihle, H.C. Wainwright & Katie Lachapelle, Canaccord Mitch Vanderydt, Eight Capita | Genuity | Colin Healey, Haywood Sed Joseph Reagor, ROTH Cap | |

⁽¹⁾ As of April 30, 2021, our most recent financial statements date

⁽⁵⁾ In November 2020 and March 2021, UEC made voluntary principal repayments totaling \$10M, reducing the total principal outstanding to \$10M



⁽²⁾ Equity holdings include 14M shares of Uranium Royalty Corp (UROY) having a trading price of US\$3.52 at closing on Apr 30, 2021

⁽³⁾ As of April 30, 2021, Inventory holdings include 900,000 lbs delivered U3O8, which is part of the 2.5M lbs. physical uranium initiative with multiple deliveries between March 2021 to December 2022

^{(4) \$22.7}M cash to be received should all warrants and options be exercised

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.







12

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

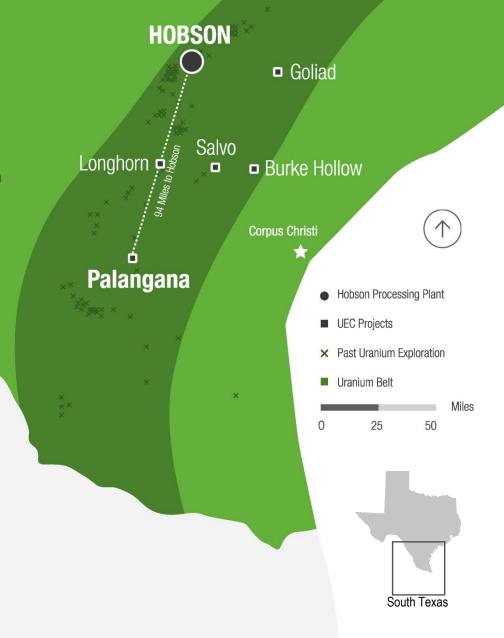
6 months construction timeline

Production Ready

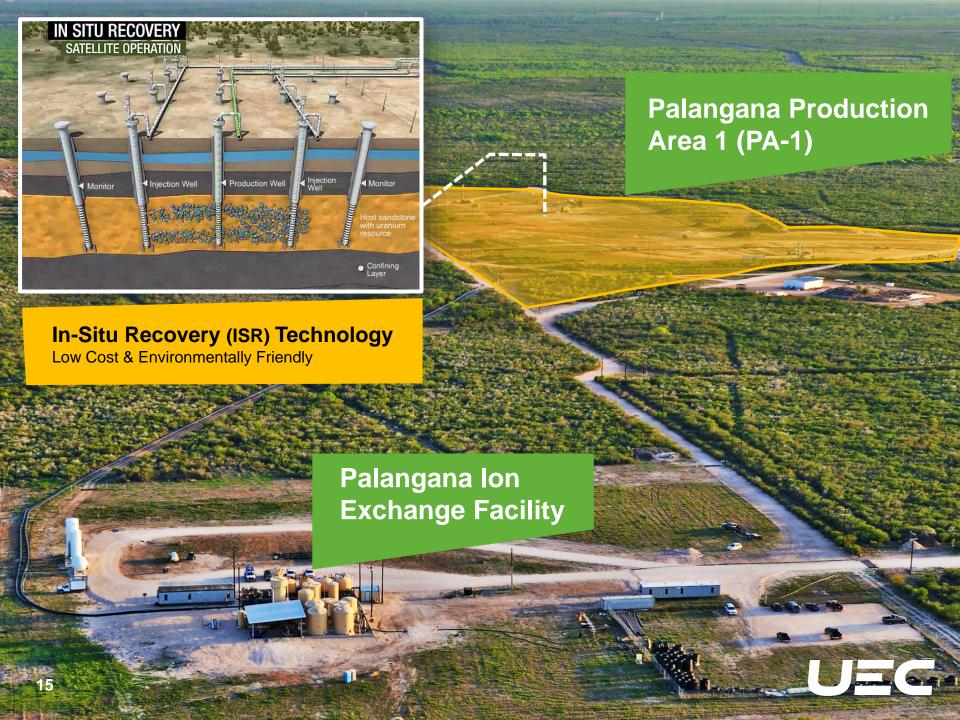
- Low cash-cost of \$21.77/lb during operation
- Fully permitted including expanded mine permit
- Received 10-year renewal permits in 2019

