



Uranium
Rare Earth Elements
Vanadium
Medical Isotopes
Recycling



Energy Fuels' White Mesa Mill (Utah, USA)

America's Leading Producer of Critical Minerals

Energy Fuels Inc.

UUUU NYSE American

EFR TSX

March 2022

IMPORTANT INFORMATION

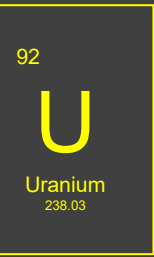
- Please carefully review important information about this presentation
 - Forward looking statements, page 25
 - Notice regarding technical disclosure, page 26
 - Cautionary statements for US investors concerning mineral resources, page 27

ENERGY FUELS

RESPONSIBLY PRODUCING THE RAW MATERIALS NEEDED FOR THE CLEAN ENERGY REVOLUTION

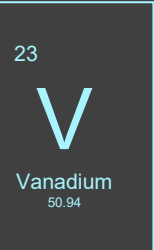
1 URANIUM (CORE BUSINESS)

We are the largest U.S. producer of uranium, the fuel for carbon- & emission-free nuclear energy



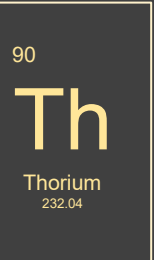
2 RARE EARTH ELEMENTS (REE)

Producing the most advanced REE material in the US today; REE's used in EVs, renewable energy & other technologies



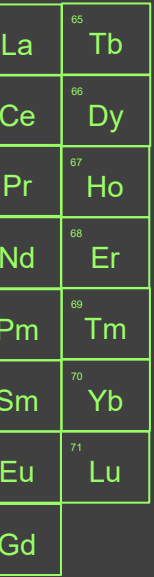
3 VANADIUM

A major U.S. producer of vanadium when markets warrant; Used in steel, high-strength alloys & grid-scale batteries



4 MEDICAL ISOTOPES

We are evaluating the recovery of radioisotopes for use in emerging cancer therapies from existing process streams



5 RECYCLING

We preserve global resources & help address climate change through industry-leading recycling programs

6 FINANCIAL STRENGTH + ZERO DEBT

\$143 million of working capital, including \$113 million cash & securities, and large uranium & vanadium inventories¹

¹ As of December 31, 2021

ENVIRONMENTAL & SOCIAL RESPONSIBILITY

E.S.G. IN ACTION

The focus of our business – uranium, rare earths, vanadium & recycling – is E.S.G. focused

September 16, 2021: Energy Fuels Creates & Funds the San Juan County Clean Energy Foundation

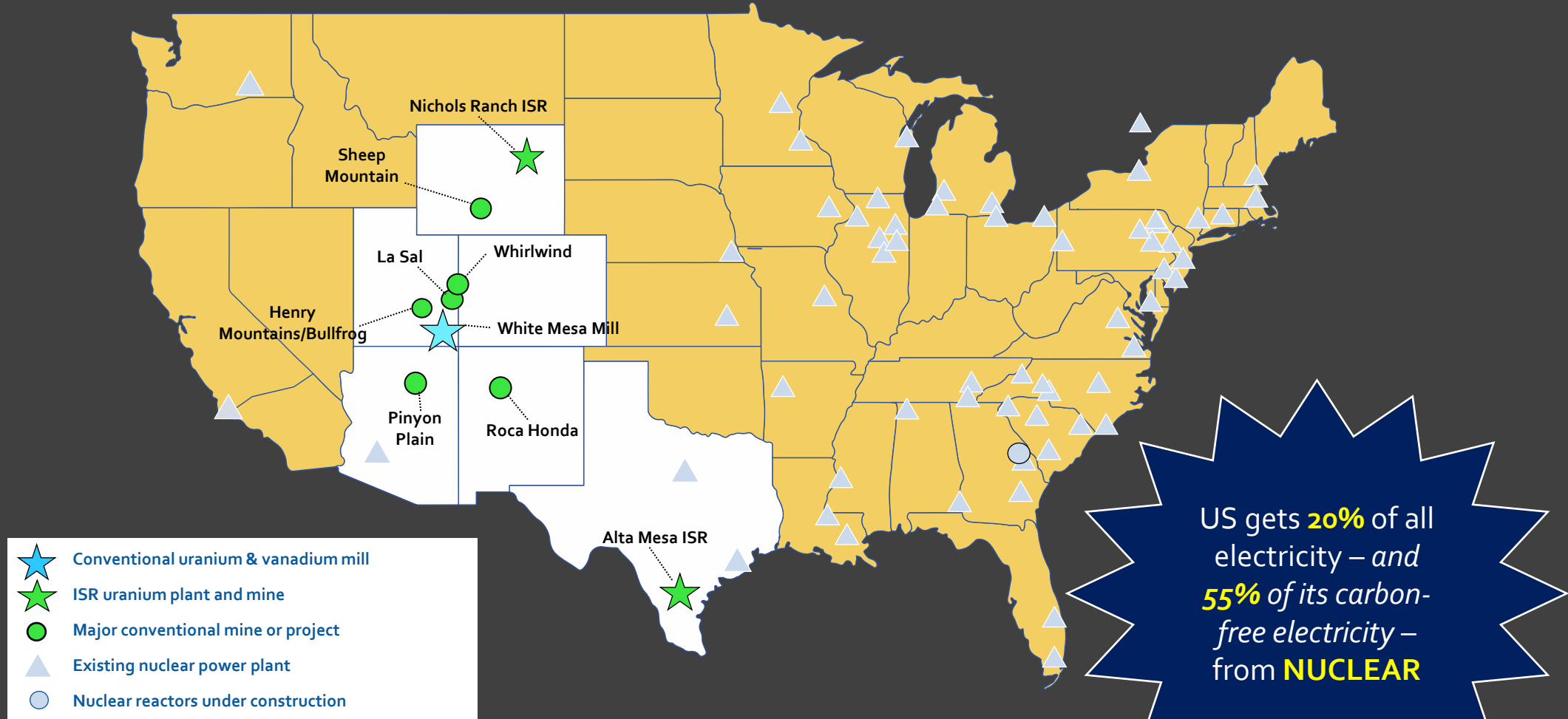
- Demonstrates our commitment to supporting disadvantaged communities near our White Mesa Mill in Utah
- Funds local education, health/wellness, environmental & Tribal/Indigenous initiatives
- \$1 million initial cash contribution in 2021 + ongoing funding equal to 1% of annual revenues from White Mesa Mill

December 2020 Sustainability Report:

- Describes our commitment to health, safety & environmental responsibility;
- How Energy Fuels helps address climate change & air pollution;
- Our industry-leading recycling programs;
- How we benefit the communities in which we operate; and
- Details our industry's modern, comprehensive regulatory framework

