



Clean Energy Starts With Us

January 2025

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, 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 continue to 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 or separated REE oxides to be produced by the White Mesa Mill or the quantities of contained TREO in the Mill’s REE carbonate; any expectation as to future exploration results for the Bahia Project; any expectation that fiscal terms and a stability agreement will be successfully negotiated with the government of Madagascar; any expectation that all government approvals will be obtained, such that development may proceed at the Toliara Project; any expectation that the recovery of monazite will be added to the permits for the Toliara Project; any expectation that all permits will be obtained for the Donald Project any expectation that the Company will be successful in permitting and developing the planned Phase 2 and Phase 3 REE Separation Facility at the White Mesa Mill;; 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 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 governments; the inability to receive or delays in the receipt of all required permits for the Toliara project and the Donald Project, including lifting of the current suspension relating to development at the Toliara Project; 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 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 Reserve; (ii) “Indicated Mineral Resources,” which investors should understand have a lower level of confidence than that of a “Measured Mineral Resource” and thus may be converted only to a “Probable Mineral Reserve”; and (iii) “Measured Mineral Resources,” which investors should understand have sufficient geological certainty to be converted to a “Proven Mineral Reserve” or to a “Probable Mineral Reserve.” 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 by S-K 1300 or NI 43-101. 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.

Qualified Person Statement

The scientific and technical information disclosed in this news release was reviewed and approved by Daniel D. Kapostasy, PG, Registered Member SME and Vice President, Technical Services for the Company, who is a “Qualified Person” as defined in S-K 1300 and Canadian National Instrument 43-101.

High Value Product Line

In-demand materials central to the Energy Transition



URANIUM – 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

HEAVY MINERAL SANDS – Rare earth, titanium & zirconium minerals

Low-cost monazite (rare earths + uranium) sources, as a byproduct of titanium & zircon production, from projects in Madagascar, Australia & Brazil