Similar Costs for Future Projects

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









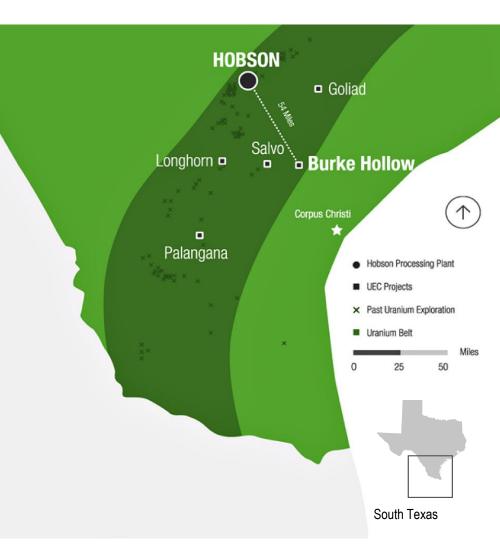
Resin Hauling Truck And Trailer



Burke Hollow ISR Project

- Discovery of six trends since 2012
- 7.09M lbs. in 4.06Mt grading 0.088% U₃0₈
- 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 ISR Project

Advancing Towards Uranium Extraction

The following final permits have been issued:

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



See news releases dated Jan 26 and April 14, 2021. Refer to a detailed breakdown of NI 43-101 resources and disclaimer on slide 2.



Burke Hollow ISR Project, South Texas

The Newest & Largest ISR Wellfield Being Developed in the U.S.

2021 Production Area Development

- ✓ 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

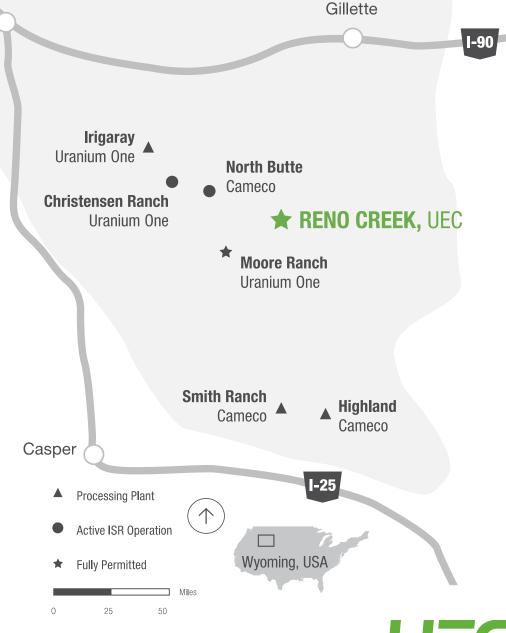


Reno Creek ISR Project

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

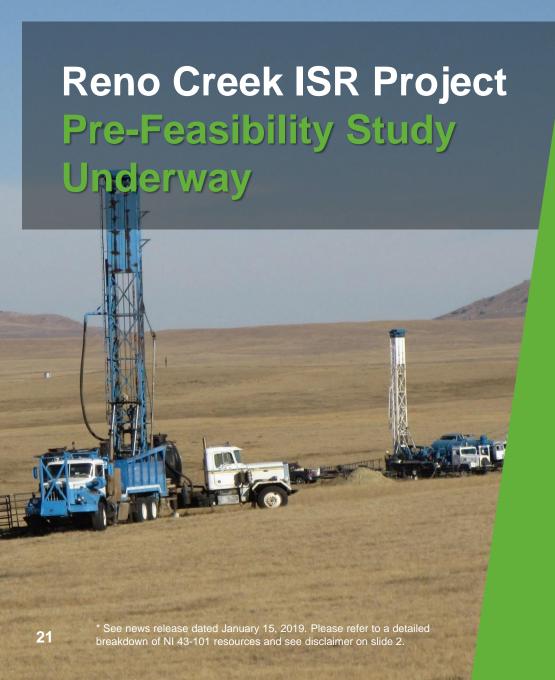
Strategic Location within the Heart of the **Powder River Basin**, **Wyoming**

