



Azarga Uranium Corp.

(AZZ-T)

SECTOR: Metals & Mining

STOCK PRICE \$0.255
 RATING BUY
 TARGET PRICE ↑ \$0.65
 Previous \$0.50

GAS HILLS PEA

Saddle Up: Gas Hills PEA Makes AZZ 2-Trick Pony

OUR TAKE: The new Gas Hills Preliminary Economic Assessment (PEA) indicates an attractive ISR uranium satellite project that delivers a post-tax project NAV_{8%} of US\$102.6M and a post-tax IRR of 101% at US\$55/lb U₃O₈, with a very low CAPEX hurdle of US\$26M, cash-opex and pre-tax all-in costs of US\$11.52/lb and US\$28.20/lb respectively, which suggests **the project is quite robust and potentially attractive even at current uranium prices** (see Figures 3/4 for sensitivities), and compares very similarly in terms of annual production (1mlb/y) and operating cost profile, to Azarga's flagship Dewey Burdock project. The Gas Hills PEA is dependent on future development of Azarga's flagship Dewey Burdock ISR uranium project in South Dakota that underpins the majority of our valuation. That project also has a very low CAPEX hurdle at US\$31M, and together these projects de-risk and mature Azarga with visibility on additional production rate or duration from its U.S. portfolio.

KEY HIGHLIGHTS

- ◆ **PEA suggests attractive economics at Gas Hills with tolerance for lower prices.** The PEA base-case uses a uranium price of US\$55/lb U₃O₈, which is below our terminal uranium price forecast of US\$65/lb within Gas Hills' likely production window, given our bullish view on uranium prices. Despite this, it is reassuring to see a US\$35M NPV_{8%} / 44% IRR (pre-tax) at US\$35/lb, equivalent to more than half AZZ's market cap for this secondary project. With all-in pre-tax cost of production of ~US\$28/lb, Gas Hills has the potential to be a very resilient project capable of generating positive cash-flow even at currently depressed term market prices.
- ◆ **Gas Hills PEA Highlights** (June 2021) (see Figure 2 for Gas Hills / Dewey Burdock side-by-side):
 - **Mine-life:** 7 years, including ramp-up
 - **Life-of-mine Production:** 6.5 Mlb U₃O₈ (1.0Mlb/y at steady-state)
 - **Direct Cash OPEX:** US\$11.52/lb U₃O₈
 - **Total pre-tax OPEX:** US\$28.20/lb U₃O₈
 - **CAPEX:** US\$26M
 - **Pre-Tax NPV/IRR @ US\$55/lb:** US\$121M / 116%
 - **After-Tax NPV/IRR @ US\$55/lb:** US\$103M / 101%
 - **Gas Hills Resources:** Measured & Indicated Resources of 10.8 Mlb U₃O₈, including 7.7 Mlb of in-situ recovery (ISR) M&I resources at an average grade of 0.101% U₃O₈.
- ◆ **Increasing Target on De-risking of Gas Hills.** With the PEA now complete, we have integrated Gas Hills into our production profile for Azarga, replacing our US\$2.00/lb in-situ credit for the asset. Our combined Dewey + Gas Hills DCF NAV increases to US\$230M from US\$175M (Dewey alone) resulting in an **increase in our formal target to \$0.65 (from \$0.50).**

OUTLOOK & RECOMMENDED ACTION

We recommend owning Azarga with the below catalysts in mind.

- ◆ **Positive PEA on Gas Hills de-risks and increases Azarga's potential to evolve into a multi-source production centre.** Azarga's share price performance has lagged (Figure 7) peers during a very strong period for uranium equities (Azarga +48% vs Developer peer average of +195% since Nov. 2020). We could see that gap closing as it grows and de-risks its future production base. AZZ is trading at 0.38x our valuation which is based on 1.0x our corporate NAV. Select peers are trading at 0.7-0.8x NAV. With the positive PEA, Gas Hills adds a second development stage asset with compelling economics to AZZ's fold and the additional scale potential should reinvigorate interest in Azarga and we recommend adding to positions here.

CATALYSTS

1. **2021/22** - Final State level permits required to take Dewey Burdock into production – the State-level processes were previously paused pending outcome of federal permitting process, which has concluded. State-level permitting may conclude at any time.
2. **2021/22** – Growing and ongoing U.S. political support for Nuclear as U.S. Government plans to revive domestic uranium mining industry to maintain energy and defense self-sufficiency domestic uranium / nuclear fuel supply chain.

PROJECTED RETURN

155%

RISK FACTOR

Very High

SCENARIO ANALYSIS

Downside Scenario	Current Price	Price Target
\$0.15	\$0.255	\$0.65
↓41%		↑155%

KEY STATISTICS AND METRICS

52-Week High/Low	\$0.36/\$0.16
YTD Performance	6.3%
Dividend Yield	NA
Shares O/S	233.6M
Market Capitalization	\$59.6M
Cash	\$2.2M
Debt	\$0.2M
Enterprise Value	\$57.6M
Daily Volume (3 mos.)	233,170
Currency	C\$ unless noted

HAYWOOD ESTIMATES (USD)

	2020A	2021E	2022E
Revenue (\$M)	0	0	0
EBITDA (\$M)	(1.6)	(1.7)	(1.7)

VALUATION

Our \$0.65/share target is primarily based on an NPV_{10%} of the Dewey Burdock plus Gas Hills projects, assuming a US\$65/lb uranium price. Including credit for its other projects and corporate adjustments, we apply a 1.0x P/NAV multiple to arrive at our target.

