

Energy Fuels, Inc. (UUUU – \$5.76*)

Energy & Natural Resources: Metals & Mining Buy; \$9.00 PT; \$942.2M Market Cap

Coverage Initiated Wednesday, April 17, 2024

Providing Fuel to the Energy Transition—Initiating Coverage at Buy, \$9 PT

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STOCK DATA						
Market Cap (mil)	\$942.2					
52-Week Range	\$4.99-\$9.03					
3-Month ADTV	2,745,078					
Shares Outstanding (mil)	163.6					
Float (%)	97.5					
Short Interest	23,841,040					
Beta	2.31					
Fiscal Year-End	December					

FINANCIAL DATA 2025E 2023A 2024E EPS \$0.62 \$(0.11) \$0.25 Rev. (mil) \$37.9 \$52.2 \$188.0 Adj. EBITDA \$(23.8) \$(11.0) \$62.1 In \$ millions.

BALANCE SHEET DATA

DALANCE SHEET BAIA	
	4Q23
Cash & Equivalents	\$57.4
Accounts Receivable	\$0.8
Inventories	\$38.9
Accounts Payable	\$10.2
Total Debt	\$0.0
Long-Term Debt	\$0.0
\$ in millions.	
Priced as of the close on April 17, 2024.	

Summary and Recommendation

We are initiating coverage of Energy Fuels, Inc. (UUUU) with a Buy rating and a \$9 price target, implying approximately 55% potential upside (as of the April 16 close). Headquartered in Lakewood, Colorado, Energy Fuels is an established producer of uranium, vanadium, and rare earth elements. The company's foundational asset is the White Mesa Mill, which is a conventional uranium processing facility in Utah. With a licensed U3O8 capacity of 8.0M lbs per year, White Mesa is one of the largest uranium mills in North America—and the only operational mill in the U.S. that processes conventional uranium ore. In addition, the company controls several upstream uranium mines (both conventional and ISR) that are expected to provide adequate uranium feedstock to produce over 5.0M lbs of U3O8 long term. A key differentiator for Energy Fuels is the company's vanadium and rare earth separation business—the latter of which has the potential, in our opinion, to generate robust earnings once the company achieves adequate monazite supply in the coming years. All considered, we estimate Energy Fuels scaling up to roughly \$320M in adjusted EBITDA across all segments in our terminal year—or an implied EV/EBITDA multiple of 4.2x.

Key Points

- Ambitious uranium growth plans. At the core of Energy Fuel's uranium business is the White Mesa Mill, which has a U3O8 processing capacity of 8.0M lbs. While the mill does not have an onsite uranium mine, its central location in Utah puts it within trucking distance of several conventional uranium mines with a combined uranium resource of 41.2M lbs across UUUU's portfolio. In early 2024, Energy Fuels announced the restart of the Pinyon Plain and La Sal mines, which will bring the company to a projected 1.1M lbs to 1.4M lbs of runrate production (likely by mid 2024). In addition, the company noted that Nichols Ranch and Whirlwind are one year away from production, which UUUU expects will increase runrate production to over 2.0M (starting in 2025E). Lastly, the completion of Sheep Mountain, Roca Honda, and Bullfrog could add an estimated incremental 4.0M lbs of U3O8 production per year; however, these projects are still in various stages of permitting and offer greater execution risk than the near-term projects.
- Established contract book. Energy Fuels has supply agreements with three undisclosed utility companies. Total U3O8 volume commitments from these agreements are approximately 3.0M lbs from 2024 to 2030, and volume could reach 4.1M lbs if certain options are exercised. Overall, we believe the company has a strong base of future business, valued at roughly \$360M in gross sales based on current U3O8 spots. However, we believe that long-term sales volumes will be far higher as the company secures new commercial agreements or utilizes the spot market for incremental sales. In addition, contract pricing on the committed volume is expected to be partially subject to prevailing spot prices at the time, meaning investors will maintain exposure to uranium spot price moves over the coming years.
- U308 weakness is a robust buying opportunity. Over the prior two to three months, the uranium industry has come under modest pressure, with U308 pricing down 16% from 2024 highs. Overall, we believe the weakness in U308 has been largely driven by profit-taking among traders and is not a reflection of long-term uranium fundamentals. In our opinion, the uranium bull thesis and long-term supply shortfall for uranium have only gained traction in recent months with Kazatomprom, the world's largest uranium producer, announcing that production could come under pressure in 2024 and 2025 due to a lack of sulfuric acid supply. In addition, the U.S. bill to ban Russian-enriched uranium could serve as a significant near-term catalyst for both spot pricing and U.S.-exposed uranium companies. Thus, we see the weakness as an excellent buying opportunity.

Valuation – Energy Fuels, Inc.

We are initiating coverage of Energy Fuels, Inc. with a Buy rating and a \$9 price target, implying roughly 55% potential upside from current spots (as of market close on April 16, 2024). We base our valuation for UUUU on a detailed DCF model that incorporates our company projections through 2028, plus a terminal-year estimate. From this analysis, we calculate a \$9 price target for UUUU, representing an implied 21.7x multiple on our 2025E adjusted EBITDA estimate of \$62.1M and an implied 12.7x multiple on our 2026E adjusted EBITDA estimate of \$105.6M. In our terminal year, we are assuming 5.5M lbs of uranium sales and a long-term U3O8 benchmark price of \$80/lb. In addition, we are modeling 2,400 Mt of total rare earth oxide (TREO) sales, as well as 2.0M lbs of vanadium sales in our terminal year. Based on our pricing and cost assumptions for the company, this equates to ~\$320M in terminal-year EBITDA, or an implied EV/EBITDA multiple of 4.2x. Lastly, our model assumes a share count of 163.6M, 0% terminal-year EBITDA growth, and a WACC of 10%.

Discounted Cash Flow Analysis - Energy Fuels, Inc.