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





Buffalo



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*

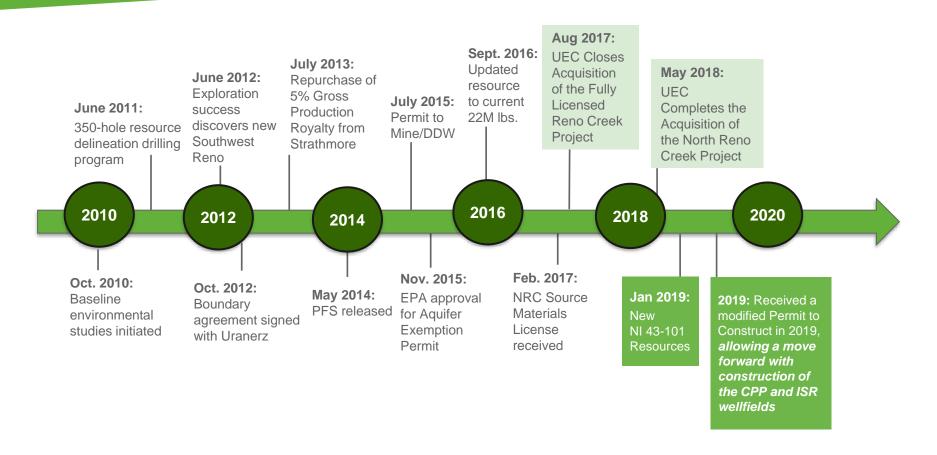
First time since 1980 that the major mineralized trends have been consolidated

Considerable ISR exploration and expansion potential

Production permits in place



Reno Creek: Project Timeline

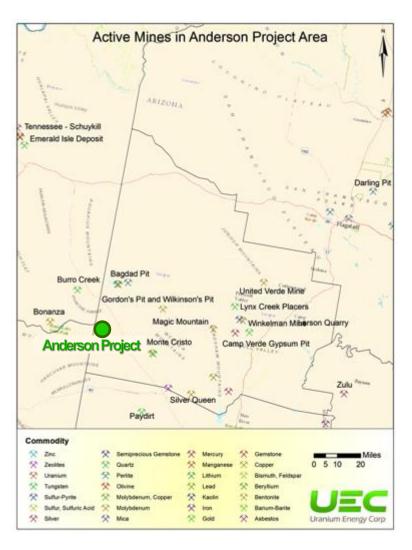


^{*} See news release dated January 15, 2019. Please refer to a detailed breakdown of NI 43-101 resources and see disclaimer on slide 2.



Anderson Project - Arizona

NI 43-101 compliant resource*: Indicated Resource: 29.5Mt, 17M lbs. avg. grade A Large U.S. of 0.029% Resource Inferred Resource: 14.3Mt, 12M lbs. with avg. grade of 0.046% 9,852 Acres Project located ~75 miles northwest of Phoenix, AZ Between 1955-1958 with ~\$40M spent by previous **History** operators, including Urangesellschaft Extensive Feasibility studies, milling studies, and hydrological reports previously completed by third parties Work





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

Slick Rock Project - Colorado

NI 43-101 Compliant Resource*: • Inferred Resource: 2.5Mt, 11.6M lbs. avg. **Technical** grade of 0.228% Report • 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 containing 69.6M lbs. Resource Nearby Projected sale of mined product to the White Mesa mill in nearby Blanding, UT Infrastructure



*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 2021 and Resource estimation updated
- Valuation and Market study completed and PEA Phase 2 underway