VANADIUM – 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

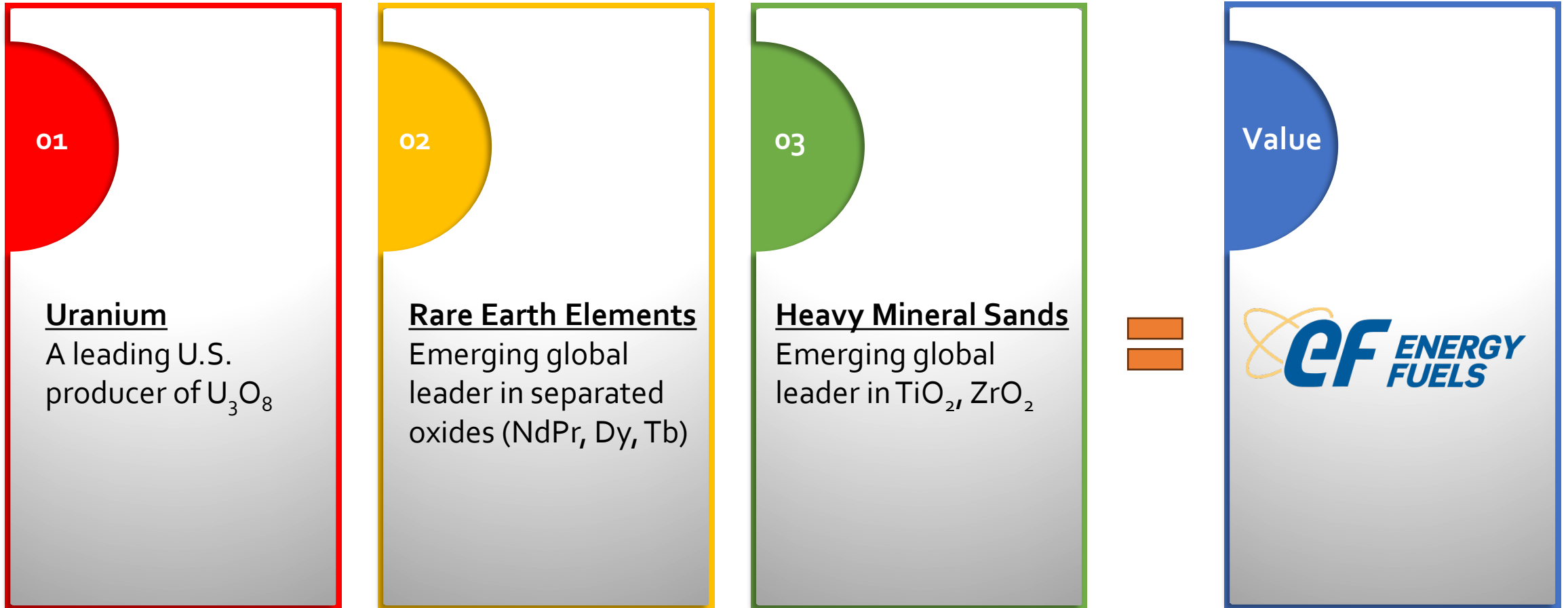
BUILT UPON FINANCIAL STRENGTH

No debt, significant cash & inventory & ongoing uranium sales

\$183.16M in working capital as of 9/30/2024, including \$148.61M of cash + marketable securities, and large U_3O_8 & V_2O_5 inventories