INVESTMENT THESIS

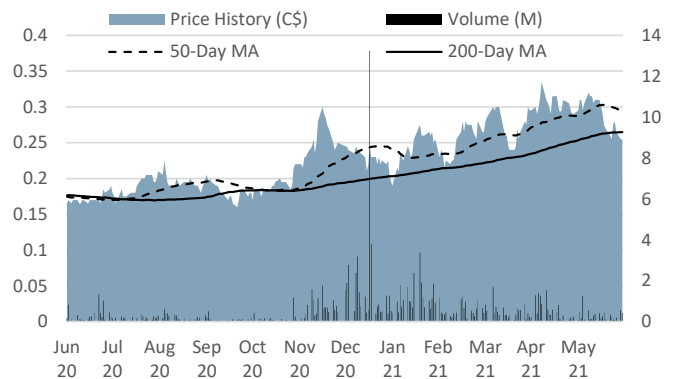
- Making the Grade.** Average resource grades of 0.11% U₃O₈ (Measured at 0.132%) at Dewey Burdock, and 0.101% U₃O₈ at Gas Hills position these projects **among the highest grade undeveloped ISR uranium project in the U.S.**, and well above some existing producers. Although many factors determine the successful extraction of uranium in an ISR operation, higher concentrations of uranium will help to reduce sustaining capex in the form of well-field development costs per pound of production, on a relative basis, and could prove to be a sustainable advantage. We believe the advanced-stage Dewey Burdock uranium project could reach production by 2023, coincident with a time when uranium prices are forecast to have increased significantly from current levels.
- Azarga Uranium** completed a merger with URZ Energy in July 2018, creating a U.S.-based uranium junior developer with a diversified asset base with combined all-categories NI 43-101 uranium resources of over 46 Mlb U₃O₈ (87% Meas.&Ind.) within South Dakota, Wyoming and Colorado.
- Azarga Poised to Deliver Further Stock-Catalyzing News Flow in 2021:** Azarga has now delivered on a key 2021 catalyst with the Gas Hills PEA, which it has rapidly advanced and now demonstrated strong potential economics in a future production scenario. The Gas Hills satellite potential compliments that the 2019 Dewey Burdock Preliminary Economic Assessment (PEA) which indicated significant improvement in all core metrics for that project, which positions as a 1.0Mlbpa U₃O₈ mine, with a 16 year life, cash costs <US\$11/lb and all-in production costs <\$29/lb. The Dewey Burdock project has received all key Federal-level permits, and is now awaiting State-level permits, which could come at any time, and would further unlock the stock.

KEY RISKS

- Licensing / Permitting:** While AZZ has an NRC Source Materials License and final EPA permits for the flagship Dewey Burdock project, there remains State-level permitting risk as these permits are required to further advance the project toward production.
- Financial:** Azarga is a pre-revenue, development-stage company, and will almost certainly rely on external funding source in the form of future equity dilution or debt capital.
- Commodity Price:** Our forecasts include a substantial increase in uranium price from current market prices. Failure for this to materialize would negatively impact our valuation.

SCENARIO ANALYSIS

Azarga Uranium Corp. (AZZ-T)



Source: Capital IQ, and Haywood Securities

TARGET PRICE

Our \$0.65/share (from \$0.50) target is primarily based on an NPV_{10%} of the Dewey Burdock + Gas Hills project, assuming a US\$65/lb uranium price. Including credit for its other projects and corporate adjustments, we apply a 1.0x P/NAV multiple to arrive at our target.

DOWNSIDE CASE

Our downside case takes a 0.2x multiple to our base case valuation including the NPV_{10%} of the Dewey Burdock + Gas Hills project and gives no credit for Azarga's other projects.

Our downside scenario price is a theoretical case based on notional valuation metrics and market assumptions. The downside price is solely intended for demonstrative purposes and is not to be regarded as a reflection of all market possibilities. It is not a guarantee that this company's share price will not drop below this price level and hence should not be taken as such.

Company Website

www.azgauranium.com

Key Management

Blake Steele (President & CEO)



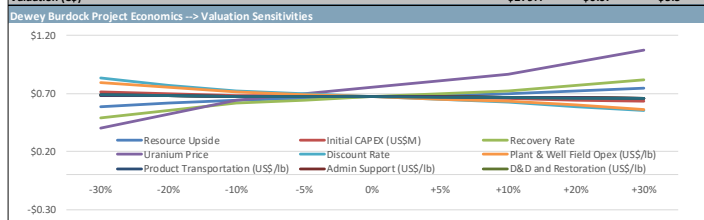
Azarga Uranium (AZZ-T)

Azarga Uranium Corp. TSX:AZZ Price: \$0.255 Shares O/S (M) 233.6 Rating: Buy
 June 29, 2021 MCap (C\$ M) \$60 Target (C\$): \$0.65 Return: 155%

Investment Highlights
 Azarga is a junior uranium development company with a U.S.-based suite of assets.
Catalysts:
2021/22 - Final State level permits required to take Dewey Burdock into production – the State-level processes were previously paused pending outcome of federal permitting process, which has concluded. State-level permitting may conclude at any time.
2021/22 – Growing and ongoing U.S. political support for Nuclear as U.S. Government plans to revive domestic

Financials & Model Assumptions	2020	2021	2022	2023	2024	2025
	Dec-20	Dec-21	Dec-22	Dec-23	Dec-24	Dec-25
Spot Uranium Price (US\$/lb U3O8)	\$39	\$39	\$47	\$55	\$65	\$65
LT Uranium Price (US\$/lb U3O8)	\$46	\$46	\$55	\$63	\$65	\$65
USD/CAD	1.34	1.25	1.25	1.25	1.25	1.25
Revenue (US\$)	\$0.0	\$0.0	\$0.0	\$0.6	\$4.2	\$6.0
Total Project Costs (US\$)	\$0.0	\$0.0	\$0.0	\$2.3	\$20.0	\$28.5
Corporate G&A (US\$)	\$1.6	\$1.6	\$1.6	\$1.7	\$1.7	\$1.7
EBITDA (US\$)	(\$1.6)	(\$1.6)	(\$1.7)	(\$3.4)	(\$17.5)	(\$24.3)
Weighted Avg. S/O (Basic)	232	234	234	243	257	258
Weighted Avg. S/O (Diluted)	275	277	277	286	300	301
Earnings (US\$M)	(\$2.1)	(\$1.6)	(\$1.7)	(\$3.5)	(\$25.5)	(\$35.4)
EPS (US\$)	(\$0.01)	(\$0.01)	(\$0.01)	(\$0.01)	(\$0.10)	(\$0.14)
Free Cash Flow (US\$M)	(\$2.10)	(\$15.76)	(\$7.45)	(\$9.06)	(\$29.77)	(\$25.82)

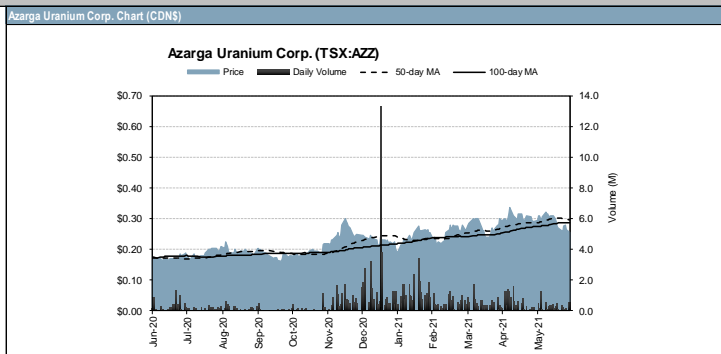
Sum-of-Parts Valuation	Project	Location	M&I Resource (lbs)	Forecast Resource	Valuation	Per Share	EV/lb
	Dewey Burdock	S. Dakota, USA	18.39	24.22	\$174.5	\$0.42	\$7.2
	Gas Hills	Wyoming, USA	10.77	10.77	\$49.3	\$0.12	\$4.6
	Aladdin	Wyoming, USA	1.04	1.04	\$1.0	\$0.00	\$1.0
	Juniper Ridge	Wyoming, USA	6.12	6.12	\$6.1	\$0.01	\$1.0
	Shirley Basin	Wyoming, USA	0.00	0.00	\$0.0	\$0.00	NM
	Dewey Terrace	Wyoming, USA	0.00	0.00	\$0.0	\$0.00	NM
	Savageton	Wyoming, USA	0.00	0.00	\$0.0	\$0.00	NM
	Centennial	Colorado, USA	10.61	10.61	\$10.6	\$0.03	\$1.0
	Kyzyl Ompul (70%)	Kazakhstan	0.00	0.00	\$0.0	\$0.00	NM
Total			46.9	52.8	\$241.6	\$0.58	\$4.6
Corp. Adjustments					(\$18.07)	-\$0.04	
P/NAV Multiple	1.0x						
Valuation (US\$)					\$223.5	\$0.54	\$4.2
Valuation (C\$)					\$279.4	\$0.67	\$5.3