Energy Fuels Inc. DCF Model								
Year Ended December 31								
(\$ in millions except per share data)	2023A	2024E	2025E	2026E	2027E	2028E	Terminal	
U308 Volumes (K lbs)	560.0	500.0	1,615.0	2,000.0	2,400.0	3,400.0	5,500.0	
Average Realized Price (\$/lb)	59.43	88.36	97.77	101.38	105.04	108.04	80.00	
Cost of Sales (\$/lb)	27.35	30.00	41.33	40.12	45.46	47.93	45.00	
Gross Margin (%)	54.0%	66.0%	57.7%	60.4%	56.7%	55.6%	43.8%	
Vanadium Volumes (K lbs)	79.3	200.0	2,000.0	3,000.0	3,000.0	3,000.0	2,000.0	
Average Realized Price (\$/lb)	10.98	10.49	11.50	12.00	12.00	12.00	12.00	
Cost of Sales (\$/lb)	6.94	7.50	7.50	8.00	8.00	8.00	8.00	
Gross Margin (%)	36.7%	28.5%	34.8%	33.3%	33.3%	33.3%	33.3%	
TREO Volumes (K Kgs)	153.4	105.0	120.0	200.0	1,200.0	2,100.0	2,400.0	
Average Realized Price (\$/Kg)	18.57	32.57	38.33	60.00	70.00	103.62	100.00	
Cost of Sales (\$/Kg)	15.08	30.67	30.67	40.00	40.00	40.00	40.00	
Gross Margin (%)	18.8%	5.8%	20.0%	33.3%	42.9%	61.4%	60.0%	
Total Revenue	37.9	52.2	188.0	253.3	374.6	623.4	705.0	
Product Cost of Sales	(18.2)	(19.7)	(85.4)	(112.2)	(181.1)	(271.0)	(359.5)	
Other Cost of Sales	(10.2)	(13.7)	(03.4)	(112.2)	(101.1)	(271.0)	(333.3)	
SG&A & Other Overhead	(35.4)	(38.0)	(38.9)	(39.8)	(36.8)	(37.8)	(35.0)	
Exploration and Development	(15.5)	(12.0)	(14.0)	(16.0)	(16.0)	(16.0)	(12.0)	
Depletion, Depreciation and Amortization	2.8	2.6	8.4	16.4	21.4	22.0	15.0	
Adjusted EBITDA	(23.8)	(11.0)	62.1	105.6	166.1	324.8	318.5	
Capital Expenditures	(15.4)	(79.3)	(246.7)	(200.0)	(50.0)	(15.2)	(15.0)	
Additions to Mineral Properties	(6.8)	(8.0)	(8.0)	(158.0)	(191.3)	(274.7)	(8.0)	
Cash Taxes	(0.3)	(5.5)	(0.0)	(130.0)	(131.3)	(= //	-	
Change in Working Capital	3.4	(3.4)	(6.3)	11.5	(5.3)	(41.0)	_	
Other	-	(5)	(0.0)	-	(3.3)	(1210)	_	
Unlevered FCF	(42.9)	(101.7)	(198.9)	(240.9)	(80.5)	(6.1)	295.5	
Net Interest Expense	5.7	-	(4.0)	(20.0)	(32.0)	(32.0)		
Dividends and Other	-	_	-	(=====	(====,	-		
Levered FCF	(37.2)	(101.7)	(202.9)	(260.9)	(112.5)	(38.1)	295.5	
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Valuation				Summary Statist	tics			
Enterprise Value	1,345.9			WACC			10.0%	
Less: Net Debt	(57.4)			Implied Termin	al EBITDA Gro	wth	0.0%	
Equity Value	1,403.4			Terminal Year			2028	
Shares Outstanding (millions)	163.6			Terminal EV Mu	ltiple		4.23	
Per Share Value	\$8.58			Implied 2025 EV		iple	21.68	
	·			Implied 2026 EV/EBITDA Multiple				
FCF Summary Statistics (Market Valuation)								
2024 FCFF (\$M)	(101.7)	Summary Statistics (Market Valuation)						
2025 FCFF (\$M)	(198.9)	Last Share Price				\$5.80		
2024 FCFF Yield (%)	(11.8%)	Shares Outstanding (millions)				158.6		
2025 FCFF Yield (%)	(23.1%)	Market Capitalization (\$M)				920.0		
2024 FCFE (\$M)	(101.7)		Net Debt (Cash) - 3Q23A					
2025 FCFE (\$M)	(202.9)		ľ	Enterprise Value			862.5	
2024 FCFE Yield (%)	(11.1%)		ľ	EV/EBITDA 2024	Multiple		(78.65)	
2025 FCFE Yield (%)	(22.1%)			EV/EBITDA 2025	Multiple		13.90	

Source: B. Riley Securities Research



Company Background

Energy Fuels, Inc. is an established domestic uranium producer that was founded in June 1987 and headquartered in Lakewood, Colorado. UUUU aims to be a leading U.S. producer of uranium and other critical minerals needed for advanced technologies and the energy transition, such as rare earth elements (REEs) and vanadium. As of close on April 16, 2024, UUUU has a market capitalization of approximately \$949M, with the shares dual-listed on the NYSE American (under the ticker "UUUU") and the TSX (under the ticker "EFR"). The company's foundational asset is the White Mesa Mill, which is a uranium processing facility located in Blanding, Utah. With a processing capacity of 8.0M lbs of U3O8 per year, White Mesa is one of the largest uranium processing facilities in North America—and the only operational mill in the U.S. that processes conventional uranium ore. In addition, Energy Fuels owns and operates several upstream uranium mines (both conventional and ISR) across multiple U.S. states, most of which are within trucking distance to White Mesa. In late 2023, Energy Fuels made the decision to restart three of its conventional uranium mines (Pinyon Plain, La Sal, and Pandora), as well as prepare two additional mines (Whirlwind, Nichols Ranch) to commence commercial production within one year. Based on company guidance, this is expected to increase run-rate mine production to 1.1M—1.4M lbs of U3O8 by mid to late 2024 and to over 2.0M lbs by 2025. Longer term, the company believes it has an adequate uranium resource to scale up to over 5.0M lbs of U3O8 mining capacity (once Sheep Mountain, Bullfrog, and Roca Honda come on line).

Uranium Business

The Flagship Asset: White Mesa Mill

The White Mesa Mill (100% controlled by UUUU) is a uranium, vanadium, and rare earth processing mill located in San Juan County, Utah, approximately 6 miles south of the city of Blanding, Utah. The property is located on 4,816 acres of privately owned land, with the mill occupying 50 acres and the tailings facility occupying 250 acres. While the mill does not have an onsite uranium mine or resource, its central location in Utah puts it within trucking distance of several company-owned uranium mines in Utah, Colorado, Arizona, and New Mexico. White Mesa is a notable asset in the U.S. uranium industry because it is currently the only operational uranium mill in the U.S. that specializes in conventional uranium processing. With a uranium processing capacity of 8.0M lbs of U308 per year, White Mesa is also one of the largest uranium processing mills in North America. Overall, White Mesa is a foundational cog in the U.S. uranium supply chain—processing approximately 24% of all uranium that was produced in the U.S. from 2012–2018.

Centrally Located in the State of Utah



Source: Company documents

White Mesa Mill: Uranium, Vanadium, and Rare Earth Processing



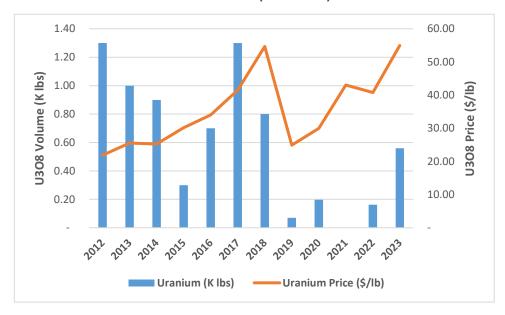
Source: Company documents

White Mesa Mill's Operating History

White Mesa was originally constructed by Energy Fuels Nuclear, Inc. (no affiliation with UUUU) and has had several owners since commencing commercial operations in June 1980. In 1984, UMETCO Minerals Corp. acquired a 70% interest in the mill. UMETCO was the main operator of the mill from 1984 until 1994. In 1997, White Mesa was acquired by Denison Mines Corp. (International Uranium Corporation at the time), which operated the facility until it was acquired by Energy Fuels in June 2012. Over the plant's operating history (1980–present), White Mesa had recovered a total of 40M lbs of U3O8 and 46M lbs of vanadium. While the current licensed processing capacity at White Mesa is high, the mill has historically operated on a campaign basis (when market conditions warrant it) and well below its full U3O8 processing capacity.