ENERGY FUELS IS #1 IN U.S. URANIUM

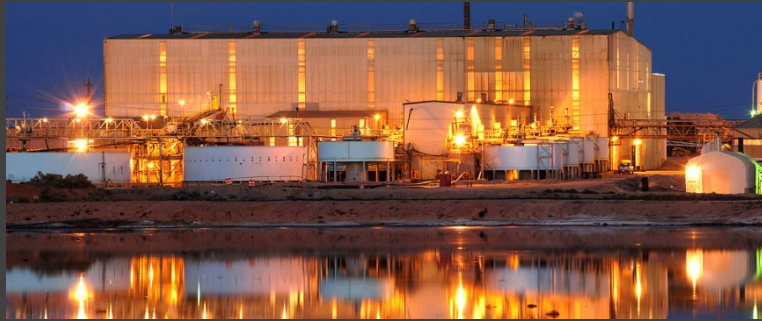
THE LARGEST U.S. PRODUCER SINCE 2017



PROVEN URANIUM PRODUCTION

LEADING U.S. PRODUCTION PORTFOLIO

Licensed & Developed Conventional



WHITE MESA MILL (UTAH) – PRODUCING

- Only uranium & vanadium mill in US – plus Rare Earth Elements
- 39M lbs. of U_3O_8 + 54M lbs. of V_2O_5 produced since 1980



PINYON PLAIN MINE (ARIZONA) – STANDBY

- Licensed & substantially developed high-grade uranium mine
- Ore to be processed at the White Mesa Mill
- **Likely the lowest-cost uranium mine in the U.S. today**

Licensed & Developed *In Situ* Recovery (“ISR”)



ALTA MESA ISR (TEXAS) – STANDBY

- 4.6 million lbs. of U_3O_8 produced (2005 – 2012)
- Significant resources + exploration potential on 200,000 acres



NICHOLS RANCH ISR (WYOMING) – STANDBY

- 1.2 million lbs. of U_3O_8 produced (2014 – 2019)
- 34 licensed wellfields provide long-term production profile

AMERICA'S PROVEN URANIUM PRODUCERS

SINCE 2006, 86% OF ALL U.S. URANIUM PRODUCED BY ASSETS OWNED BY CAMECO & ENERGY FUELS

6,000,000

5,000,000

4,000,000

3,000,000

2,000,000

1,000,000

2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020

- Cameco
- Energy Fuels - Primary Mine
- Energy Fuels - Alt. Feed/3rd Party
- Ur-Energy
- Consolidated Uranium (Note 2)
- Peninsula Energy
- Uranium Energy Corp.
- Westwater Resources (f/k/a URI)

25.0 Million Lbs. U₃O₈

15.6 Million Lbs. U₃O₈

3.0 Million Lbs. U₃O₈

2.7 Million Lbs. U₃O₈

1.0M Lbs.

1.1M Lbs.

0.3M Lbs

Companies with proven facilities are best positioned to respond to improved markets

¹ Actual production from U.S. projects as reported by each company, including production from assets prior to acquisition.

² All uranium ore produced from mines now owned by Consolidated Uranium was milled at Energy Fuels' White Mesa Mill; these amounts are not included in Energy Fuels' total

MARKET POSITION – URANIUM

NORTH AMERICAN SPACE AS OF MARCH 16, 2022¹

COMPANY	MARKET CAP (US\$MM)	CASH, SECURITIES, INVENTORY (US\$MM)	TOTAL DEBT (US\$MM)	URANIUM INVENTORY (MM LBS.) ²	URANIUM	RARE EARTHS	VANADIUM	MEDICAL ISOTOPEs	RECYCLING
Cameco	\$10,704	\$1,930	(\$779)	8.0	✓	✗	✗	✗	✗
NexGen Energy	\$2,659	\$165 ²	(\$56) ²	✗	✓	✗	✗	✗	✗
Uranium Energy Corp	\$1,370	\$156 ⁴	(\$10)	1.0 ⁴	✓	✗	✗	✗	✗
Denison Mines	\$1,326	\$170 ²	\$0	2.5	✓	✗	✗	✗	✗
Energy Fuels	\$1,299	\$144¹	\$0	0.6g	✓	✓	✓	✓	✓
Fission Uranium	\$477	\$45 ²	(\$6)	✗	✓	✗	✗	✗	✗
Ur-Energy	\$361	\$41	(\$12)	0.28	✓	✗	✗	✗	✗
Peninsula Energy	\$174 ⁶	\$17 ⁶	\$0	0.02 ⁶	✓	✗	✗	✗	✗

¹ This chart reflects the most recent publicly available information; Energy Fuels' information is disclosed in its Form 10-K for the year ended December 31, 2021

² Cdn\$ = US\$0.789

³ Au\$ = US\$0.730

⁴ Announced additional purchases of 3.1 million lbs. of uranium on the open market; deliveries to occur during 2022 - 2025.

RARE EARTHS + URANIUM

COMPLEMENTARY BUSINESS OPPORTUNITIES FOR ENERGY FUELS

What are rare earth elements?

- Series of 17 naturally-occurring elements
- Building blocks of numerous clean energy & advanced technologies
- Electric vehicles (EVs), wind energy, batteries, cell phones, computers, flat-screen displays, advanced optics, permanent magnets, medical devices, lasers & defense applications
- **Up to a 5-fold projected increase in demand for magnet REE oxides through 2030¹**

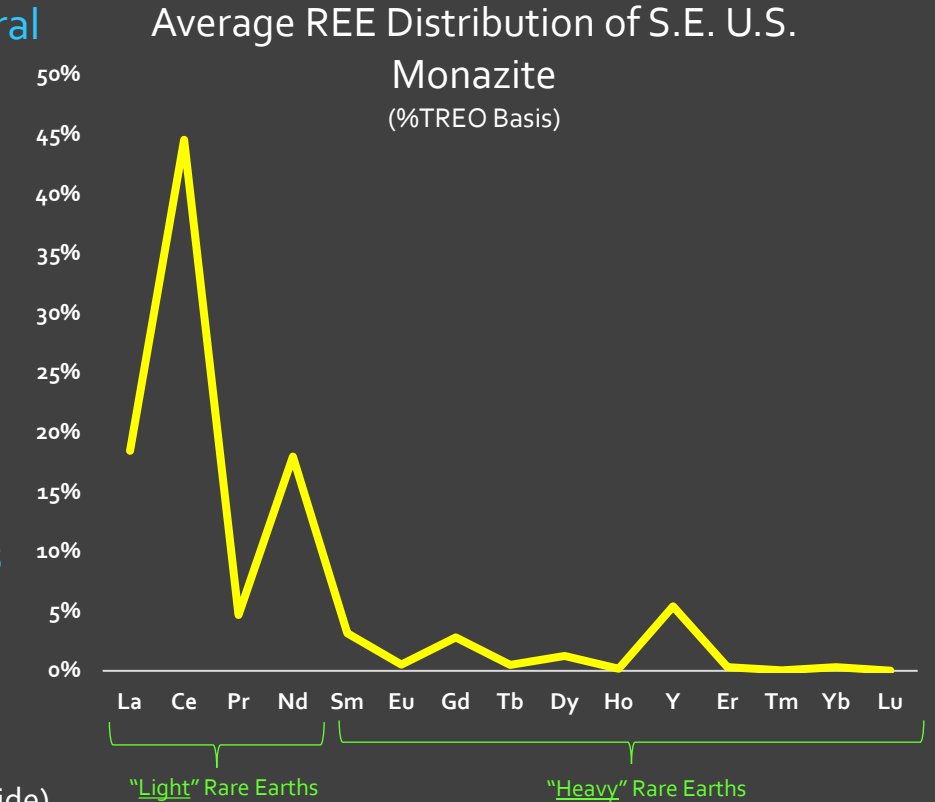
- Could Energy Fuels be the “missing link” in rare earth production?
 - The highest-value REE-bearing minerals – including monazite – also contain uranium & other naturally radioactive elements that must be managed
 - Energy Fuels’ White Mesa Mill in Utah is the only existing facility in North America (possibly outside of China) with the licenses & capabilities to process monazite
- In 2021, Energy Fuels began ramping up **commercial** production of an intermediate REE product – Rare Earth Carbonate – from U.S.-mined monazite
 - No other U.S. company is producing a more advanced REE product
- Energy Fuels plans to fully integrate REE production in the next 2-3 years