Three Businesses In One

With exposure to three potentially high-growth critical mineral markets



Our Products Power Many Advanced Technologies



Nuclear Fuel Assembly



Electric Vehicle (EV) / Plug-In EV Drivetrain



Wind Turbine



Vanadium Flow Batteries



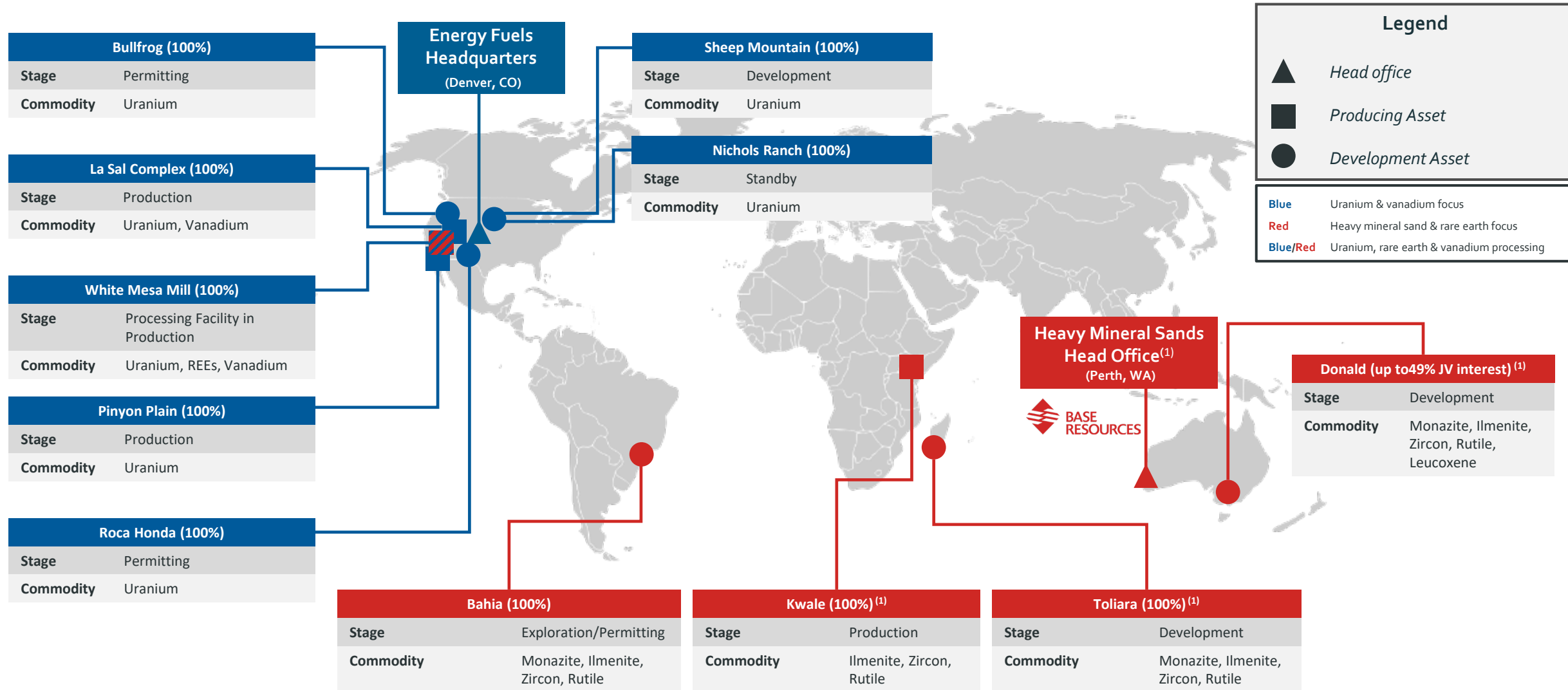
Advanced Robotics



F-35A Jet

Diversified Asset Portfolio for Long-Term Value

Across geography, commodity and stage of development



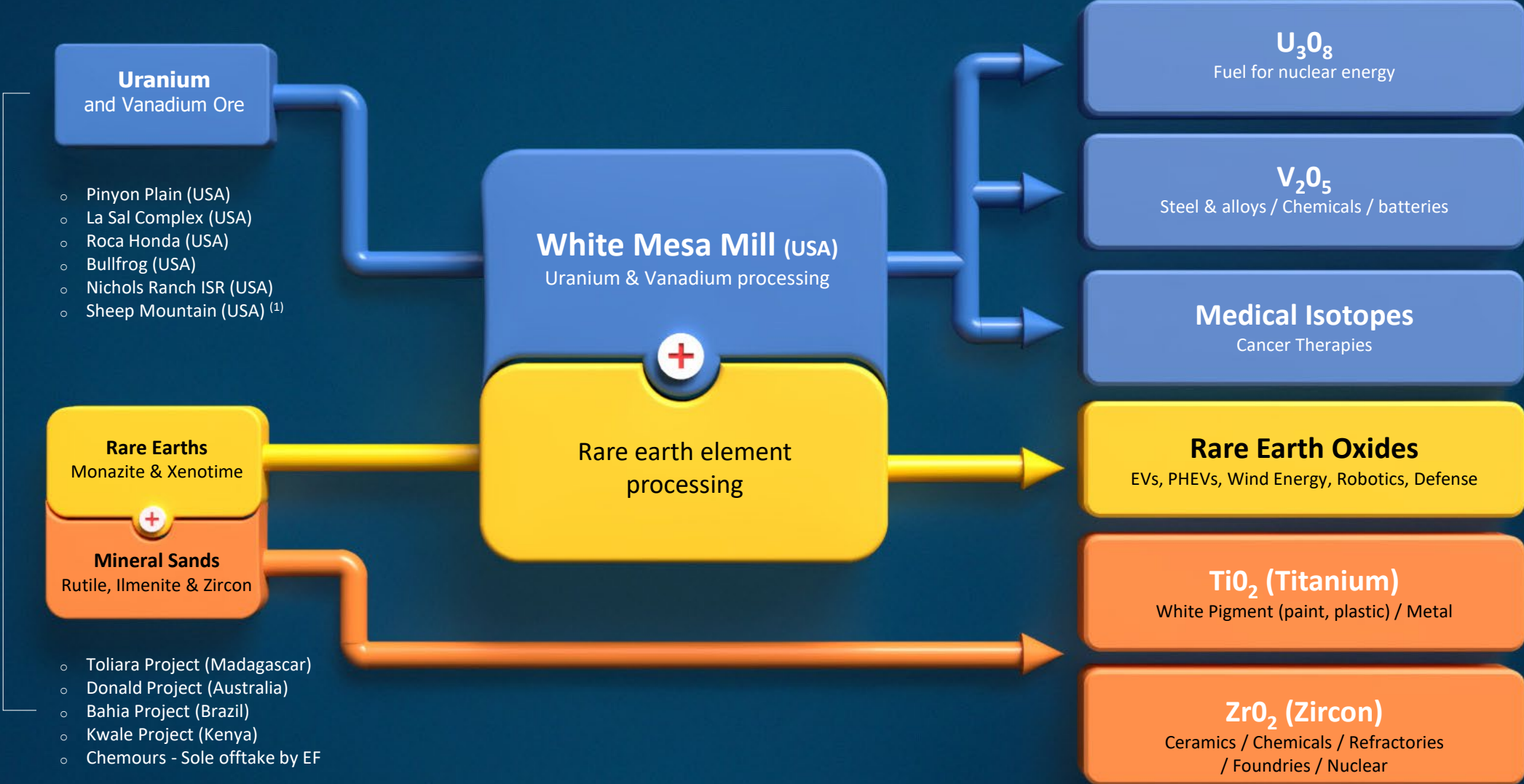
(1) Completed acquisition of Base Resources, including Toliara and Kwale Projects, on October 2, 2024. Completed JV with Astron Corporation Ltd on June 3, 2024, right to earn up to a 49% interest; Kwale mining operations expected to end in December 2024.