Since 2007, White Mesa has historically sourced conventional uranium ore from the La Sal Complex, which was recently brought out of standby status to resume commercial production. In addition, conventional ore was historically sourced from the Daneros Project and the Tony M Project in Utah (both sold in 2021), as well as from the Arizona 1 Project (depleted in 2014) and the Pinenut Project (advanced state of reclamation). In addition to sourcing its own uranium ore, Energy Fuels is opportunistic when it comes to third-party ore purchases, toll milling arrangements, or other unique arrangements with third parties if market conditions warrant it. Prior to sharp improvement in uranium pricing over the past 12 months, the company focused the vast majority of its uranium business on processing alternate feed material, either under tolling arrangements or for its own account. For example, from 2019 to 2022, UUUU primarily received shipments of alternate feed material generated from the cleanup of large uranium mines in northwestern New Mexico. White Mesa is the only processing facility in the country that can produce recycled uranium from this waste material, and it can permanently dispose of the material in its licensed tailings facility. Energy Fuels has guided that it can produce anywhere from 0 lbs to 500K lbs of U308 per year from its various recycling programs.

White Mesa Mill - Sales Volume and Price (2012-2023)



Source: B. Riley Securities Research and company documents

New Supply Agreements

In 2022, a tight supply environment and improvements in uranium pricing led to Energy Fuels signing four uranium sale and purchase agreements—three with major U.S. nuclear utilities and one with the U.S. Uranium Reserve Program. In 2023, the company sold 560K lbs of U308 into these contracts at an average sales price of \$59.42/lb, which was partially subject to the prevailing market price at the time. In 2023, Energy Fuels was not operating any upstream uranium mining assets. Thus, U308 sales were accomplished with existing finished uranium inventories that the company controlled prior to the sale (or via purchased inventory). The company finished 2023 with 685K lbs of finished uranium inventories, which are located at various conversion facilities in North America. In addition, approximately 436K lbs of additional U308 inventory are contained in stockpiled alternate feed material and other ore material that could be recovered relatively quickly in the future.

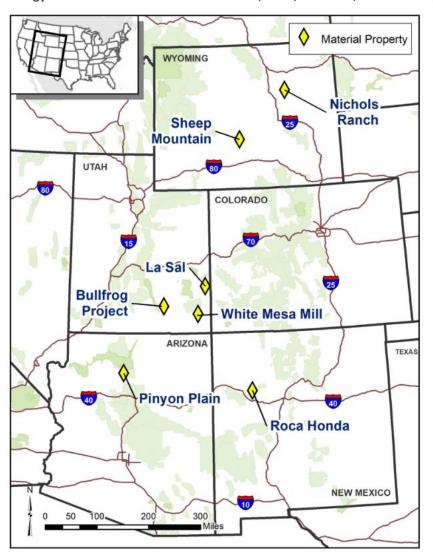
Looking ahead, the company has three remaining supply agreements with three utility companies. Total U3O8 volume commitments from these agreements are roughly 3.0M lbs from 2024 to 2030; however, volume could reach 4.1M lbs if certain options are exercised. In its 2023 annual report, Energy Fuels noted that it delivered 200K pounds of U3O8 in January 2024 at an average price of \$75.13/lb (\$15.0M in total consideration). In addition, the company has scheduled to sell an additional 100K lbs on the spot market at an average price of \$102.88/lb in March 2024 (\$10.29M), which equates to total sales of 300K lbs of U3O8 in 1Q24. Looking ahead to the remainder of 2024, a utility customer has the option to purchase an additional 100,000 pounds of uranium from the company by providing notice to UUUU before October 1, 2024. In addition, the company will continue to evaluate additional spot and/or long-term uranium sales opportunities up to 300,000 lbs in 2024 and beyond. As noted previously, Energy Fuels has recently recommenced operations at two conventional uranium mines and is in the process of preparing several more for operations over the coming years.

Significant Uranium Resource Potential

Energy Fuels has a comprehensive list of upstream uranium assets located across five U.S. states. Most of the assets are U.S. conventional uranium assets that are meant to supply uranium ore feedstock to the White Mesa Mill—which has 8.0M lbs of U3O8 processing capacity. Near-term conventional assets that fall into this category are Pinyon Plain (Arizona), the La Sal Complex (Utah), and Whirlwind (Colorado/Utah)—all of which are fully permitted. Roca Honda (New Mexico) and Bullfrog (Utah) are also expected to eventually tie into the White Mesa Mill; however, both of these projects are longer-term in nature and still in permitting.

The company also controls the Nichols Ranch Project, which is a fully permitted and developed in situ recovery (ISR) project in Wyoming. As an ISR project, Nichols Ranch will have an independent processing plant that will operate separately from the conventional production at White Mesa Mill. Lastly, the company controls the Sheep Mountain Project in Wyoming. While Sheep Mountain is a conventional uranium resource, Energy Fuels is currently evaluating an independent ore processing solution for the project given the far trucking distance to White Mesa Mill.

Energy Fuels Has Uranium Mines in Arizona, Utah, Colorado, New Mexico, and Wyoming



Source: Company documents and B. Riley Securities Research

Proven and Probable Uranium Reserves

		Proven			Probable	
Project/Operation	Ore (K tons)	eU³O ⁸ (%)	U³O ⁸ (K lbs)	Ore (K tons)	eU³O ⁸ (%)	U ³ O ⁸ (K lbs)
Pinyon Plain	8	0.33%	51	127	0.60%	1,517
Sheep Mountain	-	-	-	7,453	0.12%	18,365
Total	8	0.33%	51	7,580	0.13%	19,882

Source: Company documents and B. Riley Securities Research

Measured, Indicated, and Inferred Uranium Resource

	Measured Resource			Indicated			Inferred			
Project/Operation	Ore (K tons)	eU³O ⁸ (%)	U ³ O ⁸ (K lbs)	Ore (K tons)	eU³O ⁸ (%)	U ³ O ⁸ (K lbs)	Ore (K tons)	eU³O³ (%)	U ³ O ⁸ (K lbs)	
Pinyon Plain	-	-	-	37	0.95%	703	5	0.48%	48	
La Sal Complex	-	-	-	-	-	-	823	0.26%	4,281	
Nichols Ranch - ISR	11	0.19%	41	2,924	0.11%	6,142	614	0.10%	1,176	
Sheep Mountain	-	-	-	4,210	0.11%	9,570	-	-	-	
Bullfrog	-	-	-	1,560	0.29%	9,100	410	0.25%	2,010	
Roca Honda	208	0.48%	1,984	1,639	0.48%	15,638	1,513	0.46%	13,842	
Total	219	0.46%	2,025	10,370	0.20%	41,153	3,365	0.32%	21,357	

Source: Company documents and B. Riley Securities Research

Unclassified Uranium Resource

		Unclassified	
Project/Operation	Ore (K tons)	eU³O ⁸ (%)	U ³ O ⁸ (K lbs)
Whirlwind	625	0.25%	3,096
Arkose - ISR	1,667	0.10%	3,293
Wate	71	0.08%	118
EZ Complex	224	0.47%	2,105
Total	2,587	0.17%	8,612

Source: Company documents and B. Riley Securities Research

Uranium Growth Initiative

In late 2023, the company announced that it would be resuming mining operations at three mines: Pinyon Plain, La Sal, and Pandora (part of the La Sal Complex). Once production is fully ramped up at these three mines in mid to late 2024E, the company expects to be operating at a nameplate mine capacity of 1.1M lbs to 1.4M lbs of U3O8 per year. Uranium production from these mines will not be available for sale in 2024 but instead stockpiled at White Mesa Mill for later processing in 2025. Energy Fuels expects uranium inventories to total approximately 585K lbs to 935K lbs of U3O8 at year-end 2024. In addition, the company is preparing two additional mines, Whirlwind and Nichols Ranch, to commence uranium production within one year. Once complete, this would increase Energy Fuels' production capacity to more than 2M lbs of U3O8 by as early as 2025E. Lastly, the company plans to advance permitting on the Roca Honda, Sheep Mountain, and Bullfrog Projects, which could expand its uranium production to an annual run-rate of up to 5M lbs of U3O8 in the coming years.