Comparable Companies	Name	Share Price	Cons. Target	Return	Market Cap (M)	EV (M)	EV/lb	P/NAV
	Denison Mines (DML-T)	\$1.52	\$2.20	44%	\$1,223	\$865	0.9x	
	Energy Fuels (UUUU-US)	\$7.33	\$8.11	11%	\$1,031	\$806	1.2x	
	Uranium Energy (UEC-US)	\$3.12	\$4.84	55%	\$728	\$572	0.7x	
	Ur-Energy Inc. (URE-T)	\$1.66	\$2.36	42%	\$316	\$261	0.8x	
	Laramide Resources (LAM-T)	\$0.46	\$0.00		\$81	\$70		
	Peninsula Energy (PEN-AU)	\$0.14	\$0.26	83%	\$144	\$107	0.4x	
	Azarga Uranium (AZZ-T)	\$0.26	\$0.65	155%	\$59.6	\$57.6	\$1.09	0.38x
	Group Avg. (Ex-AZZ)							0.8x

Dewey Burdock Production Profile	2023	2024	2025	2026	2027	2028
Total Uranium Production (lbs)	176,145	1,233,018	1,761,455	1,761,455	1,761,455	1,761,455
Reserve Profile (lbs)	19,203,308	17,994,467	16,267,551	14,540,635	12,813,718	11,086,802

Gas Hills Production Profile	2030	2031	2032	2033	2034	2035
Total Uranium Production (lbs)	464,786	929,571	929,571	929,571	929,571	929,571
Reserve Profile (lbs)	6,051,328	5,139,983	4,228,639	3,317,294	2,405,950	1,494,605



Trading Statistics (C\$): Capital Structure	52 Week High/Low	\$0.36	\$0.16	Average Daily Volume	233,170
Ownership (M)	Insider / Institutional				
Shares	17,944,972	31,919,256			
% O/S	7.7%	13.7%			
Last Financings	December 31, 2020: Closed bought deal prospectus offering, issuing a total of 30,000,000 units at a price of C\$0.20 per Unit for gross proceeds of C\$6,000,000.				
Shares O/S (M) - Basic/Diluted	234	277			
Cash (as of Dec. 31, 2020)	Av Strike (C\$)	Units (M)	ITM Units (M)	Proceeds (C\$)	
Options	\$0.20	16.21	13.12	\$2	
Warrants	\$0.27	26.99	5.44	\$1	
Total Cash & ITM	\$0.24	43.20	18.56	\$6	

Target Price Sensitivities	Valuation/Shr	Base	-30%	-20%	-10%	-5%	+5%	+10%	+20%
Dewey Burdock Model Input									
Resource Upside	\$0.67	\$0.59	\$0.62	\$0.65	\$0.66	\$0.69	\$0.70	\$0.73	\$0.73
Initial CAPEX (US\$M)	\$0.67	\$0.71	\$0.70	\$0.69	\$0.68	\$0.67	\$0.66	\$0.66	\$0.65
Recovery Rate	\$0.67	\$0.49	\$0.56	\$0.62	\$0.65	\$0.70	\$0.73	\$0.78	\$0.78
Uranium Price	\$0.75	\$0.40	\$0.52	\$0.64	\$0.70	\$0.81	\$0.86	\$0.97	\$0.97
Discount Rate	\$0.67	\$0.83	\$0.77	\$0.72	\$0.70	\$0.65	\$0.63	\$0.59	\$0.59
P/NAV Multiple	\$0.67	\$0.67	\$0.67	\$0.67	\$0.67	\$0.67	\$0.67	\$0.67	\$0.67
Leverage	\$0.67	\$0.66	\$0.66	\$0.67	\$0.67	\$0.68	\$0.68	\$0.69	\$0.69
Interest Rate	\$0.67	\$0.69	\$0.68	\$0.68	\$0.68	\$0.67	\$0.67	\$0.67	\$0.67
Equity Issue Price	\$0.67	\$0.67	\$0.67	\$0.67	\$0.67	\$0.67	\$0.67	\$0.67	\$0.67
USD/CAD	\$0.67	\$0.67	\$0.67	\$0.67	\$0.67	\$0.67	\$0.67	\$0.67	\$0.67
Surface Royalties	\$0.67	\$0.68	\$0.68	\$0.68	\$0.67	\$0.67	\$0.67	\$0.67	\$0.67
Average	\$0.68	Min	\$0.40	Max	\$0.97	Std. Dev	7.0%		

Dewey Burdock Resource & Haywood Mining Concept	Current Resource (M&I)	Current Resource (Total)	Forecast Resource	Grade	Recovery	Dilution	Process Yield
	18,387,184	19,214,666	24,220,000	0.2%	80%	2%	100%
	CAPEX/OPEX		Other Model Assumptions				
Initial CAPEX (US\$M)	\$30	Steady State Annual Production (M lbs)					1.76
LoM Sustaining CAPEX (US\$M)	\$146	LoM Production (M lbs)					19.02
LoM Cash Operating Cost (US\$/lb)	\$17	Mine Life (Y)					11.00
LoM Total Cash Opex & Capex (US\$/lb)	\$27	LoM Gross Revenue (US\$M)					\$1,237
		LoM Operating CF (US\$M)					\$779

Gas Hills Resource & Haywood Mining Concept	Current Resource (M&I)	Current Resource (Total)	Grade	Recovery	Dilution	Process Yield
	10,765,191	11,255,263	0.07%	80%	2%	100%
	CAPEX/OPEX		Other Model Assumptions			
Initial CAPEX (US\$M)	\$26	Steady State Annual Production (M lbs)				0.93
LoM Sustaining CAPEX (US\$M)	\$59	LoM Production (M lbs)				6.51
LoM Cash Operating Cost (US\$/lb)	\$11	Mine Life (Y)				7.00
LoM Total Cash Opex & Capex (US\$/lb)	\$24	LoM Gross Revenue (US\$M)				\$423
		LoM Operating CF (US\$M)				\$322