Diversified Critical Mineral Product Suite

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

END PRODUCTS
and applications

MINES
and minerals



(1) The Company is currently evaluating the appropriate processing facility for the Sheep Mountain Project.

Rare Earth Minerals Produced Globally

Processed into Advanced Materials in the USA



October 2, 2024: Energy Fuels acquires “generational” critical mineral asset, along with successful management & operations teams

- 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 critical mineral development projects globally (titanium, zirconium, rare earth elements)
- Massive resource with robust project economics and free cash-flow

Tremendous Synergy with Energy Fuels’ Existing Assets:

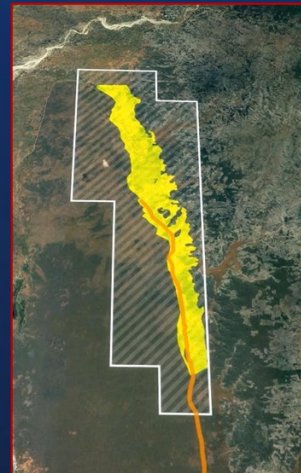
- Monazite product from Toliara to be processed into advanced Rare Earth materials at Energy Fuels’ facility in Utah, USA

Breaking News – November 28, 2024:

Government of Madagascar Lifts Suspension on Toliara Project

Breaking News – December 5, 2024: Energy Fuels and Madagascar Government sign MOU on Toliara Project

- *Very significant* step forward in the development of the Toliara Project
- Suspension imposed in November 2019, pending negotiation of fiscal and other terms
- Development activities can now resume, including:
 - *Further mine planning and engineering*
 - *Expand the mineral resource base*
 - *Re-establish community programs*
 - *Progress other legal activities necessary to progress the project*
 - *Move forward with FID (over next ~14 months)*



U.S. Uranium Production

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



White Mesa Mill (Utah)



Production

Nichols Ranch ISR (Wyoming)



Pre-Production

Pinyon Plain Mine (Arizona)



Production

La Sal Complex (Utah)



Production

Development Pipeline

Large-scale future uranium production



Sheep Mountain (Wyoming)



Development

Roca Honda (New Mexico)



Development

Henry Mountains – Bullfrog (Utah)



Development¹

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

¹ See Resource Table at end of this presentation

2024 Uranium and Vanadium Highlights

Uranium & Vanadium Inventory

- 235,000 lbs. of finished inventory and 805,000 lbs. in raw materials and work-in-progress inventory for a total of 1,040,000 pounds of U_3O_8 in inventory
- 905,000 pounds of finished vanadium (" V_2O_5 ")

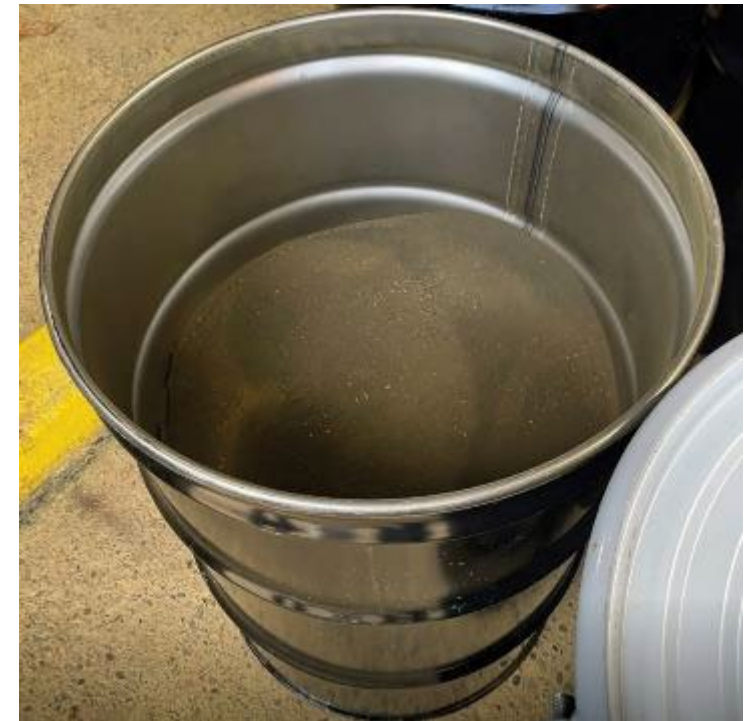
Four (4) long-term contracts with U.S. utilities (to date):

- **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 year to date through 9/30/2024 under long-term contracts for \$75.13/lb.

