

## Uranium Sector M&A Action Heats up this Week

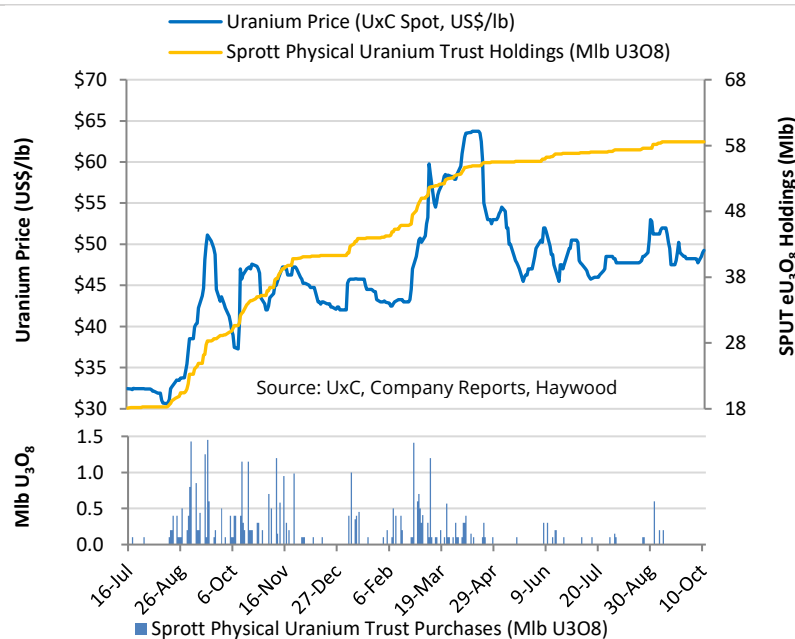
### CAMECO EXPANDS ITS VERTICAL – UEC EXPANDS ATHABASCA FOOTPRINT

#### Uranium Price Update & Sector Commentary: Close of October 12<sup>th</sup>, 2022

In a move to further expand its vertical integration in the nuclear sector, Cameco (CCO-T, not rated) [announced Tuesday](#) that it is forming a strategic partnership with Brookfield Renewable Partners (BEP.UN-T) to acquire Westinghouse Electric Company. Cameco will control 49% of the new partnership, with Brookfield Renewables and its institutional partners controlling 51%. Brookfield and its partners will invest ~\$2.3 billion of which Brookfield will make up ~\$750M (for ~17%), while Cameco will invest ~\$2.2 billion for its 49% share. Concurrently, [Cameco announced a US\\$650M bought deal](#) equity financing at an ~15% discount to its closing price Tuesday evening, which was quickly taken up. Assuming full exercise of the underwriters' option, the financing will raise gross proceeds of ~US\$748M which Cameco will use to partially fund its share of the acquisition. Westinghouse Electric is "one of the world's leading nuclear services businesses" and will complement Cameco's downstream nuclear services operations which already include its Blind River uranium refinery which produces UO<sub>3</sub>, and its conversion (from U<sub>3</sub>O<sub>8</sub> to UF<sub>6</sub>) and fuel fabrication capabilities for CANDU reactors performed at its Port Hope & Cobourg facilities. According to Cameco/Brookfield disclosure, "**Westinghouse services about half the nuclear power generation sector and is the original equipment manufacturer to more than half the global nuclear reactor fleet.**" Eighty-five percent of Westinghouse's revenue is derived from long-term contracts/recurring and has ~9,000 employees. The consortium cites several growth opportunities for the business in both its "core fuel and services segments", and its "growing pipeline for extending and uprating nuclear power plants", and "rising demand for new utility-scale and modular" power plants.