Corporate Contact
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 Colin Healey, MBA - Research Analyst Emma Boggio, MSA, CPA, CA - Research Associate
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Source: Bloomberg, Capital IQ, Company Reports, and Haywood Securities

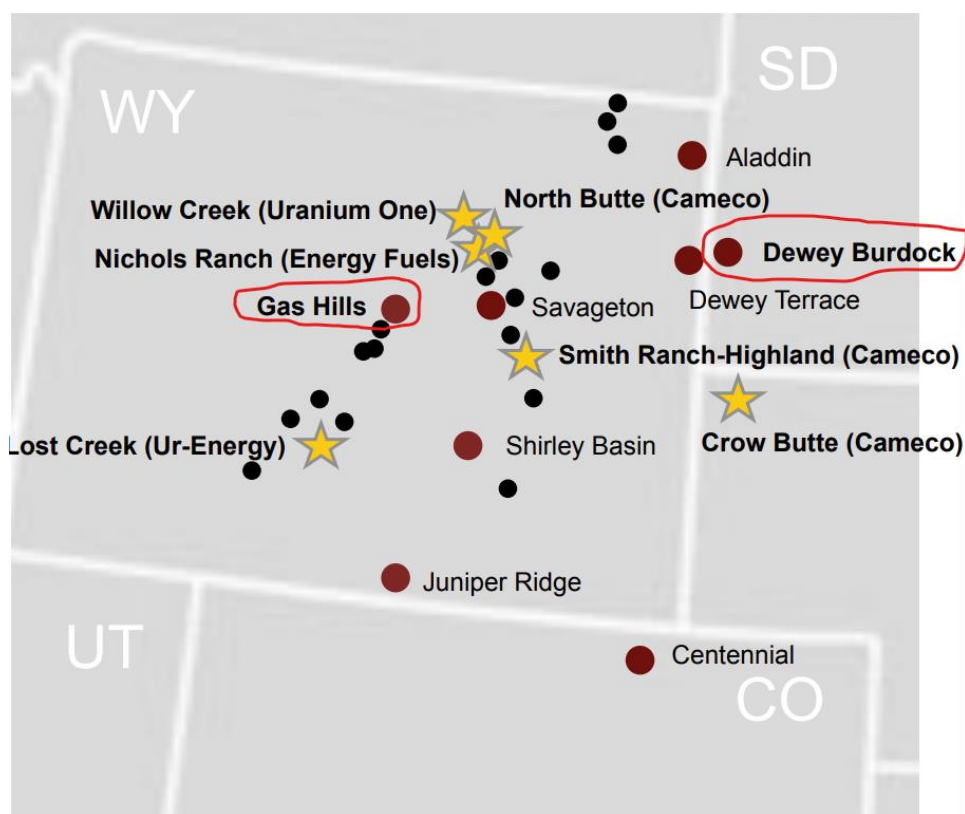


Gas Hills PEA Highlights Robust Project

PEA Indicates CAPEX /OPEX Profile on Par with Flagship Asset – Demonstrates Solid Economics at Close to Current Term Price

Background: Azarga has been working to demonstrate the Gas Hills project's potential as an ISR uranium mine for some time. First steps were reassessing historic data to outline an ISR amenable component within the resource area. Next steps included further drill log analysis and assessment culminating in the March 2021 Resource update ([our report here](#)) that significantly grew the ISR amenable resources. That work led to the decision to initiate the subject Preliminary Economic Assessment just released. The PEA studies Gas Hills as a satellite operation to the Company's flagship Dewey Burdock (DB) ISR project, which has a similarly scoped annual production profile (1.0Mlb/y). Loaded resin from the Gas Hills project would be shipped to DB for processing into yellowcake. The 100%-owned Dewey Burdock ISR uranium project is located in southwestern South Dakota right near the Wyoming border and less than 100 miles east of Wyoming's newest ISR uranium mines (Figure 1). The Dewey Burdock (DB) project PEA, outlines a low-capex, low-OPEX ISR uranium mining operation with a ~16-year life, producing ~1.0 Mlb/year at steady state. A summary of the PEA mining scopes and economics are provided in Figure 2.

Figure 1: Relative Position of Flagship Dewey Burdock and Gas Hills Projects



Source: Azarga Uranium – Haywood modification

Gas Hills Project Description: Gas Hills (Wyoming) is located approximately 250 miles from the flagship Dewey Burdock project (South Dakota). The new PEA on Gas Hills assumes it will function as a satellite production well-field to DB. The deposit setting is sandstone hosted roll front uranium mineralization, with potentially ISR amenable resources located below the water table. Similarly, the DB Project, located in southwest South Dakota and is comprised of typical sandstone-hosted roll-front style uranium mineralization. Mineralization occurs in multiple hydrogeologically isolated horizons necessary for in-situ recovery of uranium.

March 2021 Resource update: Measured and Indicated uranium resources of 10.77 million pounds U_3O_8 up from 4.73 Mlb prior (128% increase) with an average grade of 0.077% U_3O_8 , with inferred Resources of 0.49 million pounds U_3O_8 , for 8.13 Mlb U_3O_8 all-categories resources. **Measured and Indicated in-situ recovery ("ISR") uranium resources total 7.71 million pounds U_3O_8 (72% of overall Measured and Indicated resources) with an average grade of 0.101% U_3O_8 .**



Making the Grade: Between Dewey Burdock and Gas Hills, the deposits remain among the highest grade undeveloped ISR uranium projects in the U.S., and well above some existing producers using a GT cutoff similar to most recent ISR deposit resources in the U.S. Although many factors determine the successful extraction of uranium in an ISR operation, higher concentrations of uranium will help to reduce sustaining capex in the form of well-field development costs per pound of production and could be a sustainable advantage.