Securing spot sales

- Sold 250,000 pounds of uranium on spot market year to date through 9/30/2024 for average price of \$91.51 per pound
- **Spot price at \$77.25 per pound on November 30, 2024¹**

U_3O_8 Produced at the
White Mesa Mill



¹ TradeTech

**Our Structural
Advantages**

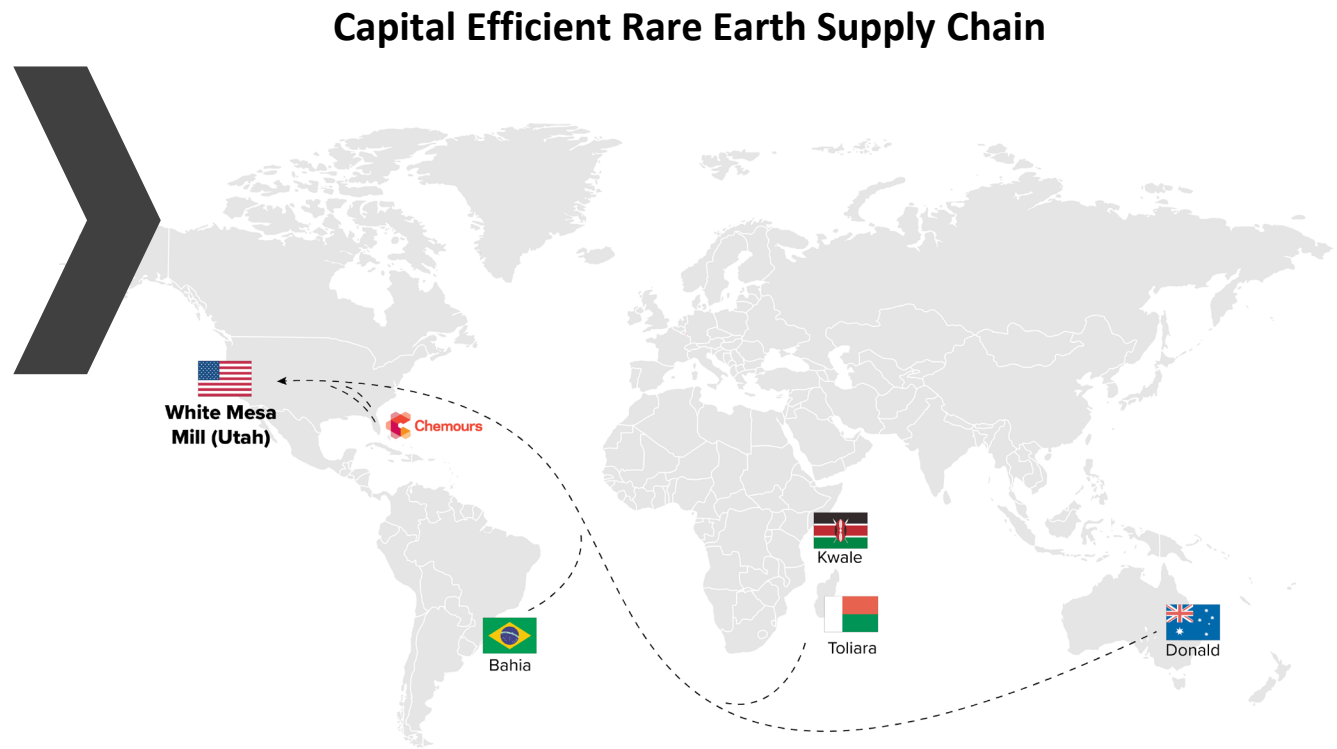
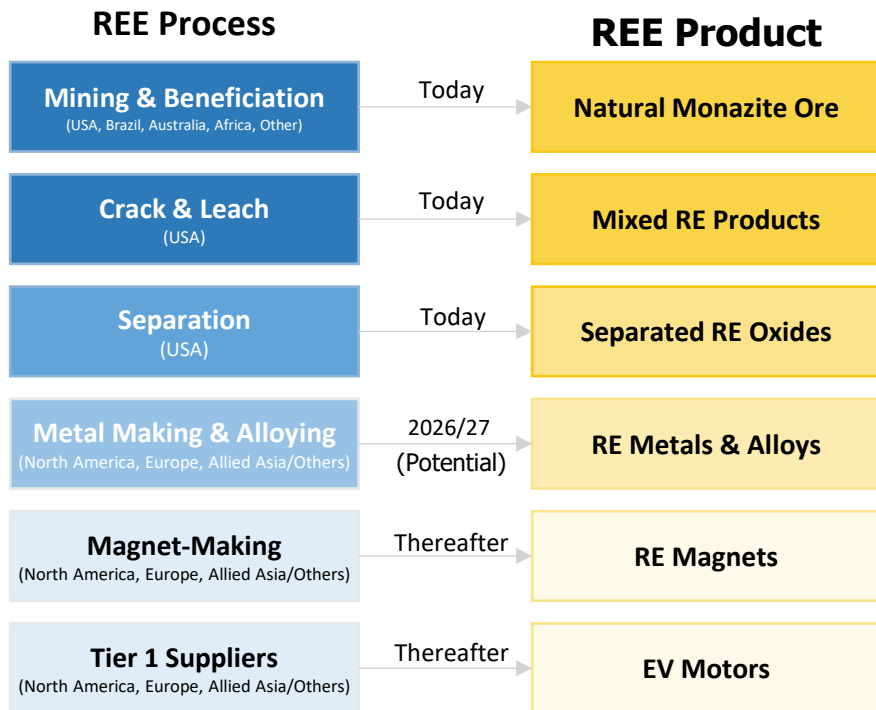