Production Buildout - Company Guidance

Uranium Assets	Location	Туре	Production (M lbs)	Status
Near-Term Assets				
Pinyon Plain	Arizona	Conventional	NA	Operating, Ramping
La Sal Complex	Utah	Conventional	NA	Operating Ramping
Run-Rate Production	(Mid-24E)		1.1 - 1.4	
Medium-Term Assets				
Whirlwind	Colorado/Utah	Conventional	NA	Developed and Permitted
Nicols Ranch	Wyoming	In-Situ	NA	Developed and Permitted
Run-Rate Production	(25E)		2.0+	
Long-Term Assets				
Roca Honda	New Mexico	Conventional	NA	In Permitting
Sheep Mountain	Wyoming	Conventional	NA	Fully-permitted for mining; evaluating ore processing options
Bullfrog	Utah	Conventional	NA	In Permitting
Run-Rate Production	(LT)		5.0+	

Source: B. Riley Securities Research and company documents



Sales Projections for the Uranium Business

For 2024, we are modeling the restart of commercial mine production for Pinyon Plain and La Sal, as well as 500K lbs of U308 sales volume. As noted previously, production at Pinyon Plain and La Sal will be used primarily to build inventory at White Mesa Mill over the course of this year, and sales will likely be made from existing inventory. As inventories scale throughout 2024, we believe the company will be well positioned to increase sales volumes in the following year. For 2025, we are modeling roughly 1.6M lbs of U308 sales, as well as the commercial restart of Nichols Ranch and Whirlwind. Once on line, these assets will bring the company's run-rate production to more than 2.0M lbs of U308. Thus, in 2026, we expect the company to generate approximately 2.0M lbs of U308 sales. Longer term, we expect commercial completion of Sheep Mountain and Bullfrog in 2027 and completion of Roca Honda in 2028. Overall, as the assets scale, we are modeling 2.4M lbs of U308 sales in 2027, 3.4M lbs of U308 sales in 2028, and 5.5M lbs in our terminal year.

U308 Production/Sales Projections



Source: B. Riley Securities Research

Rare Earth Business

What Are Rare Earth Elements?

Rare earth elements are a group of 17 metallic elements that include the 15 lanthanide elements, plus scandium and yttrium. They are often grouped into light elements, which include the elements from lanthanum to samarium, and heavy elements, which include the elements from europium to lutetium. Heavy rare earths are notably rarer than light rare earths and thus typically command a higher price on the open market. The group of elements has a range of applications across multiple sectors of the economy. They are used extensively in high-tech consumer products, such as cellphones, hard drives, electric and hybrid vehicles, and flat-screen monitors and televisions. The defense industry also relies on rare earth elements for some functionality in electronic displays, guidance systems, lasers, and radar and sonar systems. Lastly, these elements are arguably most associated with permanent magnets, which are used heavily in consumer electronics, EVs, and wind turbines. China accounts for roughly ~70% of all upstream production, as well as the vast majority of downstream processing for rare earth elements. Other notable players in the industry are the U.S. and Australia, which account for roughly 12% and 5%, respectively, of all mined production.

Rare Earth Elements Are Used in a Variety of End Markets

Rare Earth Element	Current Applications
Yttrium	Phosphors , ceramics, metal alloys
Lanthanum	Batteries, catalysts for petroleum refining
Cerium	Autocatalysts, Chemical Catalyst, glass polishing, metal alloys
Praseodymium	High power magnets, yellow ceramic pigment, Autocat
Neodymium	High power magnets
Promethium	Beta radiation source
Samarium	High temperature magnets,
Europium	fluorescent lighting
Gadolinium	Magnetic resonance imaging contrast agent, nuclear reactor rods
Terbium	Phosphors for lighting, high power high temperature magnets
Dysprosium	High power high temperature magnets, lasers
Holmium	Highest power magnets in existence
Erbium	Lasers, glass colourant
Thulium	Ceramic magnetic materials which are still under development
Ytterbium	Fibre optic technology, solar panels
Lutetium	PET scanners

Source: Lynas Rare Earths

Rare Earth Growth Initiative

A unique differentiator for Energy Fuels is the company's rapidly growing rare earth business. Energy Fuels officially entered the rare earth industry on November 3, 2020, when it produced a rare earth carbonate at White Mesa—an intermediate product containing a mix of multiple REEs. Shortly after, in March 2021, Energy Fuels announced a partnership with Neo Performance Materials, in which UUUU would supply RE carbonate to Neo's Silmet REE separation facility in Estonia. Energy Fuels utilizes an advanced production process at White Mesa, separating lanthanum (La) and cerium (Ce) from its RE carbonate to produce a material with high concentrations of neodymium and praseodymium (NdPr) oxides. This process was the first commercial-level rare earth separation to occur in the U.S. since 2015.

The company is focused on expanding its REE separation capability, which would allow UUUU to produce larger commercial quantities of separated NdPr oxide and other REEs (over the course of multiple phases). In Phase 1, White Mesa is expected to have a monazite processing capacity of 8,000 Mt to 10,000 Mt per year, translating to roughly 4,000 Mt to 5,000 Mt of TREO, including 800 Mt to 1,000 Mt of separated NdPr oxide. Phase 1 is expected to be commissioned in early 2024, and total capital requirements are expected to be a modest \$16M–\$18M. For Phase 2, Energy Fuels will grow its monazite processing capacity to 30,000 Mt to 50,000 Mt per year, which translates to 15,000 Mt to 25,000 Mt of TREO (including 3,000 Mt to 5,000 MT of NdPr). Important additions in the second phase will be a dedicated monazite "crack-and-leach" circuit at the mill. Once complete, this will allow White Mesa to process monazite and other mined uranium simultaneously. Lastly, in Phase 3, the company plans to add heavy REE separation capabilities in order to produce dysprosium (Dy) and terbium (Tb) and potentially other REE oxides. Energy Fuels expects to complete Phase 2 in 2026 and to complete Phase 3 in 2027; however, this timeline is subject to licensing, financing, and receipt of sufficient monazite feed.

Investment in Monazite Feedstock

In the rare earth business, Energy Fuels utilizes a feedstock called monazite, which is a mineral sand that often contains high amounts of rare earth elements. After a successful pilot plant program at White Mesa, the company announced on December 14, 2020, that it had signed a three-year supply agreement with The Chemours Company to acquire monazite sands from Chemour's Mineral Sand Plant in Georgia. Importantly, however, this supply agreement is in the process of renegotiation due to a shortfall in monazite delivery. In February 2023, to bolster its future monazite feedstock supply, the company acquired the Bahia Project in Brazil for a total consideration of \$27.5M. The project consists of 17 mineral concessions in the State of Bahia, Brazil, with a total land package of roughly 37K acres. Based on exploration work on the property to date, the company believes that Bahia has the potential to supply Energy Fuels with roughly 3,000 Mt to 10,000 Mt of monazite per year, which could translate to approximately 1,500 Mt to 5,000 Mt of TREO, including 300 Mt to 1,000 Mt of neodymium and praseodymium (NdPr) and significant commercial quantities of Dy and Tb.