¹ Adamas Intelligence

WHY FOCUS ON MONAZITE?

A SUPERIOR RARE EARTH MINERAL – ALREADY PRODUCED AT EXISTING MINES

- Monazite sand is currently produced as a low-cost byproduct of heavy mineral sand (HMS) mining
 - Southeast U.S., Australia, Brazil, Africa & elsewhere
 - Main target metals at HMS mines are zirconium & titanium minerals, with monazite sand recovered as a low-cost byproduct
- Monazite is very high-grade
 - ~53% - 55% TREO (Total Rare Earth Oxides)
 - Some from Australia is over 60% TREO
- Monazite has superior distributions of REEs needed for permanent magnets (% TREO Basis):
 - ~22.1% NdPr + ~13.8% "Heavies" (\$30,248/ton "basket value")
 - Typical U.S. "bastnaesite" ore contains only ~16.3% NdPr + ~1.3% "Heavies"¹ (\$12,630/ton)
 - Much greater recoveries of magnetic REE's from monazite (phosphate) vs. bastnaesite (fluoride)



The "problem" with monazite is that it contains higher concentrations of uranium & thorium
Energy Fuels can recover & manage the uranium & thorium – unlock the REE value of monazite

¹ Source: "A Lanthanide Lanthology" by Barry Kilborn

UNIQUE CAPABILITIES OF THE WHITE MESA MILL

THE “MISSING LINK” IN THE U.S. REE SUPPLY CHAIN

- White Mesa Mill is the only facility in North America currently licensed & capable of processing monazite for recovery of REE's
 - Existing mill license allows monazite processing
 - Uranium & thorium are problems for most companies – they are value-adds for [Energy Fuels](#)
- Highly scalable + ample capacity:
 - Mill has licensed capacity to process ~720,000 tons of ore per year
 - Currently processing ~1,000 tons of monazite per year (~0.1% of annual capacity)
 - Goal to process ~15,000 – 30,000 tons of monazite per year (~2-4% of annual capacity)
- Relatively little waste is generated
 - Small relative quantities of feed to begin with
 - 50%+ of feed is recovered as finished REE & uranium product
 - Waste will use less than 2% of capacity in existing, 1,000-year design tailings management system



LAUNCHING RARE EARTH SUPPLY CHAINS

HIGHLY CAPITAL EFFICIENT PLAN USING EXISTING FACILITIES

- Short-Term Business Plan (Now): U.S.-E.U Supply Chain

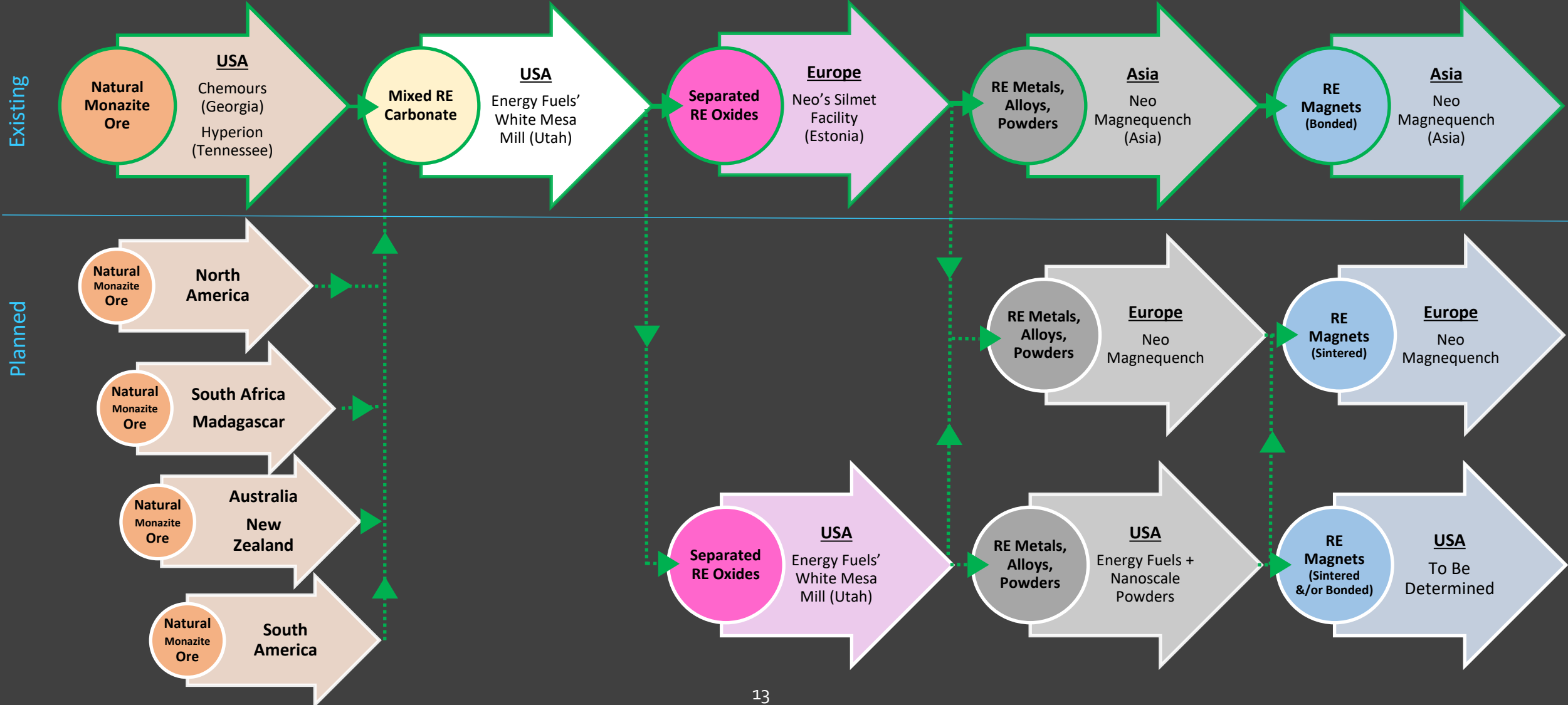
- Energy Fuels is currently purchasing natural monazite sand being produced at an existing HMS operations owned by The Chemours Company in Georgia (USA) (NYSE:CC)
- Seeking to purchase additional monazite supply – in advanced discussions with major existing suppliers globally
- Producing an REE carbonate at our existing White Mesa Mill in Utah
- Delivering REE carbonate to existing separation facility owned by Neo Performance Materials in Europe (TSX: NEO)