**Top Global Competitor
in Rare Earths**

- Solvent Extraction (“SX”) expertise
- Licenses & permits
- Existing U.S. infrastructure
- Processing technology
- Diversified low-cost feedstock supply

Innovative U.S.-Centered REE Supply Chain

Process Byproduct Monazite from HMS Mines Globally into Separated REE Oxides in the U.S.



October 2024 acquisition of Base Resources significantly adds to Energy Fuels' HMS mineral supply chain & brings highly successful and respected HMS management and operations teams



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 (roughly similar to uranium ores)
- White Mesa Mill in Utah is the only U.S. facility able to process Monazite & produce advanced REE materials
 - Completed “Phase 1” REE facility with up to 1,000 tpa of separated NdPr production capacity for approx. \$19M
 - Produced 38 tonnes of finished ‘on-spec’ separated neodymium praseodymium (“NdPr”) and 9 tonnes of finished high purity, partially separated mixed rare earth carbonate (“RE Carbonate”) in inventory
 - Samples currently being qualified with permanent magnet manufacturers
- Increasing RE Production – updating AACE International Class 4 Pre-Feasibility Study (“PFS”)¹
 - Designing capacity to produce 4,000 – 6,000 tpa NdPr + 150 – 225 tpa of Dy, and 50 to 75 tpa of Tb (for up to 6 million EVs per year)
 - \$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)

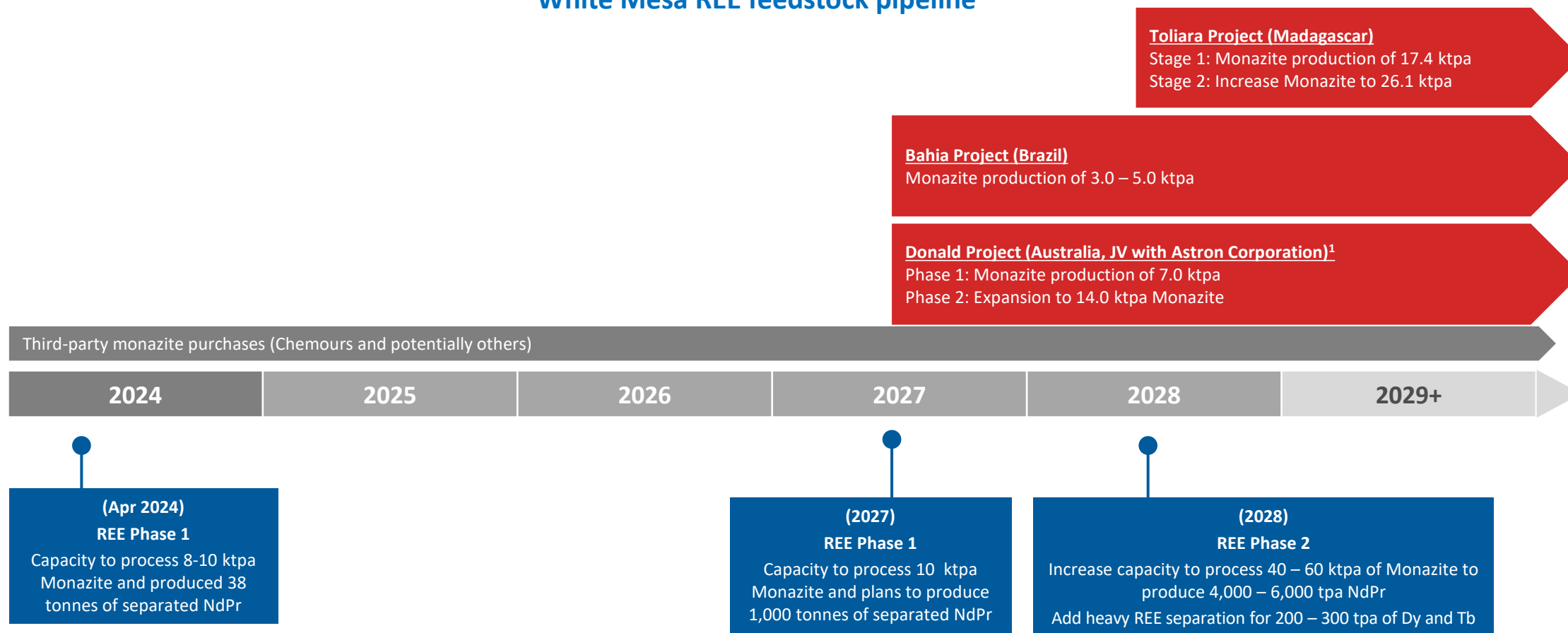
Diversifying into REE’s without diminishing industry-leading uranium production capabilities