Lastly, on December 27, 2023, Energy Fuels made another significant addition to its monazite portfolio, announcing a non-binding memorandum of understanding (MOU) with Astron Corporation Limited to jointly develop the Donald Rare Earth and Mineral Sands Project. Based on the agreement, Energy Fuels will make an investment of A\$180M (\$117M USD) to earn a 49% interest in the venture, which will provide the company with roughly 7,000 Mt to 14,000 Mt of incremental monazite feedstock per year, including 850 Mt to 1,700 Mt of NdPr oxide, 70 Mt to 140 Mt of Dy oxide, and 12 Mt to 25 Mt of Tb oxide. In addition, the Donald monazite production stream is expected to contain approximately 50K to 100K lbs of low-cost recoverable uranium per year.

Financial Projections for the Rare Earth Business

We estimate that Energy Fuels will sell roughly 105 Mt of total rare earth oxides in 2024, including 70 Mt of NdPr oxide. As Phase 1 capacity continues to scale over the course of 2024, we expect the company to grow volumes slightly in 2025 to 120 Mt of TREOs; however, Energy Fuels' rare earth business will be significantly constrained until adequate monazite feedstock is developed in Brazil and Australia. As a result, we model rapid growth in TREO volumes in our latter three forecast years, with 200 Mt TREO sales in 2026E, 1,200 Mt in 2027E, and 2,100 Mt in 2028E. All considered, this would have the rare earth business scaling up to approximately \$36M in annual gross margin in 2027E and roughly \$133.6M in 2028—assuming the company completes its third phase of REE separation.

Rare Earth Business - Financial Projections



Source: B. Riley Securities Research

Vanadium Business

What Is Vanadium?

Vanadium is a metallic element that is used primarily as an alloying metal with iron to create ferrovanadium, which is a shock- and corrosion-resistant steel additive. Vanadium-steel alloys are used to make extremely durable tools such as axles, armor plates, car gears, springs, cutting tools, piston rods, and crankshafts. Vanadium alloys also have applications in nuclear reactors because of their low-neutron-absorbing properties. While most vanadium is consumed by the steel industry, it is also used increasingly in aerospace and the chemical industry. Its common compound, vanadium pentoxide (V2O5), is used as a catalyst in some chemical reactions and in the production of sulfuric acid. The element is often studied for potential energy storage applications, specifically the vanadium redox battery.

Vanadium is a relatively abundant element that occurs naturally in about 65 minerals and in fossil fuel deposits. It is most often produced as a by-product of other mineral production—mainly from steel smelter slag; from heavy oil flue dust; or as a by-product from uranium mining, which is the case with Energy Fuels. According to Market Research Future, the global vanadium market was estimated at \$3.04B in 2023 and is expected to grow to \$4.49B by 2032, a CAGR of 5.0% over this period. China is the largest producer of vanadium in the world; Russia, South Africa, and Brazil are also major producers.

The price of vanadium came under pressure in 2023, reaching as low as \$5.65/lb in December 2023, after trading as high as \$10.80/lb in February 2023. The primary drivers of V2O5 pricing are global steel demand and growth in heavy industry, such as construction, infrastructure, and auto manufacturing. The company has cited commentary from Fastmarkets that credited the weakness in vanadium pricing to fewer steel mill tenders in China during the run-up to the Lunar New Year holiday, as well as the overall tepid outlook for the global economy. The company noted that pricing could increase once confidence in the Chinese steel sector and global economy returns. As of February 16, 2024, the company reported that the price of vanadium had improved slightly to \$6.88 per pound of V2O5.

Vanadium Initiative

Energy Fuels produces vanadium from the White Mesa Mill on a campaign basis. Vanadium feedstock can be sourced from uranium/vanadium ore from its conventional mines (La Sal and Whirlwind); however, this has not been a material source of production for several years because the company's conventional mines have been curtailed. In recent years, the company's vanadium production has been from recycling company tailings (Pond Return Program). In 2019, the White Mesa Mill recovered roughly 1.8M lbs of vanadium from this program. Volume was lower in the following years due to a decrease in vanadium pricing, with 67K lbs produced in 2020 and 7.4K lbs produced in 2021. Pricing for vanadium eventually improved in 2022, leading to an increase in vanadium sales to 642K lbs (at \$13.67/lb). Even during active years for the vanadium business (such as 2022), it is important to note that the segment is a relatively small portion of the company's total earnings potential, generating only approximately \$8.8M in revenue in 2022 at a 57% gross margin. In 2023, depressed vanadium pricing led to the segment cooling once again, with a modest 79.3K lbs in sales volumes and \$0.9M in revenue.

Vanadium Financial Projections

The company holds approximately 906K lbs of finished vanadium inventory that it plans to sell into the market once pricing warrants it. In addition, Energy Fuels estimates that it has roughly 1.0M lbs to 3.0M lbs of vanadium that can be recovered from tailings for future sale. Given that the vanadium business has historically operated in a cost range of \$6–\$7/lb, we believe the company will wait until pricing exceeds \$10/lb before considering any commercial sales of vanadium. Due to currently depressed pricing for vanadium, we are modeling modest sales volumes of 200K lbs in 2024. In our model for 2025, we have average realized pricing improving to approximately \$11.50/lb, which leads to projected higher sales volumes of 2.0M lbs. In 2025 to 2028, we expect that the company will reach a stable run-rate of roughly 3.0M lbs of sales per year, with pricing and cost of sales at \$12/lb and \$8/lb, respectively. Overall, this translates to approximately \$36M in revenue and \$12M in gross margin per year across the vanadium segment. Because UUUU operates its vanadium business on a campaign basis, we expect future financials to likely be more "lumpy" than our modeled estimates below.

Vanadium Business - Financial Projections



Source: B. Riley Securities Research and company documents

Capital Structure

As of December 31, 2023, Energy Fuels had approximately 162.7M in issued and outstanding shares. Thus, at current spots of \$5.80/share, UUUU's market capitalization is roughly \$943M based on the 2023 year-end share balance. On a fully diluted basis, UUUU has roughly 165.7M in fully diluted shares outstanding, which includes approximately 1.8M stock appreciation rights (SARs), 0.5M options, and 0.6M in restricted stock units that could be exercisable in the future. We estimate the company's enterprise value at \$753M, which accounts for \$57.4M in cash and \$133M in short-term marketable securities. UUUU currently holds no debt liabilities on its balance sheet.

Equity ownership of UUUU is primarily held by institutional investors that control roughly 50.5% of shares outstanding. The top five institutional holders are ALPS Advisors (5.81%), Global X Management Co. (5.73%), BlackRock Fund Advisors (4.81%), The Vanguard Group (3.41%), and Columbia Management Investment Advisors (2.83%). In addition, company insiders control approximately 2.5% of shares outstanding, leaving a relatively large float on the shares at an estimated 97.5%. The average trading volume on UUUU shares is approximately 2.9M per day, or 1.8% of the company's float, and short interest is relatively high at 23.8M shares, or 14.9% of the float.