- Long-Term Business Plan (2023/4): U.S.-Centric Supply Chain

- Develop fully-integrated REE separation & value-added REE capabilities at White Mesa Mill:
 - Capture full value of rare earth supply chain
 - Collaboration with Carester SAS; extensive experience recovering & separating rare earths from monazite using solvent extraction (SX) technology
 - Collaboration with Nanoscale Powders (“NSP”) to potentially develop low-cost, low-impact REE metal-making technologies
 - White Mesa Mill has a 40+ year history of recovering uranium & vanadium using SX technology

Rebuilt U.S./E.U. Rare Earth Supply Chains

LED BY ENERGY FUELS & NEO PERFORMANCE MATERIALS



Energy Fuels' 2021 RE Carbonate Production

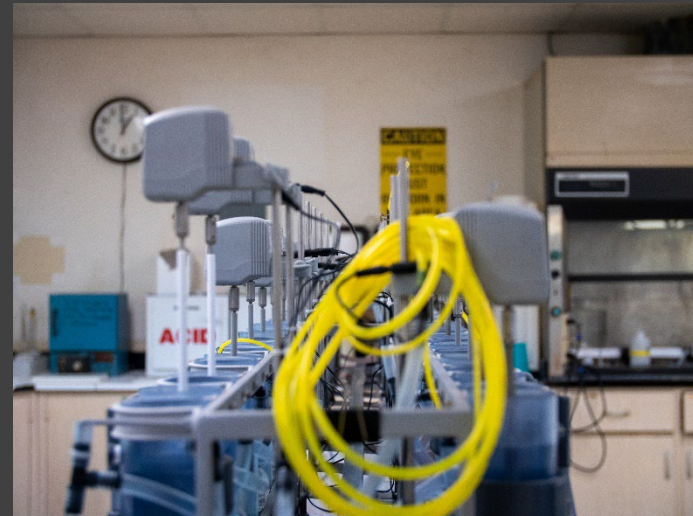
White Mesa Mill (Utah)

1 tonne "supersacks" of mixed RE carbonate loaded into container bound for Estonia



Laboratory analysis of REEs at Energy Fuels' White Mesa Mill

Monazite "crack-and-leach" ongoing at Energy Fuels' White Mesa Mill



Multi-stage lab-scale solvent extraction (SX) REE separation occurring today (36-stages currently & increasing)

Energy Fuels' 2021 REE Carbonate Production

Our People



Worker inside of Energy Fuels' White Mesa Mill



Energy Fuels' personnel at White Mesa Mill (Utah)



(Left to Right) Mark Chalmers (EF), Logan Shumway (EF) & Constantine Karayannopoulos (Neo) next to packaging equipment



Energy Fuels' personnel operating REE equipment at White Mesa Mill (Utah)

COLLABORATION WITH NANOSCALE POWDERS

TO DEVELOP LOW-COST, LOW-EMISSION RARE EARTH METALS

December 15, 2021: Announced Strategic Alliance with Nanoscale Powders

- Purpose is to develop and, if successful, prove up innovative rare earth metal-making technologies
- Revolutionary technology has potential to reduce costs, significantly reduce greenhouse gas emissions, reduce labor, improve safety, and reduce energy use versus traditional REE metal-making tech
- Feeds anhydrous separated REE chloride materials, free of water, into a molten sodium bath
- A key step in Energy Fuels' goal to restore a fully integrated REE supply chain in the U.S.
- Definitive Agreements with Nanoscale are in the process of being completed

WHY WILL ENERGY FUELS SUCCEED?

WHERE OTHERS HAVE STRUGGLED?

1. **Energy Fuels currently has the licenses & capabilities to handle the radionuclides in monazite**
 - We can recover and monetize the uranium & possibly the thorium as significant value-adds – these are a problem for others
2. **Monazite has much more value relative to other REE minerals**
 - ~30% higher in NdPr; ~95% higher in “heavy” REEs (versus bastnaesite) + higher recoveries of magnetic REEs
3. **Monazite is already mined in the U.S. & around the world as a low-cost byproduct**
 - No current need to build new mines + most mining costs carried by primary zircon & titanium production
4. **Monazite is more straightforward to process than other REE minerals**
 - Chemically easier to recover the REEs from the phosphates in monazite vs the fluorides in bastnaesite + higher recoveries of magnetics
5. **Low cost & capital efficient**
 - Using existing licenses & facilities saves considerable time & money
6. **Energy Fuels has used solvent extraction (SX) processing technology for uranium & vanadium recovery for 40+ years**
 - Relatively easy for us to pivot & apply existing SX know-how to REE recovery & separation
7. **Focusing on proven REE separation technologies using SX**
 - We are not “reinventing the wheel” or attempting to license & deploy new technologies
8. **Utah is a relatively low-cost & supportive jurisdiction in which to operate**
 - Compared to other locations where REEs are produced (California, Australia, etc)

The #1 challenge to “unlocking” the value of monazite has been the radionuclides.

Energy Fuels has solved this challenge.