(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

Indicative REE Development Timeline

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

White Mesa REE feedstock pipeline



White Mesa REE production & expansion timeline



(1) Energy Fuels has entered into a joint venture with Astron Corporation Limited to earn into a 49% interest in the Donald Project under which Energy Fuels will offtake all Monazite

Medical Isotopes

Optionality in Additional High-Growth Market Needed for Emerging Cancer Treatments

- Targeted alpha therapy (“TAT”) is an emerging technology showing great promise in the treatment of cancer in clinical trials
- TAT requires certain isotopes (Ra-226 and Ra-228), elements that occur in the White Mesa Mill’s existing uranium and REE process streams
- We are evaluating the potential to recover radium to help establish a U.S. medical supply chain
- Acquired RadTran LLC as a wholly owned subsidiary on August 19, 2024
- Plan to produce R&D quantities of radium in coming months; potential to produce commercial quantities in coming years
- Significant cashflow potential, upon successful commercialization in coming years

Current global shortages of medical isotopes threaten to inhibit progress of clinical trials

Community, Local & Regional Benefits

One of the largest private employers & taxpayers in San Juan County, Utah

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

Currently, about 100 employees at the White Mesa Mill (UT) & 35 each at the Pinyon Plain Mine (AZ), La Sal Mine Complex (UT)

- Roughly one-half of our employees at the Mill are Navajo and Native American

Phase 2 REE Expansion 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 150 employees

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

- Helping to address historic legacy
- The White Mesa Mill could begin to receive clean-up material – today