Capitalization and Ownership Structure

Energy Fuels, Inc Capitalization	
UUUU Share Price (\$)	5.80
Shares Outstanding (M) - End of 23A	162.7
Stock Appreciation Rights (M)	1.8
Stock Options (M)	0.5
Restricted Stock Units (M)	0.6
FD Shares Outstanding (M) - End of 23A	165.7
Market Capitalization (\$M)	943.4
Cash & Short Term Investments (\$M)	190.5
Total Debt (\$M)	-
Enterprise Value (\$M)	752.9

Energy Fuels, Inc Ownership Metrics	
Shares Outstanding (M) - 2/21/24	163.6
Institutional Ownership (% Out.)	50.5%
Institutional Ownership (M)	82.5
Insider Ownership (% Out.)	2.5%
Insider Ownership (M)	4.0
Float (% Out.)	97.5%
Float (M)	159.5
Short Interest (% Float)	14.9%
Short Interest (M)	23.8
3M Avg Daily Volume (M)	2.9
Daily Volume (% of float)	1.8%

Source: B. Riley Securities Research, FactSet, and company documents

Management and Board of Directors¹

Mark S. Chalmers, president, chief executive officer, and director. Mark Chalmers is president and CEO of Energy Fuels. Before his promotion to CEO in 2018, he served as president and COO of Energy Fuels. Prior to Energy Fuels, Mr. Chalmers was the executive general manager of production for Paladin Energy Ltd., where he managed the Langer Heinrich (Namibia) and Kayelekera mines (Malawi) and achieved significant increases in production levels while reducing operating costs. Mr. Chalmers has experience with in situ recovery (ISR) uranium production, having managed both the Beverley Uranium Mine owned by General Atomics (Australia) and the Highland mine owned by Cameco Corporation (USA). Additionally, he has consulted several key industry leaders in the uranium supply sector, including BHP, Rio Tinto, and Marubeni. Mr. Chalmers holds a Bachelor of Science in mining engineering from the University of Arizona, is a registered professional engineer, and served as the chair of the Australian Uranium Council for 10 years.

Nathan Bennett, chief accounting officer, interim chief financial officer. On December 27, 2023, Energy Fuels announced that Nathan Bennett would be appointed as chief accounting officer and interim chief financial officer (effective January 1, 2024). Mr. Bennett has served as Energy Fuel's corporate controller since August 25, 2022. He previously served as controller of Antero Midstream Corporation from December 2013 to August 2022, where he led the accounting, treasury, and financial reporting functions and the closing of two initial public offerings in 2014 (Antero Midstream Partners LP) and 2017 (Antero Midstream GP LP). Prior to Antero, Mr. Bennett held various positions within the assurance practice at PricewaterhouseCoopers, LLP, in Denver, Colorado, from December 2010 to December 2013 and previously in Houston, Texas, from January 2007 to December 2010, serving clients in the energy industry. Mr. Bennett holds a Bachelor of Science in Accounting degree, as well as a Master of Accounting degree, both from Utah State University and is a certified public accountant licensed in the State of Colorado.

David C. Frydenlund, executive vice president, chief legal officer, and corporate secretary. David Frydenlund is the executive vice president, chief legal officer, and corporate secretary of Energy Fuels. He has more than 35 years of experience in the mining and energy sectors, including with regulatory and environmental laws and regulations at the state and federal levels. Prior to his role at Energy Fuels, Mr. Frydenlund served as vice president of regulatory affairs, general counsel, and corporate secretary of Denison Mines Corp. and its

¹ Source: Company reports



predecessor, International Uranium Corporation (IUC). He was also a director at IUC and served as CFO. Preceding that, he was vice president of the Lundin Group, a collection of international public mining and oil and gas companies. He also worked as a partner at the Vancouver law firm of Ladner Downs (now Borden Ladner Gervais), specializing in corporate, securities, and international mining transactions law. Mr. Frydenlund earned a bachelor's degree in business and economics from Simon Fraser University in Vancouver, a master's degree in economics and finance from the University of Chicago, and a law degree from the University of Toronto.

Curtis H. Moore, senior vice president of marketing and corporate development. Curtis Moore serves as the senior vice president of marketing and corporate development at Energy Fuels. With more than 15 years at the company, Mr. Moore oversees product marketing, public relations, investor relations, and government relations, and he plays a significant role in mergers and acquisitions, strategy, and corporate legal matters. Prior to joining Energy Fuels, Mr. Moore gained experience in several fields, including multifamily real estate development, government relations and public affairs, production homebuilding, and private law practice. He is a licensed attorney in the State of Colorado. Mr. Moore holds a Juris Doctor degree and a Master of Business Administration from the University of Colorado, Boulder. He also holds a dual bachelor's degree in economics-government from Claremont McKenna College. Mr. Moore serves as president of the board of directors of the Friends of Arches and Canyonlands National Parks, a nonprofit based in Moab, Utah, that supports area national parks and monuments.

J. Birks Bovaird, chairman of the board of Energy Fuels. For most of his career, Mr. Bovaird has focused on the provision and implementation of corporate financial consulting and strategic planning services. He was previously vice president of corporate finance for one of Canada's major accounting firms. He is chairman of GTA Resources and Mining Inc., as well as a member of the audit and compensation committees. He is an independent director of Noble Mineral Exploration Inc., where he is a member of the audit committee and chair of the compensation committee. He also serves as an independent director and member of the audit committee of Interactive Capital Partners Corporation (ICPC), which is a reporting issuer whose common shares are not currently trading; ICPC is in the process of preparing the necessary financial reports to bring the company back into good standing with the Ontario Securities Commission. Mr. Bovaird has previously been involved with numerous public resource companies, both as a member of management and as a director. He is a graduate of the Canadian Director Education Program and holds an ICD.D designation.

Benjamin Eshleman III, director of Energy Fuels and president and CEO of Mesteña, LLC. Mr. Eshleman is president and CEO of Mesteña, LLC, a privately held energy company headquartered in Corpus Christi, Texas. As president and CEO, he is responsible for the oil, gas, and uranium leasing activities under 200,000 mineral acres located in South Texas. Mesteña built, operated, and mined several million pounds of uranium through its Alta Mesa plant in the mid 2000s. Mr. Eshleman also sits on the board of the Texas and Southwestern Cattle Raisers Association, a business association advocating landowner rights. He is a 1979 graduate of Menlo College, with a Bachelor of Science in Business Administration.

Ivy Estabrooke, director of Energy Fuels and vice president of operations and corporate affairs at IDbyDNA Inc. Dr. Estabrooke is currently vice president of operations and corporate affairs at IDbyDNA Inc., a venture-backed commercial-stage biotech company. From 2018 to 2020, she served as vice president of corporate and government programs for PolarityTE, Inc., and from 2014 to 2018, she served as the executive director of the Utah Science, Technology and Research Initiative. Other roles have included technical program manager to the U.S. Department of the Navy and science advisor to the Governor of Utah. Dr. Estabrooke has led research and development programs in both the public and private sectors, delivering technology solutions for national security and public health challenges. She earned her doctorate in neuroscience at Georgetown University in 2005 and received a master's degree in national resource strategy from the National Defense University in 2013 and a bachelor's degree in biological sciences from Smith College in 1998. She serves on the board of the Girl Scouts of Utah and is a member of the Utah District Export Council.

Barbara Filas, director of Energy Fuels. Ms. Filas is internationally recognized as a thought leader on a variety of topics, including mining, waste management, environmental and social responsibility, leadership, and sustainability, and she has experience in developed and developing countries on six continents. Ms. Filas currently serves as the nominations chair and chair of the Board of Governors for the National Mining Hall of Fame and Museum in Leadville, Colorado, and is a part-time Professor of Practice at the Colorado School of Mines in Golden, Colorado. From 2003 to 2009, Ms. Filas served as president and chief executive of Knight Piésold and Co., a global mining and environmental consulting firm, where she held various roles of increasing responsibility from 1989 to 2009. From 2011 to 2013, Ms. Filas served as president of Geovic Mining Corp., a publicly traded mining company with an advanced cobalt, nickel, and manganese exploration project in Cameroon, among other exploration ventures. From 2015 to 2016, she was a director of Moroccan Minerals Ltd., a private company that explored for copper, gold, and silver prospects in Morocco and Serbia. Ms. Filas' operational background includes hands-on experience with operating gold and coal mines and processing facilities; executive experience in consulting, public companies, and non-profits; and technical expertise in base and precious metals, coal, uranium, and industrial metals in various engineering and environmental capacities. In addition, Ms. Filas was the first female president of the Society for Mining, Metallurgy and Exploration, the world's largest technical mining organization. She is a graduate of the University of Arizona and a Licensed Professional Mining Engineer in Colorado and Nevada.

