

Forward Looking Statements & Notice Regarding Technical Disclosure

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 U₃O8, V₂O₅, and REE's, expectations as to reserves, resources, 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 Pour demand fundamentals; any expectation that the Pour demand fundamentals; any expectation that the possible of the value and the timing of implementation; 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

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; impercity in mineral resource and reserve estimates; environmental and safety risks including increased regulatory burdens; changes to reclamation requirements; unexpected geological or hydrological conditions; a potential 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 in the future; available supplies of monazite sands; the ability of the White Mesa Mill to produce REE Carbonate or separated REE oxides to meet commercial specifications on a commercial scale at acceptable costs; market factors, including future demand for REEs; Actions or inactions by foreign governments, such as the government of Madagascar; instability of foreign go

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 for the year ended December 31, 2023. The annual report on Form 10-K is available on SEDAR at www.sedar.com and on EDGAR at www.sec.gov.

All technical information including mineral estimates constituting mining operations that are material to our business or financial condition included in this presentation, have been prepared in accordance with both 17 CFR Subpart 220.1300 and 229.601(b)(96) (collectively, "S-K 1300") and Canadian National Instrument 43-101 - Standards of Disclosure for Mineral Projects ("NI 43-101") and are supported by pre-feasibility studies and/or initial assessments prepared in accordance with both the requirements of S-K 1300 and NI 43-101. S-K 1300 and NI 43-101 both provide for the disclosure of: (i) "Inferred Mineral Resources," which investors should understand have the lowest level of geological confidence of all mineral resources and thus may not be considered when assessing the economic viability of a mining project and may not be converted to a Mineral Resource," which investors should understand have a lower level of confidence than that of a "Measured Mineral Resources," which investors should understand have sufficient geological certainty to be converted to a "Probable Mineral Reserve." Investors are cautioned not to assume that all or any part of an Inferred Mineral Resource exists or is economically or legally mineable, or that an Inferred Mineral Resource will ever be upgraded to a higher category.

Our Business Objective

Creating a long-term, profitable U.S.

critical mineral company – centered on

uranium – that produces several

advanced materials needed for the clean

energy transition



"Our Why"

We are America's leading experts in recovering critical elements from naturally-radioactive ores

High Value Product Line

In-demand materials central to the Energy Transition



<u>URANIUM</u> – UUUU is a leading U.S. producer of U_3O_8 , having produced 2/3 of all U.S. uranium since 2017 Starting production at 3 uranium mines, planning to achieve an expected run-rate of 1.1 – 1.4 million lbs. of U_3O_8 per year by end of 2024

RARE EARTHS – Critical elements used in powerful magnets needed for EVs, wind & other technologies Installed new circuit with the capacity to produce up to 1,000 tpa of separated NdPr; ability to power up to 1 million EVs annually

<u>HEAVY MINERAL SANDS</u> – Rare earth, titanium & zirconium minerals

Low-cost monazite (rare earths + uranium) produced, as a byproduct of ilmenite & rutile (titanium) & zircon (zirconium) production

<u>VANADIUM</u> – Critical element used in high-strength steel, aerospace and grid-scale batteries

The largest primary producer of V_2O_5 in US; significant inventory & ability to quickly ramp up production in strong markets

RECYCLING – Uranium & vanadium bearing materials

Promoting sustainable sourcing; reducing carbon emissions & saving the world's scarce resources

BUILT UPON FINANCIAL STRENGTH

No debt, significant cash & inventory & ongoing uranium sales

\$200.94M in working capital as of 6/30/2024, including \$171.25M of cash + marketable securities, and large U₃O₈ & V₂O₅ inventories

Our Products Power Many Clean Energy Technologies













Rare Earth Minerals Produced Globally

Processed into
Advanced Rare Earth
Materials in the USA

Acquisition of Base solidifies Energy Fuels' position as a leading supplier of several critical minerals needed for the Energy Transition

- Base Resources now a wholly-owned subsidiary of Energy Fuels
- Experienced heavy mineral sands (HMS) management & operations teams join Energy Fuels
- Exceptional track-record of safety, environmental stewardship & profitability