Figure 2: New Gas Hills PEA Highlights & Resources (top) & Dewey Burdock PEA Highlights & Resources (December 2019)

PEA Highlights	Project Resources																																																																						
<p>Gas Hills June 2021 PEA Highlights</p> <ul style="list-style-type: none"> • Mine-life: 7 years, including ramp-up • Production: 1 Mlbpa U₃O₈ (steady state) • Life-of-mine Production: 6.5 Mlb U₃O₈ • Direct Cash OPEX: US\$11.52/lb U₃O₈ • Total pre-tax OPEX: US\$28.20/lb U₃O₈ • CAPEX: US\$26.0M • Pre-Tax NPV/IRR (us\$55/lb): US\$121M / 116% • After-Tax NPV/IRR (us\$55/lb): US\$103M / 101% 	<table border="1"> <thead> <tr> <th colspan="5">Gas Hills Project Mineral Resource estimate at 0.10 GT (inclusive of ISR resources)</th> </tr> <tr> <th></th> <th>Measured Resources</th> <th>Indicated Resources</th> <th>M + I Resources</th> <th>Inferred Resources</th> </tr> </thead> <tbody> <tr> <td>Tons</td> <td>993,928</td> <td>6,031,224</td> <td>7,025,152</td> <td>514,393</td> </tr> <tr> <td>Average grade (% U₃O₈)</td> <td>0.103</td> <td>0.072</td> <td>0.077</td> <td>0.048</td> </tr> <tr> <td>Average thickness (feet)</td> <td>5.4</td> <td>6.1</td> <td>6.1</td> <td>6.2</td> </tr> <tr> <td>Average grade-thickness ("GT")</td> <td>0.552</td> <td>0.443</td> <td>0.463</td> <td>0.293</td> </tr> <tr> <td>Uranium (pounds)</td> <td>2,051,065</td> <td>8,714,126</td> <td>10,765,191</td> <td>490,072</td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th colspan="5">Gas Hills Project ISR Mineral Resource estimate at 0.10 GT</th> </tr> <tr> <th></th> <th>Measured Resources</th> <th>Indicated Resources</th> <th>M + I Resources</th> <th>Inferred Resources</th> </tr> </thead> <tbody> <tr> <td>Tons</td> <td>993,928</td> <td>2,835,339</td> <td>3,829,267</td> <td>409,330</td> </tr> <tr> <td>Average grade (% U₃O₈)</td> <td>0.103</td> <td>0.1</td> <td>0.101</td> <td>0.052</td> </tr> <tr> <td>Average thickness (feet)</td> <td>5.4</td> <td>4.9</td> <td>5.0</td> <td>5.9</td> </tr> <tr> <td>Average grade-thickness ("GT")</td> <td>0.552</td> <td>0.491</td> <td>0.502</td> <td>0.31</td> </tr> <tr> <td>Uranium (pounds)</td> <td>2,051,065</td> <td>5,654,545</td> <td>7,705,610</td> <td>427,817</td> </tr> </tbody> </table> <p><i>Note: Mineral resources that are not mineral reserves do not have demonstrated economic viability.</i></p> <p>Both the ISR and non-ISR resources were determined using the GT contour method and met the following criteria:</p> <ol style="list-style-type: none"> 1) 0.02 percent grade cutoff; 2) Occur within the same mineral horizon (roll front); 3) Fall within the 0.10 GT contour; and 4) Extend no farther from the drill hole than the radius of influence specified for each category, i.e., measured, indicated or inferred. <p style="text-align: center;">Source: Azarga Uranium, Haywood presentation</p>	Gas Hills Project Mineral Resource estimate at 0.10 GT (inclusive of ISR resources)						Measured Resources	Indicated Resources	M + I Resources	Inferred Resources	Tons	993,928	6,031,224	7,025,152	514,393	Average grade (% U ₃ O ₈)	0.103	0.072	0.077	0.048	Average thickness (feet)	5.4	6.1	6.1	6.2	Average grade-thickness ("GT")	0.552	0.443	0.463	0.293	Uranium (pounds)	2,051,065	8,714,126	10,765,191	490,072	Gas Hills Project ISR Mineral Resource estimate at 0.10 GT						Measured Resources	Indicated Resources	M + I Resources	Inferred Resources	Tons	993,928	2,835,339	3,829,267	409,330	Average grade (% U ₃ O ₈)	0.103	0.1	0.101	0.052	Average thickness (feet)	5.4	4.9	5.0	5.9	Average grade-thickness ("GT")	0.552	0.491	0.502	0.31	Uranium (pounds)	2,051,065	5,654,545	7,705,610	427,817
Gas Hills Project Mineral Resource estimate at 0.10 GT (inclusive of ISR resources)																																																																							
	Measured Resources	Indicated Resources	M + I Resources	Inferred Resources																																																																			
Tons	993,928	6,031,224	7,025,152	514,393																																																																			
Average grade (% U ₃ O ₈)	0.103	0.072	0.077	0.048																																																																			
Average thickness (feet)	5.4	6.1	6.1	6.2																																																																			
Average grade-thickness ("GT")	0.552	0.443	0.463	0.293																																																																			
Uranium (pounds)	2,051,065	8,714,126	10,765,191	490,072																																																																			
Gas Hills Project ISR Mineral Resource estimate at 0.10 GT																																																																							
	Measured Resources	Indicated Resources	M + I Resources	Inferred Resources																																																																			
Tons	993,928	2,835,339	3,829,267	409,330																																																																			
Average grade (% U ₃ O ₈)	0.103	0.1	0.101	0.052																																																																			
Average thickness (feet)	5.4	4.9	5.0	5.9																																																																			
Average grade-thickness ("GT")	0.552	0.491	0.502	0.31																																																																			
Uranium (pounds)	2,051,065	5,654,545	7,705,610	427,817																																																																			
<p>Dewey Burdock December 2019 PEA Highlights</p> <ul style="list-style-type: none"> • Mine-life: 16 years, including ramp-up • Production: 1 Mlbpa U₃O₈ • Life-of-mine Production: 14.3 Mlb U₃O₈ • Cash OPEX: US\$10.46/lb U₃O₈ • Total pre-tax OPEX: US\$28.88/lb U₃O₈ • CAPEX: US\$31.7M • Pre-Tax NPV/IRR (us\$55/lb): US\$171M / 55% • After-Tax NPV/IRR (us\$55/lb): US\$147.5M / 50% 	<table border="1"> <thead> <tr> <th colspan="5">Dewey Burdock ISR Amenable Resource Estimate (Dec. 2019)</th> </tr> <tr> <th>Category</th> <th>Mt</th> <th>Avg. GT</th> <th>U₃O₈ (%)</th> <th>U₃O₈ (lb)</th> </tr> </thead> <tbody> <tr> <td>Measured</td> <td>5.420</td> <td>0.73</td> <td>0.132%</td> <td>14,285,988</td> </tr> <tr> <td>Indicated</td> <td>1.968</td> <td>0.41</td> <td>0.072%</td> <td>2,836,159</td> </tr> <tr> <td>Inferred</td> <td>0.646</td> <td>0.32</td> <td>0.055%</td> <td>712,624</td> </tr> <tr> <td>Global</td> <td>8.034</td> <td>0.62</td> <td>0.111%</td> <td>17,834,771</td> </tr> </tbody> </table> <p><i>*At 0.05% U₃O₈ Cut-off & GT Cut-off of 0.5 (M&Ind.) or 0.2 (Inf.)</i></p> <table border="1"> <thead> <tr> <th colspan="5">Dewey Burdock Non-ISR Resource Estimate (above water table)</th> </tr> <tr> <th>Category</th> <th>Mt</th> <th>Avg. GT</th> <th>U₃O₈ (%)</th> <th>U₃O₈ (lb)</th> </tr> </thead> <tbody> <tr> <td>Measured</td> <td>0.844</td> <td></td> <td>0.057%</td> <td>1,060,000</td> </tr> <tr> <td>Global</td> <td>0.844</td> <td></td> <td>0.057%</td> <td>1,060,000</td> </tr> </tbody> </table> <p><i>*At 0.02% U₃O₈ Cut-off & GT Cut-off of 0.2 (M&Ind.), 0.2 (Inf.)</i></p> <p style="text-align: center;">Source: Azarga Uranium, Haywood presentation and calculation of "Global"</p>	Dewey Burdock ISR Amenable Resource Estimate (Dec. 2019)					Category	Mt	Avg. GT	U ₃ O ₈ (%)	U ₃ O ₈ (lb)	Measured	5.420	0.73	0.132%	14,285,988	Indicated	1.968	0.41	0.072%	2,836,159	Inferred	0.646	0.32	0.055%	712,624	Global	8.034	0.62	0.111%	17,834,771	Dewey Burdock Non-ISR Resource Estimate (above water table)					Category	Mt	Avg. GT	U ₃ O ₈ (%)	U ₃ O ₈ (lb)	Measured	0.844		0.057%	1,060,000	Global	0.844		0.057%	1,060,000																				
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Source: Azarga Uranium, Haywood presentation and calculation of "Global"