Bruce D Hansen, director of Energy Fuels and chief executive officer and director of General Moly Inc. Mr. Hansen is CEO and a director of General Moly Inc., a position he has held since 2007. Prior to that, he was senior vice president, operations services and development with Newmont Mining Corporation. He worked with Newmont for 10 years, holding increasingly senior roles, including CFO from 1999 to 2005. Prior to joining Newmont, Mr. Hansen spent 12 years with Santa Fe Pacific Gold, where he held increasingly senior management roles, including senior vice president of corporate development and vice president of finance and development. Mr. Hansen holds a Master of Business Administration from the University of New Mexico and a Bachelor of Science degree in Mining Engineering from the Colorado School of Mines. Mr. Hansen is also a director and serves on the audit committee of ASA Gold and Precious Metals Ltd.

Jaqueline Herrera, director of Energy Fuels. Ms. Herrera has more than 23 years of experience in water treatment and process improvements in multiple industries, including the oil refinery, petrochemical, chemical, mining and mineral processing, and food and beverage industries. From 1998 to 2019, she worked for Nalco Water, an Ecolab Company that provides water hygiene, treatment and process improvements and energy and air solutions, in increasingly senior management roles, including sales operations and global industry development for the base metals and iron ore industries. In that role, Ms. Herrera worked in the bauxite mining and alumina processing sectors in South America, the U.S., and the Caribbean and then expanded into global base metals with a focus on the copper and molybdenum markets in various regions. In 2019, Ms. Herrera moved to the food and beverage division within Ecolab Inc., where she currently leads the protein segment, responsible for corporate account business operations and sales in the U.S. and Canada. She is a U.S. patent holder on functionalized silicones for froth flotation. Ms. Herrera has volunteered for UNICEF and Water for People in remote communities in Latin America, providing education and technical expertise in water treatment for drinking water to schools in remote areas. Ms. Herrera is a member of the Society of Women Engineers and is a board member of a non-profit organization to help youth in disadvantage financial conditions to develop leadership skills. She holds a Bachelor of Science in both metallurgical engineering and industrial engineering from the Universidad Nacional Politécnica "Antonio José de Sucre" in Venezuela; a Master of Sciences in material science from the Universidad de Oriente, Venezuela; and a Master of Business Administration in operations from the University of Phoenix, Baton Rouge, Louisiana. She is fluent in Spanish, Portuguese, and English.

Dennis Higgs, director of Energy Fuels and president and director of Austin Gold Corp. Mr. Higgs has been involved in the financial and venture capital markets in Canada, the U.S., and Europe for over 30 years. He founded his first junior exploration company in 1983 and took it public through an IPO in 1984. Since then, Mr. Higgs has been involved in the founding, financing, initial public listing, and building of several companies. He was directly involved with the founding and IPO of Arizona Star Resource Corp. and the listing and financing of BioSource International Inc., both of which were the subjects of take-over bids. Most recently, Mr. Higgs was one of the founding directors and subsequently executive chairman of Uranerz before it merged with Energy Fuels. He was executive chairman of the board of directors of Uranerz from February 1, 2006, until June 18, 2015. Mr. Higgs is currently president and a director of Austin Gold Corp., a gold exploration company. Mr. Higgs holds a Bachelor of Commerce degree from the University of British Columbia.

Robert Kirkwood, director of Energy Fuels and principal of the Kirkwood Companies. Mr. Kirkwood is a principal of the Kirkwood Companies, including Kirkwood Oil and Gas LLC, Wesco Operating, Inc., and United Nuclear LLC. He has been with the Kirkwood Companies for over 35 years and has been involved in all aspects of oil and gas exploration and operations. From 2000 to date, the Kirkwood Companies have grown from less than 500 barrels of oil per day and seven employees to over 3,000 barrels of oil per day and 60 employees with field offices in Ft. Washakie, Wyoming; Baggs, Wyoming; Moab, Utah; and Ely, Nevada. The Kirkwood Companies have identified, evaluated, negotiated, and closed over \$110,000,000 of production acquisitions in the Rocky Mountain States. Mr. Kirkwood is a 1982 graduate of the University of Wyoming with a Bachelor of Science in petroleum engineering.

Alex Morrison, director of Energy Fuels. Mr. Morrison is a mining professional with experience in management, technical, governance, and financial skills in the precious and base metals industries. He also has experience in financial reporting, capital raising, audit, and deal-making. He is currently a board member of Taseko Mines Ltd., Gold Resources Corporation, and Gold Standard Ventures. He previously served as a director for Pershing Gold Corporation and Detour Gold Corporation. From 2007 to 2010, Mr. Morrison served as vice president and CFO of Franco-Nevada Corporation, and from 2002 to 2007, he held several roles with Newmont Mining Corporation, including vice president, information technology; vice president, operations services; group executive, operations services; and group executive, internal audit. Mr. Morrison also has 13 years of experience with PricewaterhouseCoopers, where he provided business advisory, financial audit, and operational audit services to a diverse group of mining clients.

Income Statement—Energy Fuels, Inc. (UUUU)