100% ownership of the Toliara Project in Madagascar

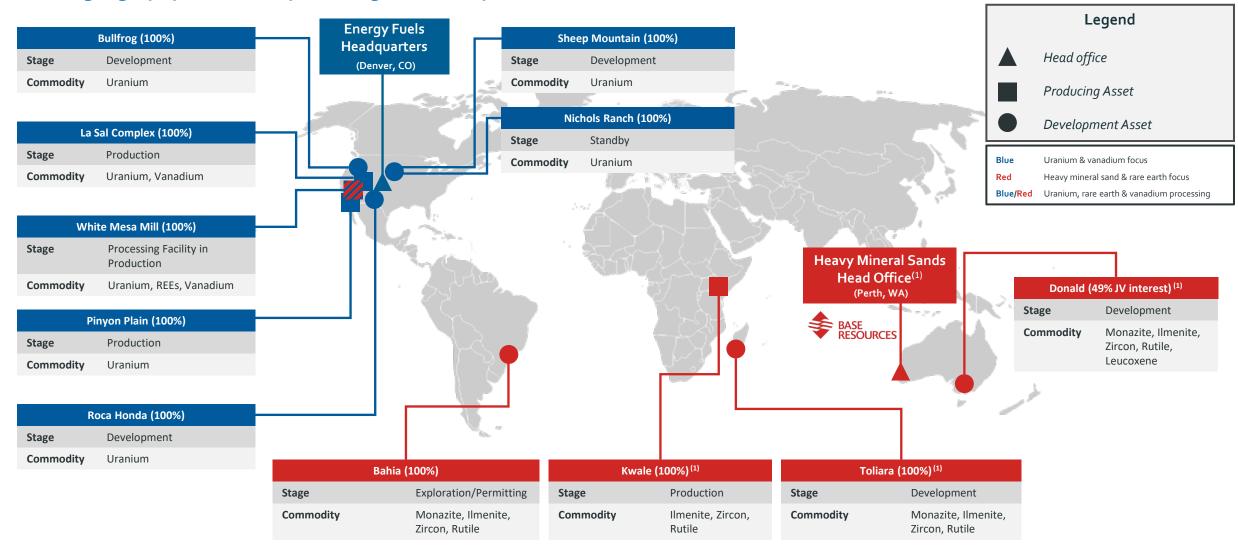
- Considered one of the best heavy HMS development projects globally
- Massive HMS resource with robust project economics & significant potential free cash flow
 - Ilmenite and rutile (titanium)
 - Zircon (zirconium)
 - Monazite & xenotime (rare earths)

Monazite & xenotime product to be processed into advanced Rare Earth materials at Energy Fuels' facility in Utah, USA