Preliminary Gas Hills PEA disclosure indicates a very robust satellite production concept, providing a similar tolerance to low uranium prices seen in the Dewey Burdock PEA, as well as similar torque to uranium prices:

The Gas Hills PEA sensitivity analysis (Figure 3) showed a ~\$34.9M pre-tax NPV at US\$35/lb U₃O₈ (IRR: 44%).

- ◆ With each US\$5.00/lb U₃O₈ change in uranium price assumption, the pre-tax NPV_{8%} changes ±US\$22M

Figure 3: Gas Hills June 2021 PEA - NPV / IRR sensitivity to Uranium Price

Uranium price scenario	NPV	IRR
US\$35/lb	US\$34.9m	44%
US\$40/lb	US\$56.4m	63%
US\$45/lb	US\$77.7m	81%
US\$50/lb	US\$98.7m	98%
US\$55/lb (base case)	US\$120.9m	116%
US\$60/lb	US\$141.5m	132%
US\$65/lb	US\$163.5m	150%
US\$70/lb	US\$185.6m	168%

Source: Azarga Uranium

- ◆ This compares well with the Dewey Burdock sensitivities (Figure 4) from December 2019 which indicated that with each US\$5.00/lb U₃O₈ change in uranium price assumption, the pre-tax NPV_{8%} of that project changes ±US\$36M.

Figure 4: Dewey Burdock December 2019 PEA - NPV / IRR sensitivity to Uranium Price

Uranium price scenario	NPV	IRR
US\$35/lb	US\$26.6m	17%
US\$40/lb	US\$62.8m	28%
US\$45/lb	US\$98.9m	37%
US\$50/lb	US\$135.1m	46%
US\$55/lb (base case)	US\$171.3m	55%
US\$60/lb	US\$207.4m	64%
US\$65/lb	US\$243.6m	72%
US\$70/lb	US\$279.7m	80%
US\$75/lb	US\$315.9m	88%

Source: Azarga Uranium

Outlook & Estimates

Adding Gas Hills Conservatively to the Dewey Burdock Mining Concept Provides Target Lift

We have conservatively assumed Gas Hills will begin contributing to our estimated production profile in 2030, providing ample time to progress the project through additional work programs, further economic study refinements, engineering, planning and permitting/licensing. This results in a modest increase in our corporate NAV, which is tempered by the additional discounting inherent in our selected timeframe. Upon publication of the full PEA technical report or further guidance from Azarga, we may opt to accelerate this assumption, as it would clearly benefit the corporate NAV and formal valuation.

We continue to model Azarga moving Dewey Burdock into production by late 2023, but caution of the risk of slippage in that estimate as the permitting process continues and is not under the control of the Company. Our model assumes production commencing in 2023 and ramping up to full scale by 2025, with Dewey having a mine life of 11 years at a higher production rate and resource base than the current PEA, slotting in Gas Hills production in mid-2030 adding a nominal 1.0Mlb/year of additional production for ~7 years. The most important overall input in our model is obviously our uranium price assumption where we remain quite bullish and believe the global profile of producers and neo-producers will require US\$65/lb to incentivize the required production of the timeframe.



Valuation, Target Price, & Recommended Action

Dewey Burdock + Gas Hills NPV, Asset Credits and Corporate NAV

With this report we have integrated Gas Hills into our production profile for the combined Dewey Burdock/Gas Hills mining concept. Our valuation and **\$0.65/share target price (increasing from \$0.50)** for AZZ is primarily driven by the DCF NPV_{10%} of the Dewey Burdock plus Gas Hills mining concept. We then apply a 1.0x multiple to our corporate NAVPS and assume a 1.25 USD/CAD exchange rate to arrive at our target.

Figures 5 & 6 granulate our sum-of-parts valuation and contribution to the target price.

Figure 5. Azarga Valuation Summary

	Valuation (M)	Per Share
Dewey Burdock NPV (US\$)	\$175	\$0.42
Gas Hills NPV (US\$)	\$49	\$0.12
Other Projects (US\$)	\$18	\$0.04
Corp. Adjustments (US\$)	-\$18.1	-\$0.04
Total Equity Value (US\$)	\$224	\$0.54
P/NAV Multiple		1.0x
Valuation (US\$)	\$224	\$0.54
USD/CAD		1.25
Valuation (C\$)	\$279	\$0.67
Target Price		\$0.65