MARKET POSITION – RARE EARTHS

GLOBAL SPACE AS OF MARCH 16, 2022

COMPANY	MARKET CAP (US\$MM)	PRIMARY MINERAL	ORE CONCENTRATE "BASKET VALUE" (US\$) ³	ORE PRODUCTION		MIXED REE CONCENTRATE PRODUCTION		REE SEPARATION		
				CURRENT	PLANNED	CURRENT	PLANNED	CURRENT	PLANNED	
Producers	MP Materials	\$8,214	Bastnaesite (US-California)	\$12,630	✓		✗	✓	✗	✓
	Lynas	\$7,097	Monazite (Australia)	\$28,486	✓		✓		✓	
	Iluka Resources	\$3,230 ⁵	Monazite (Australia)	\$25,737	✓		✗	✓	✗	✓
	Energy Fuels¹	\$1,299	Monazite (US-Georgia)	\$30,248	✗	¹	✓		✗	✓
	Neo Performance Materials ²	\$568 ⁴	n/a	n/a	✗	²	✗	²	✓	
			<i>IN SITU ORE VALUE PRE- BENEFICIATION (us\$)⁴</i>							
Developers	Texas Mineral Resources	\$139	Bastnaesite (US-Texas)	\$46	✗	✓	✗	✓	✗	✓
	Rare Element Resources	\$130	Bastnaesite (US-Wyoming)	\$1,425	✗	✓	✗	✓	✗	✓
	Ucore Rare Metals	\$34	Bastnaesite (US-Alaska)	\$473	✗	✓	✗	✓	✗	✓

¹ Is currently not a miner; purchasing monazite from HMS operators and processing in Utah

² Neo purchases mixed REE concentrates (including from Energy Fuels); does not intend to be a miner or produce mixed REE concentrate

³ Ore concentrate value, after beneficiation

⁴ In-situ ore values, before beneficiation

⁴ Cdn\$ = US\$0.789

⁵ Au\$ = US\$0.730

VANADIUM

A CRITICAL MINERAL ENERGY FUELS PRODUCES IN RESPONSE TO MARKETS

- Used in steel, high-strength alloys, aerospace, chemicals & grid-scale battery technologies
- Critical mineral in U.S. and Canada
- Energy Fuels' White Mesa Mill is a significant U.S. producer of vanadium (V_2O_5) when market conditions warrant
 - Produced 1.9 million pounds of high-purity (99.7%+) V_2O_5 at the White Mesa Mill from tailings solutions
 - 1.65 million lbs. currently in inventory (valued at \$20.2 million at today's price of \$12.25 per lb.¹)
 - Selectively selling inventory into today's rising market
 - V_2O_5 prices are up 125% since January 2021
- Evaluating potential to resume vanadium production in 2022
 - Additional ~1.0 – 3.0 million lbs. of potentially recoverable inventory in tailings solutions

¹ Metal Bulletin Mid-Point Spot Price

MEDICAL ISOTOPES FROM THORIUM AND RADIUM

ALLIANCE WITH RADTRAN FOR RECOVERY OF ISOTOPES NEEDED FOR NEW CANCER THERAPIES

- **July 29, 2021: Execution of Strategic Alliance Agreement**
 - RadTran is a Colorado based technology development company focused on closing critical gaps in the procurement of medical isotopes
 - Initiative will investigate the recovery of isotopes from Energy Fuels' existing uranium & REE process streams (wastes)
 - Focus on emerging targeted alpha therapy (TAT) cancer therapeutics
- **Alpha-Emitting Isotopes in Short Supply**
 - Major pharmaceutical companies studying TAT & advancing with the FDA (and around the world)
 - Objective to treat cancer on a cellular level, while minimizing damage to surrounding healthy tissue
 - Existing methods of production are costly & currently unable to scale-up to meet demand
- **Significant potential benefits to Energy Fuels**
 - White Mesa Mill represents a possible solution to the medical supply chain
 - Existing feed sources (natural monazite & other ores) contain thorium, radium & other needed elements
 - Potential for significant revenues
- **Another example of Energy Fuels leveraging our unique & highly specialized capabilities**

URANIUM RECYCLING

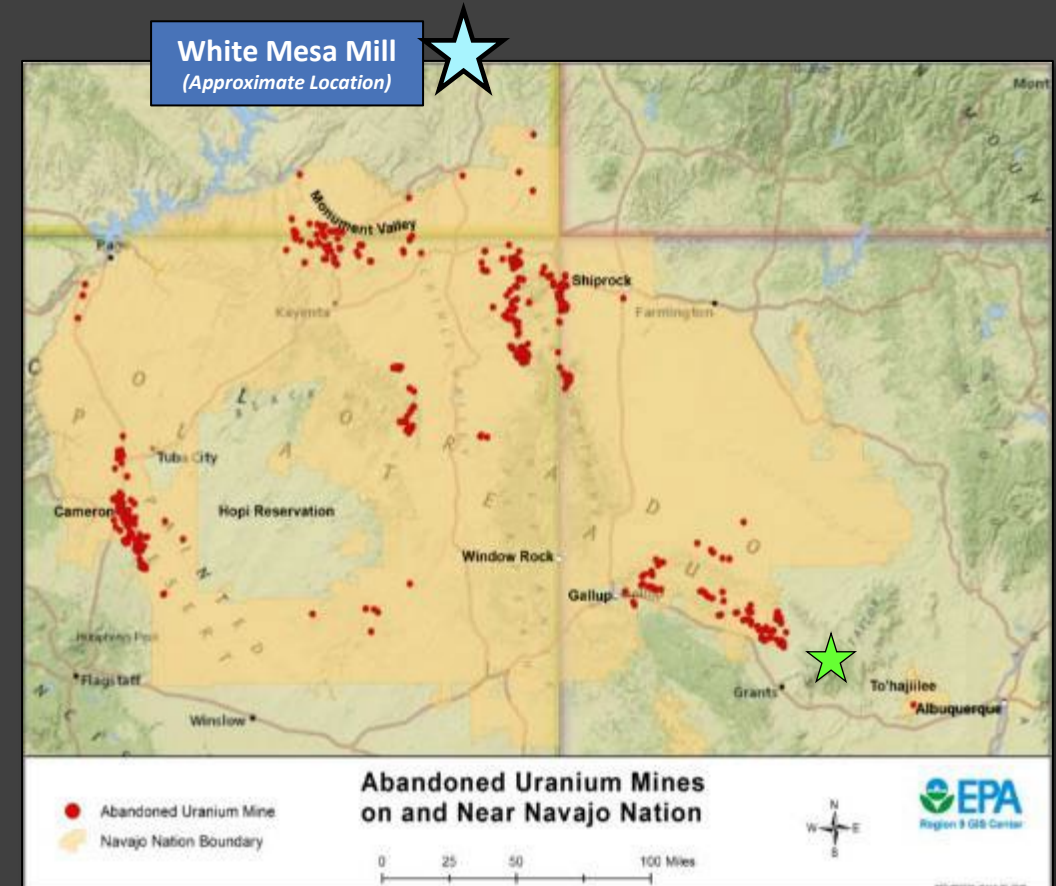
SAVING THE WORLD'S RESOURCES & REDUCING CARBON EMISSIONS

- Energy Fuels recycles materials for the recovery of uranium & vanadium that would otherwise be lost to direct disposal
- Recycling reduces the need for mining & reduces carbon-emissions
- The White Mesa Mill's recycling programs have recovered 6 million lbs. of uranium
 - If converted to nuclear fuel, Energy Fuels' recycled uranium would:
 - Eliminate over 85 million tons of CO₂ emissions compared to coal
 - Avoid the annual emissions from 18 million passenger cars
 - Produce as much electricity as the coal in a train that extends from LA to NYC – and almost all the way back again
 - Produce as much electricity as 24,500 wind turbines annually
- The Mill has recycled enough vanadium for the steel needed to build 4.5 Golden Gate Bridges
- No other uranium or rare earth company has similar recycling programs