#### Uranium Equities - News

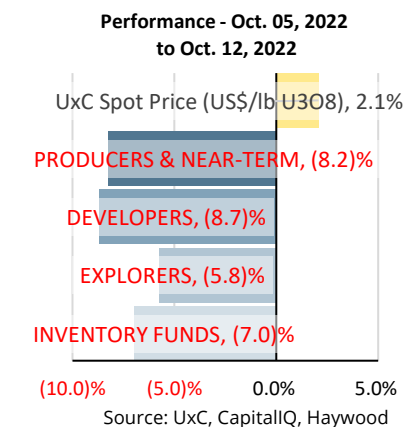
- ◆ **Kingsland Minerals Ltd (KNG-AU, Not Rated):** Provided results from the maiden drilling program at the Cleo Uranium Project – [link to Oct. 11<sup>th</sup> PR](#)
- ◆ **Traction Uranium Corp. (TRAC-CSE, Not Rated):** Mobilized crew to Hearty Bay to conduct field program – [link to Oct. 11<sup>th</sup> PR](#)
- ◆ **Kraken Energy Corp (UUSA-CSE, Not Rated):** Received drill permit for Garfield Hills Property – [link to Oct. 11<sup>th</sup> PR](#)
- ◆ **Strathmore Plus Uranium Corporation (SUU-V, Not Rated):** Received exploration permit for Beaver Rim – [link to Oct. 11<sup>th</sup> PR](#)
- ◆ **Boss Energy Limited (BOE-AU, Not Rated):** Secured key approval for restart at Honeymoon Uranium Project – [link to Oct. 6<sup>th</sup> PR](#)
- ◆ **Uranium Energy Corp (UEC-US, BUY Rating, \$6.60 Target):** Entered definitive agreement to acquire Roughrider – [link to Oct. 12<sup>th</sup> PR - Haywood Note](#)



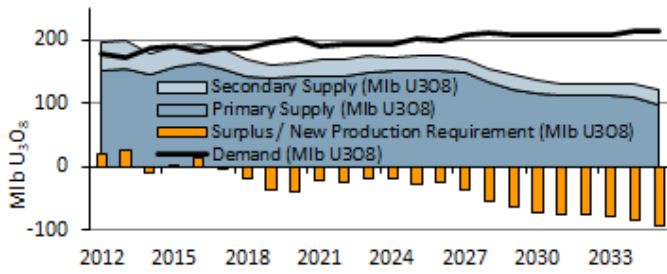
**Uranium required and cost to make 1kg of EUP (4.5% U<sup>235</sup>):** Mine/plant output of 26.7 lb U<sub>3</sub>O<sub>8</sub> (\$1,315 cost) -> Conversion to UF<sub>6</sub> (\$388 cost) -> delivers 10.22 kgU as UF<sub>6</sub> (\$1,703 cumulative cost) -> enrichment: 6.23 SWU (\$573 cost) -> delivers 1kg EUP (\$2,277 cumulative cost). (US\$, spot U<sub>3</sub>O<sub>8</sub>, tails assay of 0.30% U<sup>235</sup>)

UxC U <sub>3</sub> O <sub>8</sub> Prices	(USD per pound)
<b>SPOT (1-day Δ):</b>	<b>\$49.25 (+0.5%)</b>
(1-week Δ):	(+2.1%)
(1-month Δ):	(-2.0%)
<b>3-year (1-week Δ):</b>	\$56.00 (unchanged)
<b>5-year (1-week Δ):</b>	\$59.50 (unchanged)
<b>LT (@Sept. 26<sup>th</sup>, 1-mth Δ):</b>	\$49.00 (-2.0%)

\* UxC Spot Price published daily, 3y, 5y pricing published weekly on Monday. UxC Long-Term price published last Monday of month.



Uranium Sector – Haywood Supply / Demand Model & Uranium Price History & Forecast (annual average)