Source: Haywood Securities

Figure 6. Azarga Valuation Details

Sum-of-Parts Valuation						
Project	Location	M&I Resource (lbs)	Forecast Resource	Valuation	Per Share	EV/lb
Dewey Burdock	S. Dakota, USA	18.39	24.22	\$174.5	\$0.42	\$7.2
Gas Hills	Wyoming, USA	10.77	10.77	\$49.3	\$0.12	\$4.6
Aladdin	Wyoming, USA	1.04	1.04	\$1.0	\$0.00	\$1.0
Juniper Ridge	Wyoming, USA	6.12	6.12	\$6.1	\$0.01	\$1.0
Shirley Basin	Wyoming, USA	0.00	0.00	\$0.0	\$0.00	NM
Dewey Terrace	Wyoming, USA	0.00	0.00	\$0.0	\$0.00	NM
Savageton	Wyoming, USA	0.00	0.00	\$0.0	\$0.00	NM
Centennial	Colorado, USA	10.61	10.61	\$10.6	\$0.03	\$1.0
Kyzyl Ompul (70%)	Kazakhstan	0.00	0.00	\$0.0	\$0.00	NM
Total		46.9	52.8	\$241.6	\$0.58	\$4.6
Corp. Adjustments				(\$18.07)	-\$0.04	
P/NAV Multiple	1.0x					
Valuation (US\$)				\$223.5	\$0.54	\$4.2
Valuation (C\$)				\$279.4	\$0.67	\$5.3

Source: Haywood Securities

Recommended Action

Positive PEA on Gas Hills de-risks and increases Azarga's potential to evolve into a multi-source production centre. Azarga share price performance has lagged (Figure 7) peers during a very strong period for uranium equities (*Azarga +48% vs Developer peer average of +195% since Nov. 2020*). We could see that gap closing as it grows and de-risks its future production base. AZZ is trading at 0.38x our valuation which is based on 1.0x our corporate NAV. Select peers are trading at 0.7-0.8x NAV. With the positive PEA, Gas Hills adds a second development stage asset with compelling economics to AZZ's fold and the additional scale potential should reinvigorate interest in Azarga **and we recommend adding to positions here.**



Uranium Comparables

Figure 7: Select Uranium Company Comparables

Company (Ticker)	Consensus Targets			Shares Outst. (millions)	Market Capitalization (millions)	In-Situ Comps - EVIb U3O8			NAV Comps		Price Performance Nov. 01, 2020 to Jun. 29, 2021
	Share Price	Consensus Target	Implied Return			Enterprise Value (USD) (millions)	Total Reserves & Resources (M lb)	USD EVIb Resource	IBES Consensus NAV	Price / Nav	
PRODUCERS											
Haywood Covered Names bold											
Kazatomprom (KAP-LSE)	\$30.30	\$26.35	(13)%	259	\$7,859	\$8,311	1,184	\$7.02	\$26.19	1.16x	113.4%
Cameco Corporation (CCO-T)	\$23.71	\$23.55	(1)%	398	\$9,428	\$7,648	1,057	\$7.24	\$16.33	1.45x	101.2%
Paladin Energy (PDN-AU)	\$0.50	\$0.41	(19)%	2,678	\$1,339	\$1,152	375.4	\$3.07	\$0.51	0.97x	310.8%
Energy Fuels (UUUU-US)	\$5.92	\$6.55	11%	141	\$832.3	\$805.5	129.0	\$6.25	\$5.09	1.16x	292.1%
Uranium Energy (UEC-US)	\$2.50	\$3.91	56%	233	\$583.1	\$571.5	111.5	\$5.12	\$3.60	0.69x	189.2%
Energy Resources (ERA-AU)	\$0.27			3,691	\$96.7	\$597.0	302.3	\$1.98			92.3%
Ur-Energy Inc. (URE-T)	\$1.63	\$1.90	17%	191	\$310.6	\$261.4	41.2	\$6.35	\$2.11	0.77x	191.9%
Lotus Resources (LOT-AU)	\$0.17	\$0.18	7%	955	\$162.3	\$115.9	24.4	\$4.76			101.8%
Peninsula Energy (PEN-AU)	\$0.16	\$0.28	83%	996	\$154.4	\$106.8	53.6	\$1.99	\$0.37	0.42x	171.4%
Group Average - Producers								\$4.86		0.95x	173.8%
DEVELOPERS											
NexGen Energy (NXE-T)	\$5.02	\$6.46	29%	476	\$2,387.5	\$1,843	337.9	\$5.46	\$6.37	0.79x	142.4%
Denison Mines (DML-T)	\$1.52	\$1.77	17%	805	\$1,219.1	\$865.2	157.1	\$5.51	\$1.67	0.91x	245.2%
Global Atomic (GLO-T)	\$2.91			162	\$471.8	\$381.4	292.5	\$1.30			414.0%
Fission Uranium (FCU-T)	\$0.54	\$0.97	79%	644	\$347.9	\$281.6	135.2	\$2.08	\$1.00	0.54x	123.0%
Boss Energy (BOE-AU)	\$0.17	\$0.20	21%	2,278	\$375.9	\$270.7	71.4	\$3.79	\$0.23	0.72x	175.4%
American Lithium (LI-V)	\$1.76	\$6.95	295%	177	\$311.0	\$232.9	123.4	\$1.89			74.7%
Deep Yellow (DYL-AU)	\$0.70	\$0.71	1%	332	\$232.2	\$167.5	185.7	\$0.90			133.7%
UEX Corporation (UEX-T)	\$0.35	\$0.70	100%	454	\$159.1	\$133.3	99.7	\$1.34	\$0.79	0.44x	200.9%
Bannerman Resources (BMN-AU)	\$0.16	\$0.14	(13)%	1,189	\$190.3	\$140.8	257.2	\$0.55			388.3%
Forsys Metals (FSY-T)	\$0.80			193	\$154.3	\$113.7	127.0	\$0.90			514.0%
GovEx Uranium (GXU-V)	\$0.26	\$0.55	116%	534	\$136.2	\$119.1	201.7	\$0.59	\$0.72	0.35x	103.0%
Berkeley Energia (BKY-AU)	\$0.55			259	\$142.4	\$114.3	89.4	\$1.28			52.6%
Vimy Resources (VMY-AU)	\$0.12	\$0.22	94%	1,027	\$118.1	\$85.6	117.4	\$0.73	\$0.21	0.54x	283.9%
Western Uranium (WUC-L)	\$2.45			38	\$93.5	\$76.3	99.2	\$0.77			346.2%
Laramide Resources (LAM-T)	\$0.46			175	\$79.7	\$69.9	122.7	\$0.57			99.6%
Toro Energy (TOE-AU)	\$0.02			3,606	\$68.5	\$60.4	90.9	\$0.66			45.0%
Azarga Uranium (AZZ-T)	\$0.26	\$0.54	111%	234	\$59.6	\$46.7	46.0	\$1.02	\$0.53	0.48x	48.1%
A-Cap Energy (ACB-AU)	\$0.06			872	\$52.2	\$46.1	190.6	\$0.24			225.8%
Energy Metals (EME-AU)	\$0.18			210	\$37.7	\$16.1	61.1	\$0.26			92.3%
Group Average - Developers								\$1.57		0.60x	195.2%
EXPLORERS											
IsoEnergy Ltd. (ISO-V)	\$2.64	\$3.38	28%	99	\$260.7	\$228.7		\$1.77	\$3.97	0.67x	148.8%
enCore Energy (EU-V)	\$1.27			199	\$253.0	\$208.0	117.5	\$1.77			243.9%
Azimut Exploration (AZM-V)	\$2.11			69	\$146.0	\$112.6					124.5%
Aurania Resources (ARU-V)	\$2.52			47	\$118.1	\$98.5					(30.2)%
Appia Energy (API-AU)	\$0.97			107	\$103.4	\$83.4	55.8	\$1.50			211.5%
Alligator Energy (AGE-AU)	\$0.03			2,368	\$80.5	\$58.6					626.3%
International Consolidated (CUR-V)	\$2.04	\$3.25	59%	43	\$87.4	\$58.7	69.4	\$0.85	\$3.26	0.63x	307.5%
Mega Uranium (MGA-T)	\$0.24			348	\$81.7	\$53.7					94.2%
Elevate Uranium (ELB-AU)	\$0.30			227	\$68.0	\$47.6	113.6	\$0.42			264.2%
Globex Mining (GMX-T)	\$1.24			55	\$68.3	\$45.6					111.5%
Skyharbour Resources (SYH-V)	\$0.37	\$0.86	136%	116	\$42.4	\$34.1	7.0	\$4.90	\$1.14	0.32x	156.5%
Forum Energy (FMC-V)	\$0.36			151	\$53.6	\$43.3	0.6	\$68.85			189.3%
CanAlaska Uranium (CWV-V)	\$0.50			83	\$41.6	\$32.3					175.5%
Anfield Energy (AEC-V)	\$0.14	\$0.25	85%	268	\$36.1	\$32.2	29.2	\$1.11			222.4%
Purepoint Uranium (PTU-V)	\$0.12	\$0.25	117%	324	\$37.3	\$30.0					208.9%
Blue Sky (BSK-V)	\$0.19			162	\$30.8	\$24.4	22.7	\$1.07			104.2%
VaiOre Metals (VO-V)	\$0.25			120	\$30.0	\$21.2	43.5	\$0.49			16.8%
Baselode Energy (FIND-V)	\$0.50			53	\$26.5	\$16.6			\$1.44	0.35x	66.0%
Fission 3.0 (FUU-V)	\$0.10			182	\$18.2	\$14.7					88.1%
Standard Uranium (STND-V)	\$0.21			93	\$19.5	\$12.3			\$0.28	0.75x	80.5%
Azincourt Energy (AAZ-V)	\$0.07			346	\$22.5	\$14.2			\$0.05	1.30x	249.2%
92 Energy (92E-AU)	\$0.32			66	\$20.8	\$15.1					
Cauldron Energy (CXU-AU)	\$0.04			456	\$18.2	\$12.3	30.9	\$0.40			(16.2)%
ALX Resources (AL-V)	\$0.09			174	\$14.8	\$11.5					82.7%
GTI Resources (GTR-AU)	\$0.03			645	\$16.1	\$9.7					27.2%
X-Terra Resources (XTT-V)	\$0.09			79	\$7.2	\$5.2					(35.5)%
Zadar Ventures (ZAD-V)	\$0.30			23	\$7.0	\$5.2					(0.9)%
Tarku Resources (TKU-V)	\$0.11			57	\$6.2	\$4.0					(34.3)%
Roughrider Exploration (REL-V)	\$0.12			41	\$4.9	\$3.0					(30.3)%
Vanadian Energy (VEC-V)	\$0.09			42	\$3.6	\$3.1	43.2	\$0.07			82.7%
Northern Uranium (UNOH-V)	\$0.02			162	\$2.4	\$2.6					61.2%
Uravan Minerals (UVN-V)	\$0.05			47	\$2.1	\$1.6					141.8%
Arupa Minerals (AMU-V)	\$0.09			33	\$2.9	\$2.3					(39.6)%
Eros Resources (ERC-V)	\$0.09			98	\$8.3	(\$8.8)					7.5%
Group Average - Explorers								\$7.40			118.4%
INVENTORY FUNDS											
Uranium Participation (U-T)	\$5.39	\$6.28	17%	150	\$810.8	\$593.1	17.2	\$34.40	\$5.11	1.05x	44.8%
Yellow Cake (YCA-LN)	\$2.68	\$3.06	14%	154	\$410.8	\$561.8	13.0	\$43.21			50.4%
											47.6%
ROYALTY COMPANIES											
Uranium Royalty (URC-V)	\$3.06	\$4.47	46%	83	\$253.3	\$82.4			\$2.56	1.19x	199.9%