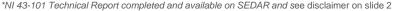
Fe₂O₃ (m) 23.58 13.95 7.41 4.94 6.61 6.0

calc

Billions

Project History



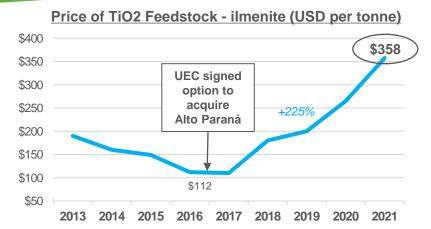




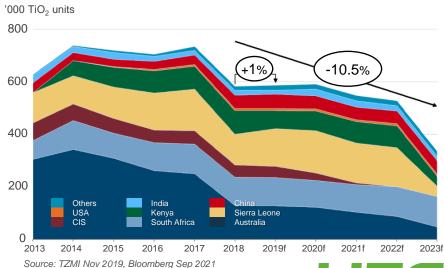
Titanium Feedstock Market – TiO2 prices hitting 3-year highs

- 90% of TiO2 feedstocks (ilmenite) used for pigment manufacturing
- Strong price recovery for ilmenite since 2017, with positive outlook, driven by:
 - Strong pigment demand & supply constraints
 - Stringent environmental regulations driving high-grade feedstock fundamentals
 - Anticipated high-grade feedstock supply deficit

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



Significant Supply Deficit - High Grade TiO2 Feedstocks



Investment Summary

- Strong balance sheet with ~\$123 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 2.3M 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

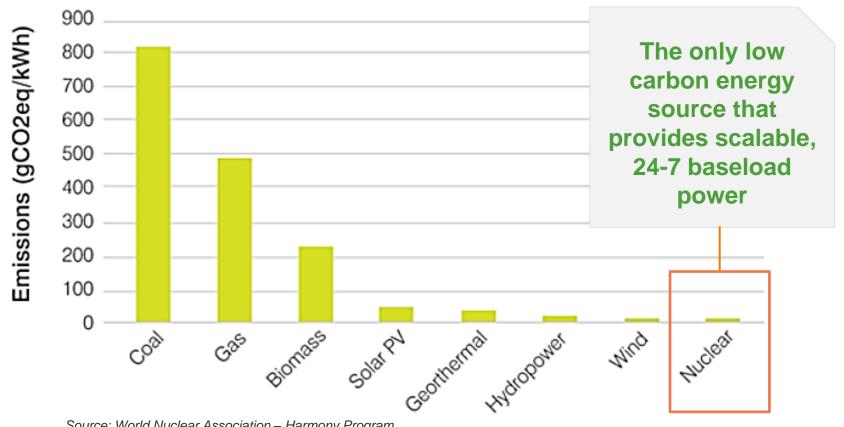






Nuclear Power = Carbon Free - Clean Energy 55% of America's Clean Energy

Life-cycle carbon emissions from selected electricity supply technologies

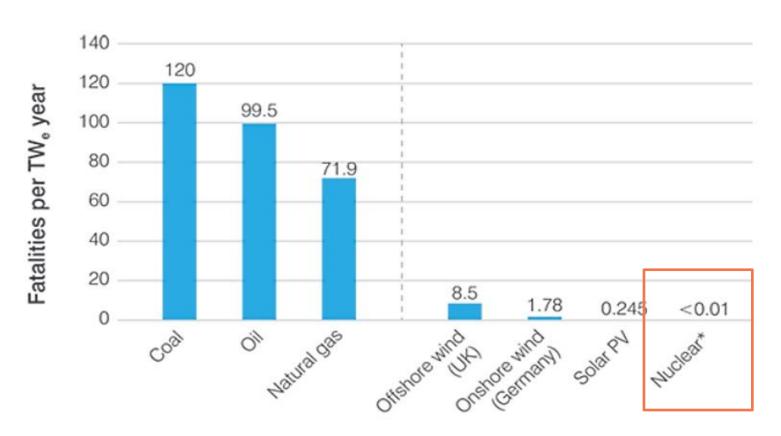


Source: World Nuclear Association – Harmony Program
https://world-nuclear.org/our-association/what-we-do/the-harmony-programme.aspx