Diversified Asset Portfolio for Long-Term Value



Across geography, commodity and stage of development

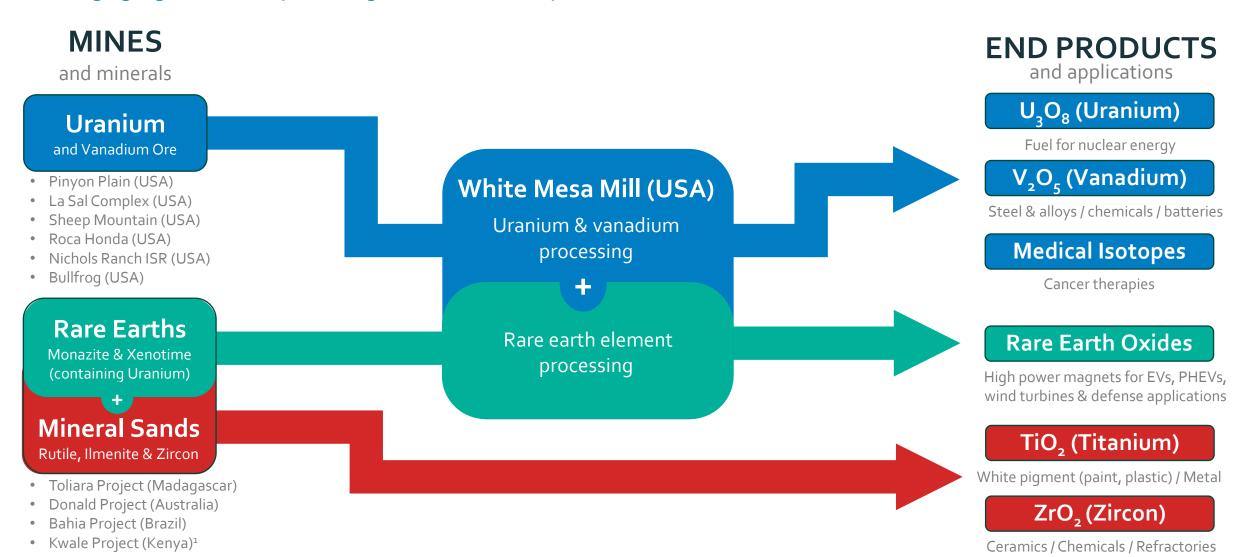


Diversified Energy Transition Product Suite



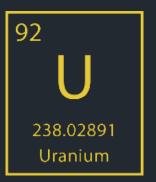
/ Foundries / Nuclear

Leveraging logical "side steps" throughout asset base to produce several critical materials



Core Business:







U.S. Uranium Production

Combine for up to 2 million lbs. of short-term, low-cost production







Production





Pre-Production





Production

La Sal Complex (Utah) —



Production

Development Pipeline

Large-scale future uranium production



Sheep Mountain (Wyoming)



Development





Development¹

Roca Honda (New Mexico)



Development

Large-Scale In-Ground Uranium Resources

- Nearly 70 million pounds of combined uranium resources¹
- Combined potential to produce roughly 6 million pounds of uranium per year
- Sheep Mountain is fully permitted for mining; requires processing facility
- Roca Honda & Bullfrog are in permitting

Uranium Sales

Revenues & Cashflows Through 2030

Multiple market tailwinds enabling new spot & long-term sales contracts with U.S. utilities at sustainable pricing

- U.S. government providing support for nuclear energy (bipartisan)
- Russia's invasion of Ukraine sharpening utility focus on security of supply
- Intermediaries buying physical uranium
- Transportation issues from Russia & Kazakhstan
- Spot price at \$82.25 per pound on September 30, 2024¹

Energy Fuels offers buyers a reliable source of U.S. uranium

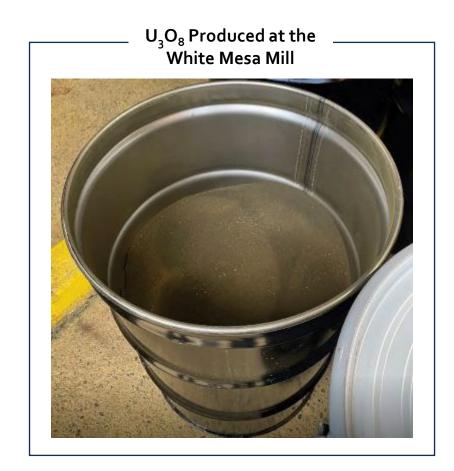
Four (4) long-term contracts with U.S. utilities (to date):

- Signed 4th long-term utility contract in 2024
- Price formulas maintain exposure to market upside, while limiting downside & adjusting for inflation
- Sold 200,000 pounds in H1-2024 under long-term contracts for \$75.13/lb.