ADDRESSING THE COLD WAR LEGACY OF URANIUM

SUPPORTING ENVIRONMENTAL JUSTICE

- 100's of government-sponsored uranium mines operated in Four Corners Region of the U.S. during the Cold War (1950's – 1960's)
 - These mines did not operate to today's modern standards
- U.S. government has access to \$1.7 billion to address some abandoned mines on Navajo Nation
- White Mesa Mill well positioned to participate
 - Fully permitted to handle clean-up material today
 - Only facility in U.S. that can recycle material to recover uranium
- Ongoing Projects by Energy Fuels
 - Participating in pilot-scale project on Navajo Nation (on hold due to COVID-19)
 - Supporting cleanup of private mine in New Mexico (green star on map)



FINANCIAL STRENGTH + FLEXIBILITY

\$144M

Cash, Securities & Inventory^{1,2}

691,000

Lbs. uranium inventory¹

1,650,000

Lbs. vanadium inventory¹

At today's commodity prices, our inventory worth significantly more

	Value on Books (\$/Lb) ¹	Current Price (\$/Lb) ⁴	% Up/ (Down)
U ₃ O ₈	\$23.79	\$58.50	+146%
V ₂ O ₅	\$5.11	\$12.25	+140%

2022 Guidance

- 100,000 – 120,000 lbs. of uranium production
- 800,000 lbs. of uranium inventory at year end
- Approx. 650 – 1,000 tonnes of mixed REE carbonate production containing approx. 300 – 450 tonnes of TREO

Market Position

- Share Price (Mar. 16, 2022)² **\$8.29**
- 52-Week Range² **\$4.32 - \$11.39**
- Average Daily Volume³ **4.8 million shares**
- Shares Outstanding⁵ **156.7 million**
- Market Cap **\$1,299 million**
- **Zero Debt**

¹ As of the year-ended December 31, 2021

² NYSE American

³ NYSE American + TSX; 3-month average Yahoo Finance

⁴ As of Mar. 11 2022

⁵ As of Mar. 10, 2022

ENERGY FUELS

EXPOSURE TO SEVERAL CRITICAL MINERALS NEEDED FOR THE CLEAN ENERGY REVOLUTION

- Uranium:** Unmatched ability to quickly increase low-cost U.S. uranium production from proven assets
More production facilities, capacity & experience than any other U.S. company
- Rare Earths:** Producing REE carbonate – a product more advanced than any other U.S. company
Quickly advancing toward full-integration of U.S.-centric rare earth supply chain
- Vanadium:** Significant existing inventory & production option with improving markets
- Medical Isotopes:** For emerging cancer therapies potentially produced from existing uranium & thorium feeds
- Recycling:** Industry-leading programs that save resources & help address climate change
- Financial Strength:** Well-positioned financially with strong balance sheet, significant inventory + zero debt

Energy Fuels produces the raw materials needed for many of today's clean energy & advanced technologies – in the U.S. to the highest global standards

FORWARD LOOKING STATEMENTS

Certain of the information contained in this presentation constitutes "forward-looking information" (as defined in the Securities Act (Ontario)) and "forward-looking statements" (as defined in the U.S. Private Securities Litigation Reform Act of 1995) that are based on expectations, estimates and projections of management of Energy Fuels Inc. ("Energy Fuels") as of today's date. Such forward-looking information and forward-looking statements include but are not limited to: the business strategy for Energy Fuels; Energy Fuels expectations with regard to current and future uranium, vanadium and rare earth element ("REE") market conditions; the uranium industry's ability to respond to higher demand; the impacts of recent market developments; business plans; outlook; objectives; expectations as to the prices of U_3O_8 , V_2O_5 , and REE's; expectations as to reserves, resources, results of exploration and related expenses; estimated future production and costs; changes in project parameters; the expected permitting and production time lines; the Company's belief that it has significant production growth potential and unmatched flexibility to scale-up production; the potential for additional business opportunities including vanadium, REE, alternate feed materials, and the cleanup of historic mines on the Navajo Nation and in the Four Corners Region of the U.S.; the potential for optimizing mining and processing; the Company's belief in its readiness to capitalize on improving markets; expectations with regard to the potential for U.S. government support of U.S. uranium miners; global uranium supply risks; expected worldwide uranium supply and demand fundamentals; any expectation that the proposed Uranium Reserve will be implemented and if implemented, the manner in which it will be implemented and the timing of implementation; any expectation that the White Mesa Mill will be successful in producing REE Carbonate on a commercial basis; any expectation that Energy Fuels will be successful in developing U.S. separation, or other value-added U.S. REE production capabilities at the White Mesa Mill, or otherwise; any expectation that the Company, Chemours and Neo will be successful in jointly developing a fully integrated U.S.-European REE supply chain; any expectation that the Company will be successful in fully integrating the U.S REE supply chain in the future; any expectation with respect to the future demand for REEs; any expectation with respect to the quantities of monazite ore to be acquired by Energy Fuels, the quantities of REE Carbonate to be produced by the White Mesa Mill or the quantities of contained TREO in the Mill's REE carbonate; any expectation that the Company's collaboration with Nanoscale Powders will be successful, that the technology will be successfully developed and proven, or that the technology will be economic or perform as expected; and any expectation that the Company will be successful in recovering radioisotopes for use in emerging TAT cancer therapeutics or that the program will be economically viable.

All statements contained herein 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 information and forward-looking statements. Factors that could cause such differences, without limiting the generality of the foregoing include: risks that the synergies and effects on value described herein may not be achieved; risks inherent in exploration, development and production activities; volatility in market prices for uranium, vanadium and REEs; the impact of the sales volume of uranium, vanadium and REEs; the ability to sustain production from mines and the mill; competition; the impact of change in foreign currency exchange; imprecision in mineral resource and reserve estimates; environmental and safety risks including increased regulatory burdens; changes to reclamation requirements; 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, vanadium and REEs; replacement of production and failure to obtain necessary permits and approvals from government authorities; weather and other natural phenomena; ability to maintain and further improve positive labor relations; operating performance of the facilities; success of planned development projects; other development and operating risks; the Company not being successful in selling any uranium into the proposed Uranium Reserve at acceptable quantities or prices, or at all; available supplies of monazite sands; the ability of the White Mesa Mill to produce REE Carbonate to meet commercial specifications on a commercial scale at acceptable costs; market factors, including future demand for REEs; the ability of Nanoscale and Energy Fuels to finalize definitive agreements; the ability of Energy Fuels to potentially recover radioisotopes from its existing process streams for use in TAT therapeutics; and the future development of the TAT market. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those anticipated, believed, estimated or expected. Although Energy Fuels 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 presentation. Energy Fuels does not undertake any obligation to publicly update or revise any forward-looking information or forward-looking statements after the date of this presentation to conform such information to actual results or to changes in Energy Fuels' expectations except as otherwise required by applicable legislation.