Energy Fuels Inc.												
Income Statement												
(\$ in millions except per share data)	2021A	2022A	2023A	1Q24E	2Q24E	3Q24E	4Q24E	2024E	2025E	2026E	2027E	2028E
INCOME STATEMENT								-				
Revenues:												
Uranium	-		33.3	25.3	4.7	7.1	7.2	44.2	157.9	202.8	252.1	367.3
Vanadium	0.1	8.8	0.9	1.1	-	0.5	0.5	2.1	23.0	36.0	36.0	36.0
Rare earth	1.4	2.1	2.8	-	1.4	1.0	1.0	3.4	4.6	12.0	84.0	217.6
Alternate Feed Materials, processing and other	1.7	1.6	0.9	0.6	0.6	0.6	0.6	2.5	2.5	2.5	2.5	2.5
Total Revenue	3.2	12.5	37.9	27.0	6.7	9.2	9.3	52.2	188.0	253.3	374.6	623.4
Cost of Sales:												
Uranium	-	-	15.3	9.0	1.5	2.3	2.3	15.0	66.7	80.2	109.1	163.0
Vanadium Rare earth	0.0 1.2	3.8 1.3	0.6 2.3	0.8	1.4	0.4 0.9	0.4	1.5 3.2	15.0 3.7	24.0 8.0	24.0 48.0	24.0 84.0
Other cost of sales	0.5	2.8	2.5	-	1.4	0.9	0.9	5.2	5.7	8.0	46.0	84.0
Total Cost of Sales	1.8	7.8	18.2	9.8	2.9	3.5	3.5	19.7	85.4	112.2	181.1	271.0
Gross Profit (Loss)	1.4	4.7	19.7	17.3	3.8	5.7	5.8	32.5	102.6	141.0	193.5	352.5
Other Operating Costs:												
Exploration, development and processing	10.8	9.3	15.5	3.0	3.0	3.0	3.0	12.0	14.0	16.0	16.0	16.0
Standby	9.5	13.2	7.5	2.0	2.0	2.0	2.0	8.0	8.0	8.0	4.0	4.0
Accretion of asset retirement obligations	1.3	1.6	1.2	0.3	0.3	0.3	0.3	1.2	1.2	1.2	1.2	1.2
Selling, general and administration	15.3	25.5	27.9	7.5	7.5	7.5	7.5	30.0	30.9	31.8	32.8	33.8
Total Other Operating Costs	36.8	49.6	52.1	12.8	12.8	12.8	12.8	51.2	54.1	57.0	54.0	55.0
Constitution of the Constitution	(25.4)	(44.0)	(22.4)		(0.0)	(7.4)	(7.0)	(40.7)	40.5		420.5	207.5
Operating Income (Loss) Gain on sale of assets	(35.4) 35.7	(44.9) 0.4	(32.4) 119.3	4.5	(9.0)	(7.1)	(7.0)	(18.7)	48.5	84.0	139.5	297.5
Change in value of investments	6.3	(16.9)	5.0	-	-	-		-	-	-		-
Change in value of marketable securities	0.3	(10.5)	0.6	_								
Change in value of marketable securities Change in value of warrant liabilities	(8.1)		-	_	_	-			-	-		-
Change in value of Convertible Debentures	(0.1)	_	1.4	_	_	_		_	_	_	_	_
Foreign exchange gain (loss)	(0.1)	2.1	0.4	_	_			_	-	-		_
Department of Energy awards	1.9	_	_	_	_	_		_	-	-	_	_
Net Interest income (expense)	-		5.7	-	-	-		-	(4.0)	(20.0)	(32.0)	(32.0)
Other	1.1	(0.5)	-	-	-	-		-	- 1	- 1		-
Net Income (Loss) Before Taxes	1.4	(59.9)	100.0	4.5	(9.0)	(7.1)	(7.0)	(18.7)	44.5	64.0	107.5	265.5
Tax expense (credit)	-		0.3	-	-	-	-	-	-	-		-
Tax expense (credit) (%)	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Net Income (Loss)	1.4	(59.9)	99.8	4.5	(9.0)	(7.1)	(7.0)	(18.7)	44.5	64.0	107.5	265.5
Foreign currency translation adjustment	(0.4)	(3.9)	-					<u> </u>	-	-	-	-
Comprehensive income (loss)	1.1	(63.8)	99.8	4.5	(9.0)	(7.1)	(7.0)	(18.7)	44.5	64.0	107.5	265.5
Income (Loss) Per Share:												
Basic	0.01	(0.38)	0.63	0.03	(0.05)	(0.04)	(0.04)	(0.11)	0.25	0.35	0.56	1.39
Diluted	0.01	(0.38)	0.62	0.03	(0.05)	(0.04)	(0.04)	(0.11)	0.25	0.35	0.56	1.39
Weighted Average Common Shares:												
Basic	146.9	157.3	158.4	163.6	166.3	169.1	171.9	167.7	176.8	184.4	191.3	191.3
Diluted	149.7	157.3	159.3	163.6	166.3	169.1	171.9	167.7	176.8	184.4	191.3	191.3
RECONCILIATION TO ADJUSTED EBITDA												
Net income (loss)	1.4	(59.9)	99.8	4.5	(9.0)	(7.1)	(7.0)	(18.7)	44.5	64.0	107.5	265.5
Tax exoense (credit)	-		0.3	-	-	-		-				
Net interest expense	-	-	(5.7)	-	-	-		-	4.0	20.0	32.0	32.0
Depletion, depreciation and amortization	3.2	3.3	2.8	0.4	0.5	0.5	1.1	2.6	8.4	16.4	21.4	22.0
EBITDA Share-based compensation	4.6 2.2	(56.7) 4.6	97.1 4.6	4.9 1.0	(8.5) 1.0	1.0	1.0	(16.2) 4.0	56.9 4.0	100.4 4.0	160.9 4.0	319.6 4.0
Gain on sale of assets				1.0	1.0	1.0	-	4.0	4.0	4.0	4.0	4.0
Change in value of Convertible Debentures	(35.7)	(0.4)	(119.3) (1.4)	-	-	-						
Change in value of warrant liabilities	8.1	-	(1.4)	-	-	-						
Change in value of marketable securities	-		(0.6)		-	-						
Accretion of asset retirement obligation	1.3	1.6	1.2	0.3	0.3	0.3	0.3	1.2	1.2	1.2	1.2	1.2
Foreign exchange gain (loss)	0.1	(2.1)	(0.4)	-	-	-	-	-				-
Revision and settlement of asset retirement obligation	(0.4)	(0.2)	-	-	-	-			-	-		_
Impairment of inventories	-	-	-	-	-	-						
Change in value of investments	(6.3)	16.9	(5.0)	-	-	-			-	-	-	-
Other non-cash expenses	(3.0)	0.5	-									-
Adjusted EBITDA	(29.2)	(35.7)	(23.8)	6.2	(7.2)	(5.3)	(4.6)	(11.0)	62.1	105.6	166.1	324.8

Proprietary to B. Riley Securities, Inc. April 16, 2024 Matthew Key . 703-312-1821 . mkey@brileyfin.com

Source: Company reports and B. Riley Securities Research

Valuation

We base our valuation for UUUU on a detailed DCF model that incorporates our company projections through 2028, plus a terminal-year estimate. From this analysis, we calculate a \$9 price target for UUUU, representing an implied 21.7x multiple on our 2025E adjusted EBITDA estimate of \$62.1M and an implied 12.7x multiple on our 2026E adjusted EBITDA estimate of \$105.6M. In our terminal year, we are assuming 5.5M lbs of uranium sales and a long-term U3O8 benchmark price of \$80/lb. In addition, we are modeling 2,400 Mt of TREO sales, as well as 2.0M lbs of vanadium sales in our terminal year. Based on our pricing and cost assumptions for the company, this equates to ~\$320M in terminal-year EBITDA, or an implied EV/EBITDA multiple of 4.2x. Lastly, our model assumes a share count of 163.6M, 0% terminal-year EBITDA growth, and a WACC of 10%.

Risks

Uranium pricing is extremely volatile. Energy Fuels is a uranium miner, and the nuclear energy sector is the company's primary end market. Uranium pricing is highly volatile and uncorrelated to most major commodities. Prices reflect changes in economic conditions/outlook and supply/demand, among other factors.

Regulatory and legislative uncertainties. UUUU operates in a highly regulated industry that is subject to extensive permitting regulations and ongoing environmental compliance. Changes in legislation or changes in the interpretation of existing legislation could have a negative impact on the company's long-lived assets.

A clear correlation between uranium demand and economic growth. Uranium demand is highly correlated to economic growth. We would likely need to see continued growth in economic activity for uranium demand to increase.

The uranium industry has operational risk. Uranium mines are complex and can face operational difficulties, potentially leading to production shortfalls or higher unit costs. These challenges can hurt the bottom line of a commodity producer and cause it to miss earnings expectations.

Costs are hard to predict. In addition to production shortfalls, large portions of uranium production costs are tied to unpredictable raw material/chemical costs. When input costs rise faster than expected, this can cause companies to miss their cost estimates. Labor is also a major component of input costs, which is subject to inflationary pressures over time.

Risk to our price target. If our estimates prove optimistic, our price target is not likely to be achieved.

*Closing price of last trading day immediately prior to the date of this publication unless otherwise indicated.

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(1) As of midnight on the business day immediately prior to the date of this publication.

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