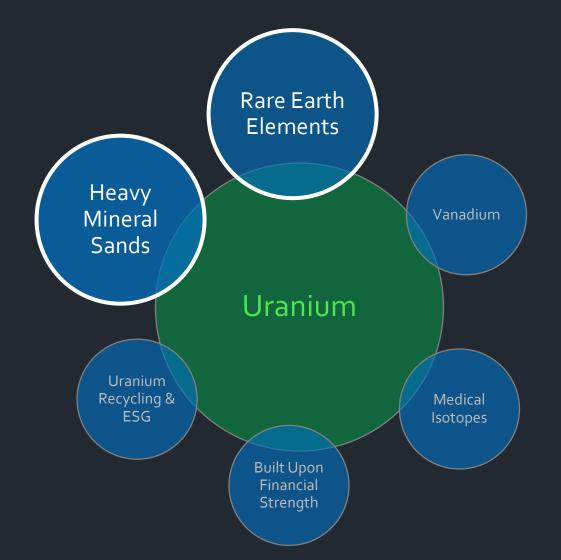
Securing spot sales

• Sold 200,000 pounds of uranium on spot market in H1-2024 for average price of \$94.39 per pound





Growth Drivers:



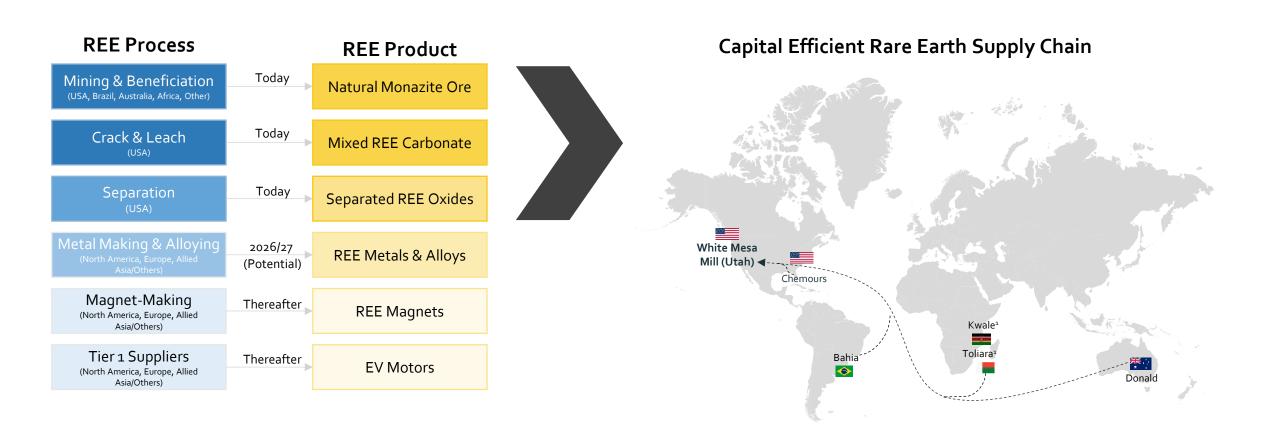
57	58	59	60	61	62	63	64
La	Ce	Pr	Nd	Pm	Sm	Eu	Gd
138.90547 Lanthanum	140.116 Cerlum	140.90766 Praseodymium	144.242 Neodymlum	145 Promethium	150.36 Samarlum	151.964 Europlum	157.25 Gadolinium
65	66	67	C0				
0.0	00	67	68	69	70	71	
ືTb	[®] Dy	^{°′} Ho	[®] Er	"Tm	Ϋ́b	Lu	





Innovative U.S.-Centered REE Supply Chain

Mining low-cost ore from HMS Mines globally & processing into advanced REE products in Utah, USA



Rare Earth Production in the U.S.



Processing a mineral called "Monazite" recovered as a byproduct of HMS mining

- Monazite has superior distributions & grades of the "magnet" REEs (NdPr, Dy, Tb)
- Monazite contains higher concentrations of uranium & thorium (roughly similar to uranium ores)
- Energy Fuels' White Mesa Mill in Utah is the <u>only facility in the USA</u> able to process Monazite & produce advanced REE materials, with 40 years of relevant experience and expertise unparalleled in the industry
 - Recently completed "Phase 1" REE facility with capacity to produce up to 1,000 tpa of separated NdPr
 - Expect to produce 25 35 tonnes of 'on-spec' separated NdPr in 2024
 - Designing capacity to produce 4,000 6,000 tpa NdPr + 200 300 tpa of Dy and Tb (enough for up to 6 million EVs per year)
- Energy Fuels has secured HMS mines globally to supply Monazite to the White Mesa Mill
 - The Toliara Project (Madagascar), the Bahia Project (Brazil), and the Donald Project (Australia)¹
 - HMS operations to be overseen by Base Resources management & operations personnel