Source: S&P Capital IQ, SNL Financial, Bloomberg, Haywood Securities, Company Reports



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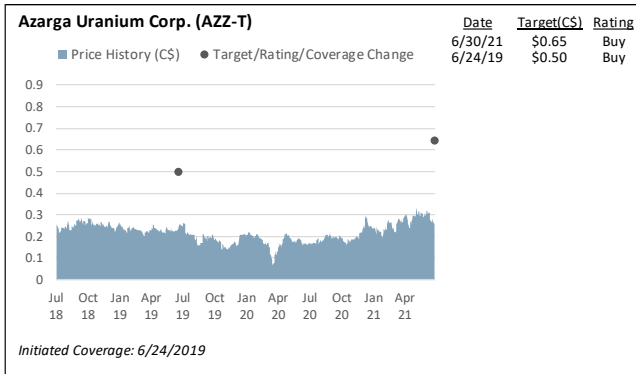
Ticker	Company	1	2	3	4	5	6	7	8	9
TSX:AZZ	Azarga Uranium Corp.	X	X	X	X		X			
TSX:DML	Denison Mines Corp.			X	X				X	
TSX:EFR	Energy Fuels Inc.			X						
TSXV:ISO	IsoEnergy Ltd.			X	X	X	X			
TSX:NXE	NexGen Energy Ltd.			X						
AMEX:UEC	Uranium Energy Corp.			X	X					
TSX:U	Uranium Participation Corporation				X					
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Distribution of Ratings (as of June 30, 2021)

	%	#	IB Clients (TTM)
Buy	84.9%	79	90.0%
Hold	7.5%	7	7.5%
Sell	0.0%	0	0.0%
Tender	2.2%	2	0.0%
UR (Buy)	0.0%	0	0.0%
UR (Hold)	0.0%	0	0.0%
UR (Sell)	0.0%	0	0.0%
Dropped (TTM)	5.4%	5	2.5%



Price Chart, Rating and Target Price History (as of June 30, 2021)



B: Buy; H: Hold; S: Sell; T: Tender; UR: Under Review
 Source: Capital IQ and Haywood Securities

Link to Research Policy: <http://haywood.com/what-we-offer/research/research-policy>

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