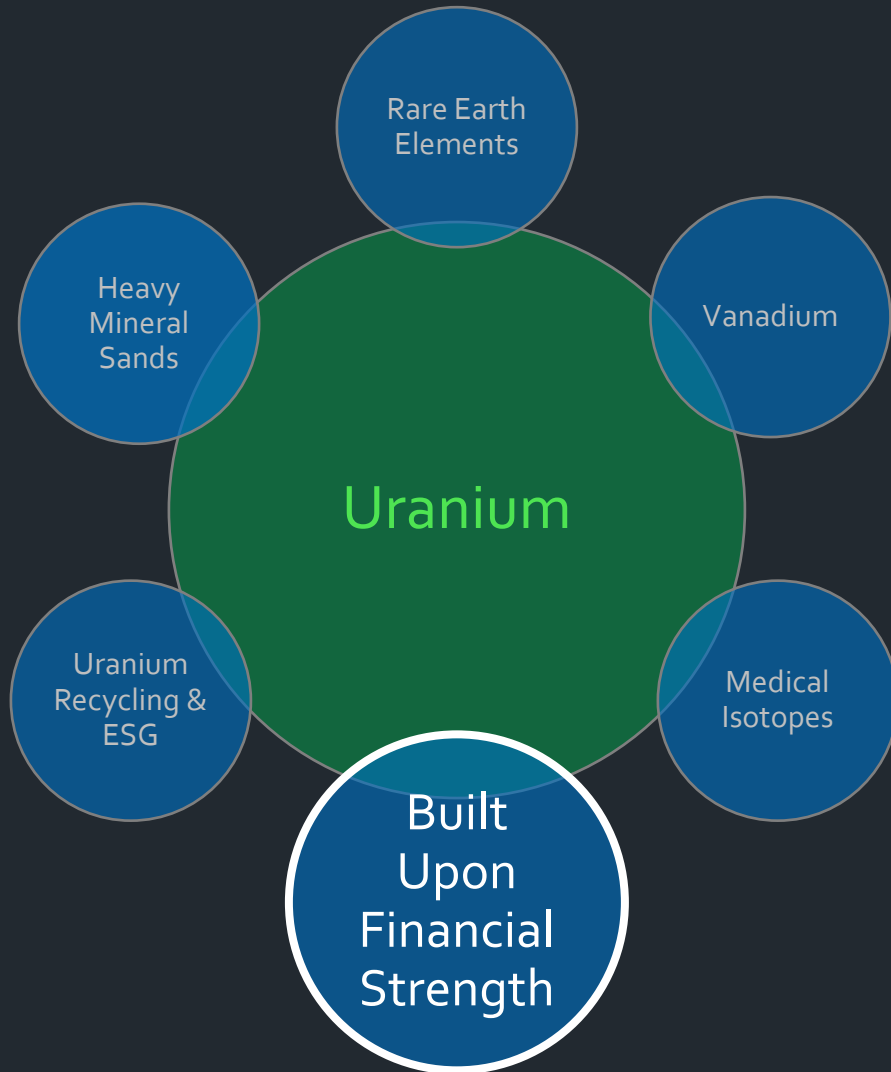
The Mill's recycling programs recover uranium & vanadium that would otherwise be lost to disposal

- Saves valuable resources and avoids carbon emissions

- Established [Foundation](#) with initial \$1 million contribution and ongoing funding equal to 1% of annual revenues from the White Mesa Mill
- Supporting education, environment, health/wellness, economic advancement & Native American priorities



Financials



Q3 2024 Financial Highlights

Net loss in Q3 2024 Driven by Transaction Costs Offset by Uranium Sales

- \$12.06 million net loss (\$0.07 per share)
 - Sold 50,000 pounds of uranium for gross profit of \$2.15 million
 - Incurred costs in Q3-2024 related to our potential acquisition of Base Resources and negotiations over the Donald Project Joint Venture with Astron.
 - Recurring operational costs
- No recent material uranium sales
 - Strategically elected not to sell large quantities of uranium for past several quarters based on lower prices and future contract sales.

Over \$183 Million of Liquidity at Current Commodity Prices

- \$183.16 million of working capital as of September 30, 2024
 - \$47.46 million of cash & cash equivalents; \$101.15 million of marketable securities (uranium stocks + interest-bearing securities); \$35.91 million of inventory, including \$13.38M of product inventory
 - **Product inventory worth \$23.79 million at current commodity prices; \$10.41 million of additional liquidity¹**
 - 235,000 pounds of finished U₃O₈, 905,000 pounds of finished V₂O₅, 9 tonnes of finished high-purity, partially separated mixed REE carbonate and 38 tonnes of finished separated NdPr in inventory
- No Debt

¹ Per TradeTech (uranium) and Fastmarkets (vanadium) as of October 28, 2024

2024 Guidance + Focus

150,000 – 200,000 pounds of finished uranium production

No further contract sales in 2024

Selectively selling 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/Q3 - 2024 (Produced 38 tonnes NdPr)

Current Mill processing has shifted to uranium production

Engineering Phase 2 REE expansion projects

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

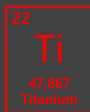
Advancing Toliara and Donald Projects toward Final Investment Decisions



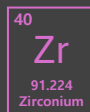
America's Leading Producer of Uranium and Critical Materials for the Clean Energy Transition



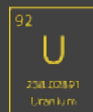
Titanium



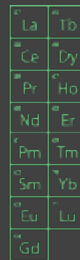
Zirconium



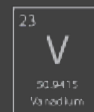
Uranium



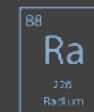
Rare Earths



Vanadium



Medical Isotopes



Recycling



Contact IR: investorinfo@energyfuels.com