Diversifying into REE's without diminishing industry-leading uranium production capabilities



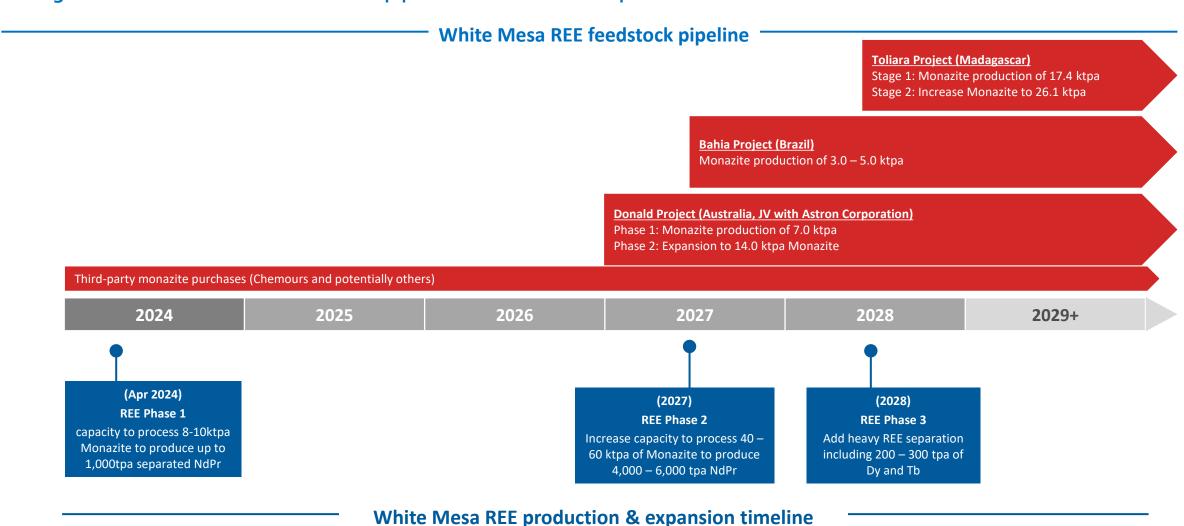
"On-spec" separated NdPr produced at the White Mesa Mill in Utah (Q2/Q3 2024)



Indicative REE Development Timeline



Strong near- and medium-term Monazite pipeline coincides with expansion at White Mesa Mill



Preliminary REE Economics

Expected to be Globally Competitive



REO Production at the White Mesa Mill (Utah):

- Phase 1 NdPr Separation (COMPLETED)
 - Capacity to produce 800 1,000 tonnes of separated NdPr per year (enough for 1 million EVs per year)
 - Commissioning today; expect to produce 25 35 tonnes of separated NdPr in 2024
 - \$16 \$18 million investment
- Increase NdPr Production AACE International Class 4 Pre-Feasibility Study ("PFS")¹
 - We evaluated capacity to process 30,000 tonnes Monazite per year at the White Mesa Mill
 - Produce ~3,000 tonnes of separated NdPr per year (no Dy or Tb)
 - \$348 million investment, including dedicated "crack-and-leach" circuit to enable simultaneous production of REE's and uranium
 - \$29.88/kg NdPr oxide processing cost (no Dy or Tb)
- Currently Updating PFS to include:
 - Increasing capacity to process ~40,000 60,000 tonnes of Monazite per year
 - Increase production to ~4,000 6,000 tonnes of separated NdPr per year
 - Add up to ~150 225 tonnes separated Dy & ~50 75 tonnes separated Tb capacity per year
 - Currently performing pilot-scale Dy & Tb separation to determine costs/economics

⁽¹⁾ Report prepared by WSP USA Environmental & Infrastructure Inc., filed on SEDAR, not intended to be compliant with NI 43-101 (Canada) or S-K 1300 (U.S.) Increased separation capacity subject to final design and permitting