Additional information about the material factors or assumptions on which forward looking information is based or the material risk factors that may affect results is contained under "Risk Factors" in Energy Fuels' annual report on Form 10-K, as amended, for the year ended December 31, 2021. These documents are available on SEDAR at www.sedar.com and on EDGAR at www.sec.gov.

NOTICE REGARDING TECHNICAL DISCLOSURE

All of the technical information in this presentation concerning Energy Fuels' properties was prepared in accordance with the Canadian regulatory requirements set out in National Instrument 43-101 - Standards of Disclosure for Mineral Projects of the Canadian Securities Administrators ("NI 43-101"). The technical information on each of the properties which are currently material to Energy Fuels is based on independent technical reports prepared in accordance with NI 43-101, as detailed below.

The following technical reports are available for viewing at www.sedar.com under Energy Fuels' SEDAR profile: Technical information regarding Energy Fuels' Colorado Plateau properties is based on the following technical reports: (i) "*Technical Report on the Henry Mountains Complex Uranium Property, Utah, U.S.A.*" dated June 27, 2012 authored by William E. Roscoe, Ph.D., P.Eng., Douglas H. Underhill, Ph.D., C.P.G., and Thomas C. Pool, P.E. of Roscoe Postle Associates Inc.; (ii) "*Updated Technical Report on Energy Fuels Resources Corporation's Whirlwind Property (Including Whirlwind, Far West, and Crosswind Claim Groups and Utah State Metalliferous Minerals Lease ML-49312), Mesa County, Colorado and Grand County, Utah*" dated March 15, 2011 authored by Douglas C. Peters, C.P.G., of Peters Geosciences. Technical information regarding Energy Fuels' Arizona Strip properties is based on the following technical reports: (i) "*Technical Report on the Arizona Strip Uranium Project, Arizona, U.S.A.*" dated June 27, 2012 and authored by Thomas C. Pool, P.E. and David A. Ross, M. Sc., P.Geo. of Roscoe Postle Associates Inc.; (ii) "*Technical Report on the EZ1 and EZ2 Breccia Pipes, Arizona Strip District, U.S.A.*" dated June 27, 2012 and authored by David A. Ross, M.Sc., P.Geo. and Christopher Moreton, Ph.D., P.Geo., of Roscoe Postle Associates Inc.; (iii) "*NI 43-101 Technical Report on Resources Wate Uranium Breccia Pipe – Northern Arizona, USA*" dated March 10, 2015 and authored by Allan Moran, CPG AIPG and Frank A. Daviess, MAusIM, RM SME of SRK Consulting (US), Inc.; and (iv) "*Technical Report on the Canyon Mine, Coconino County, Arizona, U.S.A.*" dated October 6, 2017, and authored by Mark B. Mathisen, C.P.G., Valerie Wilson, M.Sc., P.Geo., and Jeffrey L. Woods, QP MMSA of Roscoe Postle Associates. The technical information in this presentation regarding the Sheep Mountain Project is based on the technical report entitled "*Sheep Mountain Uranium Project, Updated Preliminary Feasibility Study National Instrument 43-101 Technical Report Amended & Restated*" dated February 28, 2020 authored by Douglas L. Beahm P.E., P.G. The technical information in this presentation regarding the Roca Honda Project is based on the technical report entitled "*Technical Report on the Roca Honda Project, McKinley County, New Mexico, U.S.A.*" dated October 27, 2016 authored by Robert Michaud, P.Eng; Stuart E. Collins, P.E.; Mark B. Mathisen, CPG, of RPA (USA) Ltd. and Harold R. Roberts, P.E. and COO of Energy Fuels. The technical information in this presentation regarding the La Sal project is based on a technical report entitled "*Technical Report on La Sal District Project (Including the Pandora, Beaver and Energy Queen Projects), San Juan County, Utah, U.S.A.*" dated March 26, 2014 authored by Douglas C. Peters, CPG. The technical information in this presentation regarding the Alta Mesa ISR Project is based on a technical report entitled "*Alta Mesa Uranium Project, Alta Mesa and Mesteña Grande Mineral Resources and Exploration Target, Technical Report National Instrument 43-101*", dated July 19, 2016 authored by Douglas L. Beahm, P.E., P.G. of BRS Engineering.

The following technical reports are available for viewing at www.sedar.com under Uranerz' SEDAR profile: The technical information in this presentation regarding the Nichols Ranch, Jane Dough, and Hank properties is based on the technical report entitled "*Nichols Ranch Uranium Project 43-101 Technical Report – Preliminary Economic Assessment - Campbell and Johnson Counties, Wyoming*" dated February 25, 2015" authored by Douglas L. Beahm, P.E., P.G. of BRS and Paul Goranson, P.E. of Uranerz Energy Corporation. The technical information in this presentation regarding the Reno Creek Property is based on the technical report entitled "*Reno Creek Property: Technical Report - Reno Creek Property- Campbell County, Wyoming, U.S.A.*" dated October 13, 2010" authored by Douglass H. Graves, P.E. of TREC, Inc. The technical information in this presentation regarding Uranerz' West North Butte Properties is based on the technical report entitled "*West North Butte Properties: Technical Report - West North Butte Satellite Properties - Campbell County, Wyoming, U.S.A.*" dated December 9, 2008" Douglass H. Graves, P.E. of TREC, Inc. The technical information in this presentation regarding Uranerz' North Rolling Pin Property is based on the technical report entitled "*North Rolling Pin Property: Technical Report - North Rolling Pin Property - Campbell County, Wyoming, U.S.A.*" dated June 4, 2010" authored by Douglass H. Graves, P.E. of TREC, Inc.

Daniel Kapostasy, P.G., is a Qualified Person as defined by NI 43-101 and has reviewed and approved the technical disclosure contained in this document.

CAUTIONARY STATEMENTS FOR U.S. INVESTORS CONCERNING MINERAL RESOURCES

This presentation may use the terms “Measured,” “Indicated” and “Inferred” Resources. U.S. investors are advised that, while such terms are recognized and required by Canadian regulations applicable to Energy Fuels as a company listed on the Toronto Stock Exchange (“TSX”), the United States Securities and Exchange Commission (“SEC”) does not recognize them under SEC Industry Guide 7, as defined below. “Inferred Resources” have a great amount of uncertainty as to their existence, and great uncertainty as to their economic feasibility. It cannot be assumed that all or any part of an Inferred Resource will ever be upgraded to a higher category. Under Canadian rules, estimates of Inferred Resources may not form the basis of feasibility or pre-feasibility studies. U.S. investors are cautioned not to assume that all or any part of Measured or Indicated Mineral Resources will ever be converted into mineral “reserves” as defined under SEC Industry Guide 7. Accordingly, U.S. investors are advised that information regarding Mineral Resources contained in this presentation may not be comparable to similar information made public by United States companies who report in accordance with SEC Industry Guide 7.