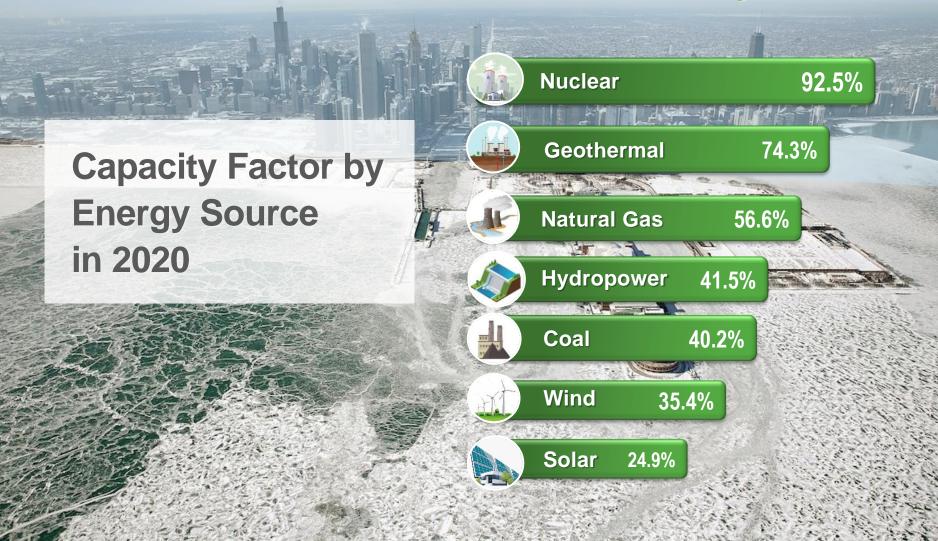
Nuclear Power = Safest Form of Electricity Generation

Nuclear has the lowest energy accident fatalities for OECD countries





2021 Polar Vortex – Nuclear Reliability at 95%



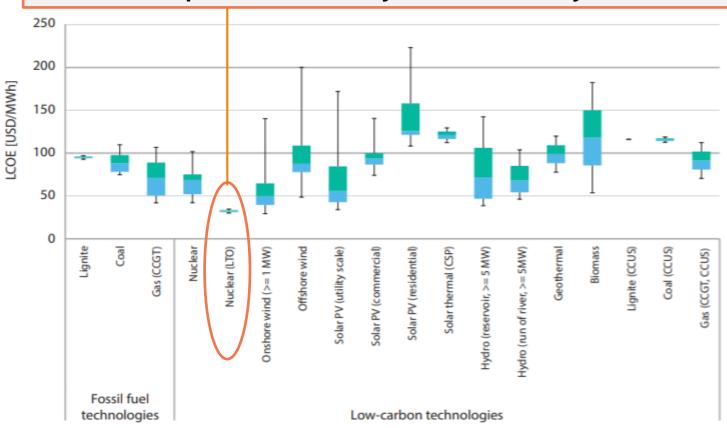






Nuclear Power = Lowest Levelized Cost of ElectricityFor Extended Life Plants vs any Other Source

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

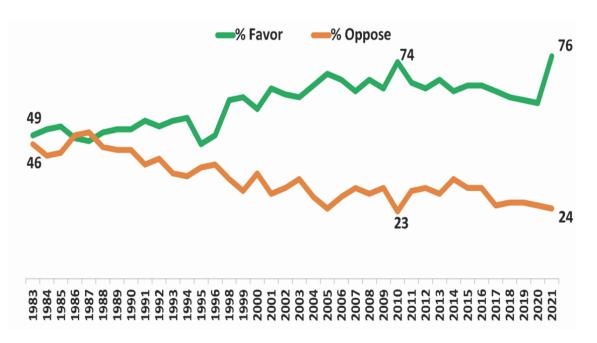




Support for Nuclear Energy is Strong and Increasing

Favorability to Nuclear Energy 1983-2021

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



ECONOMIC BENEFITS









Small Modular Reactor (SMR) An Important Emerging Market

Small Modular Reactors (SMR's)

Scalable, factory-built, smaller footprint, flexible operations, manageable investments, cost competitive, unique applications

Advanced Reactors

Leverages pros/cons of previous designs, takes advantage of technological and material advances, fuel cycle advances, higher efficiencies