Energy Fuels Has Many Structural Advantages



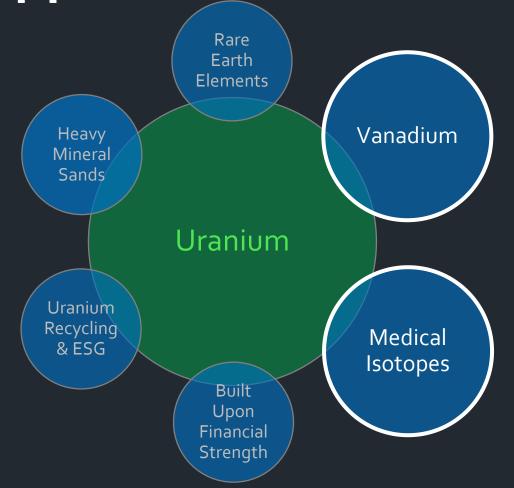
Expected to be Competitive in the Global REE Market

- 1. We currently have the licenses & infrastructure to handle the radionuclides in Monazite
- 2. Monazite has more value & higher grades relative to other REE feeds
- 3. Monazite is mined around the world as a low-cost HMS byproduct
- 4. Monazite is relatively straightforward to process compared to other REE minerals
- 5. Low cost & capital efficient, by utilizing byproduct Monazite & an existing U.S. facility
- 6. Energy Fuels has 40+ years of experience using solvent extraction (SX)
- 7. Utah is a relatively low-cost jurisdiction
- 8. Mining & processing techniques expected to meet, or exceed, applicable ESG standards

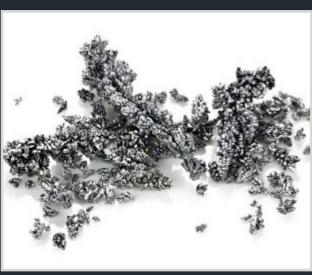
The #1 challenge
to unlocking
the value
of Monazite
has been
the radionuclides.

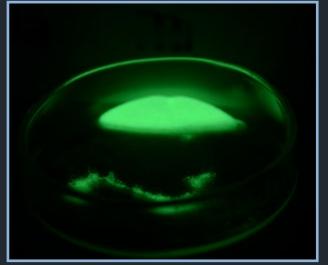
Energy Fuels has solved this challenge.

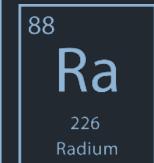
Longer Term Growth Opportunities:











Strong Position in Vanadium & Medical Isotopes



Optionality in Additional High-Growth Markets

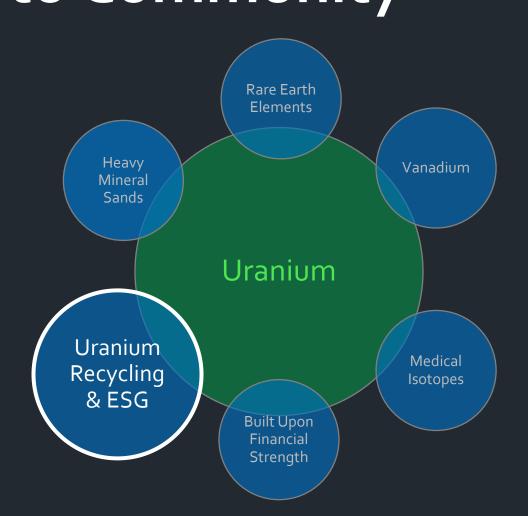
Medical Isotopes

- Targeted alpha therapy ("TAT") is an emerging technology showing great promise in clinical trials for the treatment of cancer
- TAT requires certain isotopes (Ra-226 and Ra-228) that naturally occur in the Mill's existing uranium and REE process streams
- We are evaluating the potential to recover Ra-226 and Ra-228 to help establish a U.S. medical supply chain
- Acquired RadTran LLC in 2024 to help advance initiative
- Plan to produce R&D (mg) quantities of Ra-226 in near-term with potential to produce commercial quantities in coming years

Vanadium

- Energy Fuels produces vanadium as a "co-product" of uranium production, when market conditions warrant
- Used in steel, aerospace alloys, chemicals & "grid-scale" flow batteries used with renewable energy
- Energy Fuels' White Mesa Mill is the largest conventional producer of vanadium (V₂O₅) in U.S.
- Vanadium production currently on standby due to low prices

Uranium Recycling & Commitment to Community







Local & Regional Benefits



We are one of the largest private employers & taxpayers in San Juan County, UT

One of the most economically challenged counties in the U.S.