US reporting requirements for disclosure of mineral properties are governed by the SEC’s Securities Act Industry Guide 7 entitled “Description of Property by Issuers Engaged or to be Engaged in Significant Mining Operations” (“Guide 7”). However, mineral resources disclosed in this presentation and in the NI 43-101 technical reports referenced herein have been estimated in accordance with the definition standards on mineral resources and mineral reserves of the Canadian Institute of Mining, Metallurgy and Petroleum referred to in National Instrument 43-101, commonly referred to as “NI 43-101.” The NI 43-101 technical reports referenced herein are a requirement of NI 43-101, and include estimations of mineral resources and potential mineral resources for further targeted exploration by Energy Fuels, disclosed pursuant to the applicable provisions of NI 43-101. As a company listed on the TSX, Energy Fuels is required by Canadian law to provide disclosure in accordance with NI 43-101. NI 43-101 and Guide 7 standards are substantially different. For example, the terms “mineral reserve,” “proven mineral reserve” and “probable mineral reserve” are Canadian mining terms defined in accordance with NI 43-101. These definitions differ from the definitions in Guide 7. The NI 43-101 technical reports and this presentation use or may use the terms “probable mineral reserve,” “mineral resource,” “measured mineral resource,” “indicated mineral resource,” “inferred mineral resource,” “potential uranium exploration target,” “potential mineral resource,” “potential mineral deposit” and “potential target mineral resource”. US Investors are advised that these terms and concepts are set out in and required to be disclosed by NI 43-101 as information material to Energy Fuels; however, these terms and concepts are not recognized by the SEC under Guide 7, and these terms and concepts are normally not permitted to be used in reports and registration statements filed with the SEC pursuant to Guide 7. US Investors should be aware that Energy Fuels has no “reserves” as defined by Guide 7 and are cautioned not to assume that any part or all of an inferred mineral resource or potential target mineral resources will ever be upgraded to a higher category or confirmed or converted into Guide 7 compliant “reserves.” US Investors are cautioned not to assume that all or any part of a potential mineral resource exists or is economically or legally mineable.

RESOURCE SUMMARY

THE MINERAL RESERVES & RESOURCES IN THE 1st TABLE COMPLY WITH THE REQUIREMENTS OF BOTH S-K 1300 (US) & NI 43-101 (CANADA)

URANIUM MINERAL RESERVES ¹									
Project	Proven			Probable			Total Mineral Reserves		
	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)	Tons ('000)	Grade (%U ₃ O ₈)	Lbs. U ₃ O ₈ ('000)
Sheep Mountain - Open Pit	---	---	---	3,955	0.115	9,117	3,955	0.115	9,117
Sheep Mountain - Underground	---	---	---	3,498	0.132	9,248	3,498	0.132	9,248
Mineral Reserves Total	---	---	---	7,453	0.123	18,365	7,453	0.123	18,365
URANIUM MINERAL RESOURCES ²									
Project	Measured			Indicated			Inferred		
	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)	Tons ('000)	Grade (%U ₃ O ₈)	Lbs. U ₃ O ₈ ('000)
Nichols Ranch	11	0.187	41	359	0.166	1,190	---	---	---
Jane Dough ³	---	---	---	1,532	0.112	3,432	152	0.112	340
Hank	---	---	---	450	0.095	855	423	0.095	803
North Rolling Pin	---	---	---	582	0.057	665	39	0.042	33
Wyoming ISR Total	11	0.19	41	2,923	0.11	6,142	614	0.10	1,176
Alta Mesa Project	54	0.152	164	1,516	0.107	3,246	6,996	0.12	16,793
Texas ISR Total	54	0.15	164	1,516	0.11	3,246	6,996	0.12	16,793
Sheep Mountain ⁴	---	---	---	4,210	0.11	9,570	---	---	---
Roca Honda	208	0.48	1,984	1,639	0.48	15,638	1,513	0.46	13,842
Pinyon Plain	6	0.46	55	127	0.92	2,347	16	0.38	126
La Sal Complex	---	---	---	---	---	---	823	0.26	4,281
Bullfrog (Henry Mountains)	---	---	---	1,560	0.29	9,100	410	0.25	2,010
Conventional Total	214	0.48	2,039	7,536	0.24	36,655	2,762	0.37	20,259
Mineral Resources Total	279	0.40	2,244	11,975	0.19	46,043	10,372	0.18	38,228
VANADIUM MINERAL RESOURCES ²									
Project	Measured			Indicated			Inferred		
	Tons ('000)	Grade (%V ₂ O ₅)	Lbs. V ₂ O ₅ ('000)	Tons ('000)	Grade (%V ₂ O ₅)	Lbs. V ₂ O ₅ ('000)	Tons ('000)	Grade (%V ₂ O ₅)	Lbs. V ₂ O ₅ ('000)
La Sal Complex	---	---	---	---	---	---	823	1.08	17,746
Mineral Resources Total	---	---	---	---	---	---	823	1.08	17,746
COPPER MINERAL RESOURCES ²									
Project	Measured			Indicated			Inferred		
	Tons ('000)	Grade (%Cu)	Lbs. Cu ('000)	Tons ('000)	Grade (%Cu)	Lbs. Cu ('000)	Tons ('000)	Grade (%Cu)	Lbs. Cu ('000)
Pinyon Plain	6	9.60	1,155	90	5.89	10,553	4	6.50	470
Mineral Resources Total	6	9.63	1,155	90	5.86	10,553	4	5.88	470
HISTORICAL URANIUM MINERAL RESOURCES ³									
	Measured			Indicated			Inferred		
	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)	Tons ('000)	Grade (%U ₃ O ₈)	Lbs. U ₃ O ₈ ('000)
Whirlwind	---	---	---	169	0.30	1,003	437	0.23	2,000
Wate	---	---	---	---	---	---	71	0.79	1,118
EZ Complex	---	---	---	---	---	---	224	0.47	2,105
Arizona 1	---	---	---	---	---	---	26	0.26	134
Historical Conventional Total	---	---	---	169	0.30	1,003	758	0.35	5,357
West North Butte	---	---	---	926	0.153	2,837	1,117	0.120	2,682
Arkose Mining Venture ²	---	---	---	---	---	---	1,663	0.099	3,293
Historical ISR Total	---	---	---	926	0.153	2,837	2,780	0.107	5,975
Historical Resource Total	---	---	---	1,095	0.175	3,840	3,538	0.160	11,332

¹ Figure includes only joint venture share of mineral resources applicable to Energy Fuels.

² These numbers are exclusive of Mineral Reserves; this Mineral Resource number includes both Sheep Mountain open pit and underground

³ The Historical Resources do not meet the definition of Mineral Resources as defined in S-K 1300. Additional work needs to be completed to classify these Historical Resources as current.