New Applications

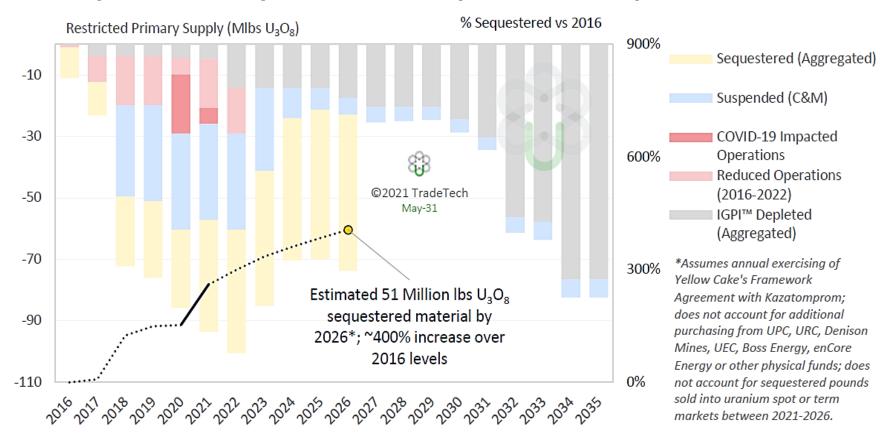
Hydrogen production, clean water through de-salinization, transportation, waste solutions, medicine





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

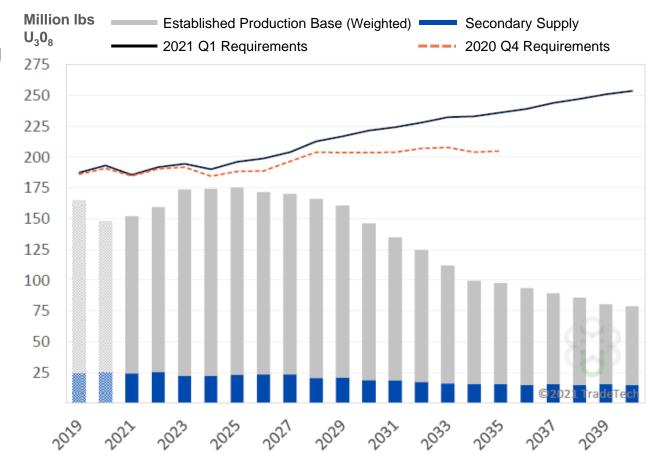
Sequestered, Suspended, Covid, Operational & Depletion Reductions





Global Supply & Demand Existing Primary Production + Secondary Market Supply

- Inventory Overhang Drawing Down
- Uranium Price Too Low to Stimulate New Production
- Within the Permitting and Development Lead Times to Bring On New Mines





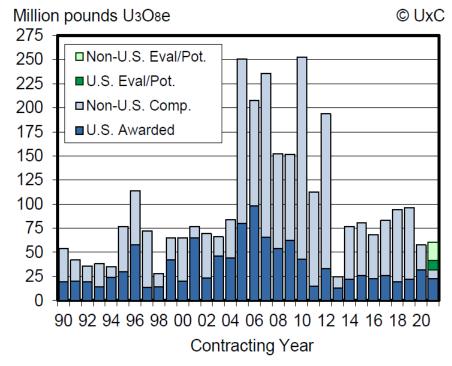
Utility Procurement Cycle: Old Contracts Rolling Off...New Contracts Need to be Signed

1.4 Billion Pounds of Contracting needed by 2035!

Utility Uncommitted Demand

Million pounds U3O8 U.S. Utilities U.S. Utilities U.S. Utilities Total Requirements 200 175 150 125 100 25 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35

Historic Long-Term Contracting





Bottom Line - Positive Market Outlook

- ✓ **Demand Growth** 55 reactors added to grid in past 8 years; 52 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 U.S. Energy Carbon Free Goals, 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



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 | l with historical resources | 3 | |
| 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 | Developmental with historical resources | | | | | |
| C de Baca, NM | Developmental with historical resources | | | | | |
| Dalton Pass, NM | Developmental with historical resources | | | | | |
| Long Park, CO | | | Developmenta | l with historical resources | 3 | |
| U.S. Conventional Total | 29,532 | 0.03* | 17,000 | 20,066 | 0.12 | 29,142 |
| Canadian Conventional Portfolio | | | | | | |
| Diabase, SK | | | Developmental | with historical resourc | es | |
| 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. U308) 45,445 ('000 lbs. U308) | | | | | |

⁽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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