About 100 employees in Utah & 35 in Arizona

• Roughly one-half of our employees at the Mill (35) are Native American

REE Expansions at the Mill could result in hundreds of millions of dollars of investment

• Likely the largest private investment in San Juan County, Utah history, plus an additional 50 to 100 employees

Seeking to assist in the cleanup of Cold War era uranium mines on Navajo Nation

- A disturbing legacy which continues to have impacts even today
- The White Mesa Mill could begin to receive clean-up material today

The Mill's recycling programs recover uranium & vanadium that would otherwise be lost to disposal

Saves valuable resources and avoids carbon emissions





San Juan County Clean Energy Foundation

- Long-term commitment to improving the quality of life for people in San Juan County
- Established Foundation with an initial
 \$1 million contribution by Energy Fuels
- Committed ongoing funding equal to 1% of annual revenues from the White Mesa Mill
- Supporting education, environment, health/wellness, economic advancement & Native American priorities
- www.sanjuancountycleanenergy.com



\$330,000 of Grants to Date

American Indian Services – STEM
Programs (\$160,000)

Canyonlands Field Institute Native Guide
Program (\$25,000)

Dinosaur Museum Solar Energy Project (\$50,000)

Navajo Nation Chapters (\$15,000)

Fine Arts in San Juan County (\$5,500)

Community Eehaniih Celebration (\$5,000)

San Juan High School Football (\$5,000)

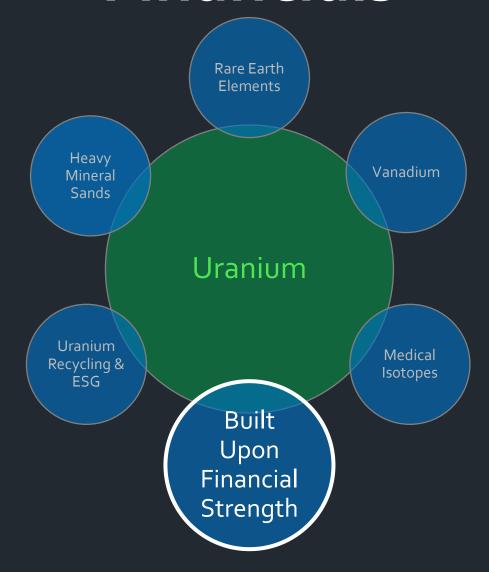
Red Mesa Chapter (\$4,600)

Farm Days 2023 (\$1,000)



Solar panels for the non-profit
Dinosaur Museum in Blanding,
Utah, funded in part by Energy
Fuels' San Juan County Clean
Energy Foundation, to lower
energy costs and enable extended
hours during the winter months

Financials





Q2 2024 Financial Highlights



Net loss in Q2 2024 Driven by Transaction Costs Offset by Uranium Sales

- \$6.42 million net loss (\$0.04 per share)
 - Sold 100,000 pounds of uranium for gross profit of \$4.91 million
 - Incurred costs in Q2-2024 related to our potential acquisition of Base Resources and negotiations over the Donald Project Joint Venture with Astron.
 - Recurring operational costs
- Potential additional uranium sales in 2024
 - Evaluating additional spot sales and long-term contract opportunities

Over \$0.21 Billion of Liquidity at Current Commodity Prices

- \$200.94 million of working capital as of June 30, 2024
 - \$24.59 million of cash & cash equivalents; \$146.66 million of marketable securities (uranium stocks + interest-bearing securities); \$23.52 million of inventory, including \$15.95M of product inventory
 - Product inventory worth \$30.08 million at current commodity prices; \$14.13 million of additional liquidity¹
 - 285,000 pounds of finished U_3O_8 , 905,000 pounds of finished V_2O_5 , 9 tonnes of finished high-purity, partially separated mixed REE carbonate and 12 tonnes of finished separated NdPr in inventory
- No Debt

2024 Guidance + Focus



150,000 – 500,000 pounds of finished uranium production

No further contract sales currently scheduled

Selling additional uranium on spot market

Ramping-up ore production at three (3) uranium mines to run-rate of 1.1 - 1.4 million lbs. per year by year end

Increasing near-term uranium production profile to 2 million pounds per year

Commissioned Phase 1 NdPr Circuit in Q2-2024 (25 – 35 tonnes NdPr production)

Currently, shifting to uranium production

Engineering Phase 2 and Phase 3 REE expansion projects

Drilling at Bahia Project in Brazil; Resource estimate in late-2024 or 2025



America's Leading Producer of Uranium + Critical Materials for the Clean Energy Transition



Uranium

Rare Earths

Vanadium

Medical Isotopes

Recycling











Uranium Reserves & Resources

S-K 1300 (U.S.) and NI 43-101 (Canada)

Uranium Reserves ¹		Proven		Probable			
	Tons (000s)	Grade (%U₃O₅)	Lbs. U ₃ O ₈ (000s)	Tons (000s)	Grade (%U₃O₅)	Lbs. U ₃ O ₈ (000s)	
Pinyon Plain (Arizona)	8	0.33%	51	127	0.60%	1,517	
Sheep Mountain – Open Pit (Wyoming)	-	-	-	3,498	0.13%	9,248	
Sheep Mountain – Underground (Wyoming)	-	-	-	3,955	0.12%	9,117	
Total Current Mineral Reserves	8	0.33%	51	7,588	0.13%	19,933	

Historical Uranium Resources ²	Unclassified			
	Tons (000s)	Grade (%U₃O₅)	Lbs. U ₃ O ₈ (000s)	
Whirlwind (Colorado/Utah)	625	0.25%	3,095	
Arkose – ISR ³ (Wyoming)	1,667	0.10%	3,293	
Wate (Arizona)	71	0.79%	1,118	
EZ Complex (Arizona)	224	0.47%	2,105	
Total Historical Mineral Resources	2,587	0.19%	9,611	

Uranium Resources ¹	Measured			Indicated			Inferred		
	Tons (000s)	Grade (%U₃O₅)	Lbs. U ₃ O ₈ (000s)	Tons (000s)	Grade (%U ₃ O ₈)	Lbs. U ₃ O ₈ (000s)	Tons (000s)	Grade	Lbs. U ₃ O ₈
Pinyon Plain (Arizona)	-	-	-	37	0.95%	703	5	0.50%	48
La Sal Complex (Utah)	-	-	-	-	-	-	823	0.26%	4,281
Nichols Ranch – ISR (Wyoming)	11	0.19%	41	2,924	0.11%	6,142	614	0.10%	1,176
Sheep Mountain (Wyoming)	-	-	-	4,210	0.11%	9,570	-	_	-
Henry Mountains/Bullfrog (Utah)	-	-	-	1,560	0.29%	9,100	410	0.25%	2,010
Roca Honda (New Mexico)	208	0.48%	1,984	1,639	0.48%	15,638	1,513	0.46%	13,842
Total Current Mineral Resources	219	0.46%	2,025	10,370	0.20%	41,153	3,365	0.32%	21,357

¹ The Current Uranium Reserve & Resource estimates above comply with the requirements of both S-K 1300 (United States) and NI 43-101 (Canada).

² The Historical Uranium Resource estimates above are historical in nature, as the Company has not conducted the work to classify these resources as current. These are presented here for informational purposes only and should not be relied upon.

³ The Arkose project is a part of the Arkose Mining Venture, in which the Company holds an 81% interest. Only pounds attributable to the Company are reported in the table above.



www.energyfuels.com