Source: UxC, WNA, IAEA, IEA, Haywood

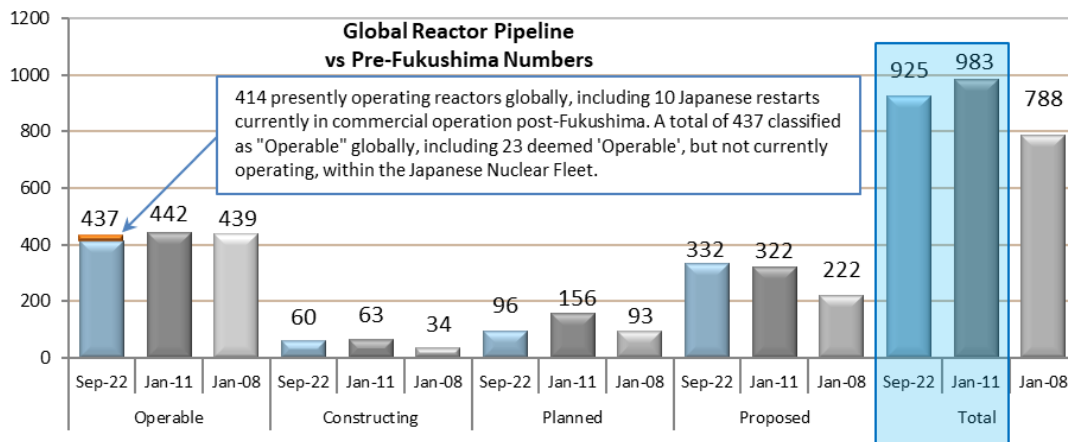
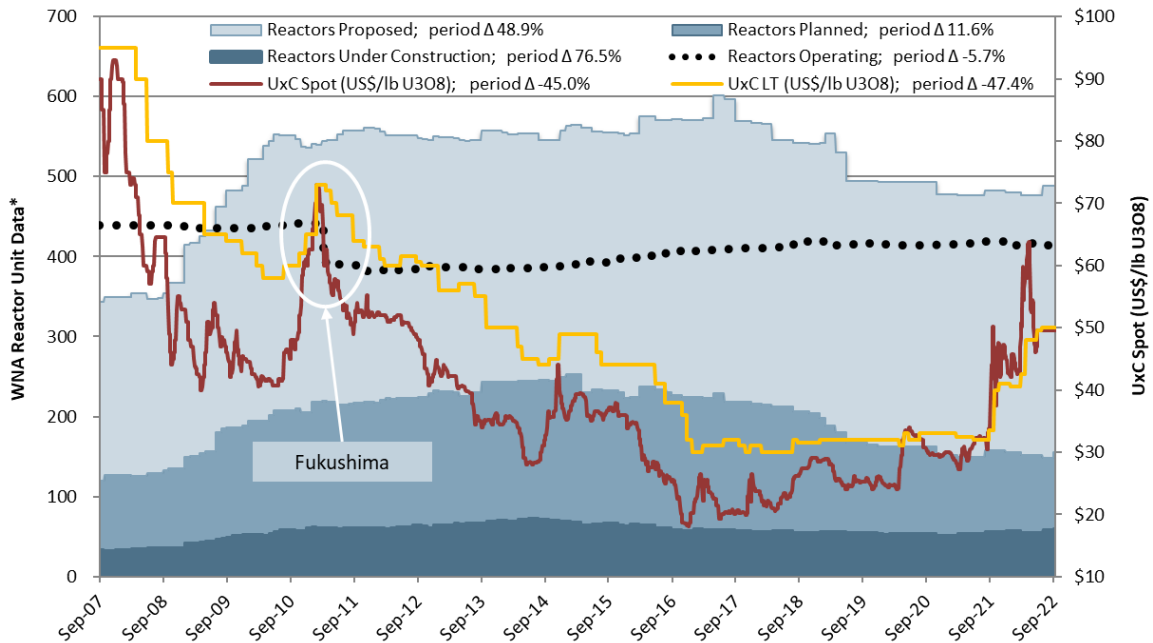
Commodity Price History	2015	2016	2017	2018	2019	2020	2021
Spot price (US\$/lb U <sub>3</sub> O <sub>8</sub> )	\$37	\$26	\$22	\$25	\$26	\$29	\$40
Long Term price (US\$/lb U <sub>3</sub> O <sub>8</sub> )	\$47	\$40	\$31	\$31	\$32	\$32	\$35

Commodity Price Forecast	2022	2023	2024	2025	2026	2027	2027
Spot price (US\$/lb U <sub>3</sub> O <sub>8</sub> )	\$47	\$55	\$64	\$65	\$65	\$65	\$65
Long Term price (US\$/lb U <sub>3</sub> O <sub>8</sub> )	\$55	\$63	\$70	\$65	\$65	\$65	\$65

Source: UxC history, Haywood Forecast

Global Civil Nuclear Reactor Pipeline Evolution

Figure 1. Upper: Global Nuclear Reactor Pipeline vs Uranium Price; Lower: Global Nuclear Reactor Pipeline – Current vs Pre-Fukushima



Source: WNA (September 2022 data), UxC, Haywood Securities



## Uranium Sector Top Picks & Covered Names

### NexGen (NXE-T, Rating: BUY, Target: \$7.50)

**Our Take:** NXE remains a top pick in the uranium space due to the disruptive potential of the Arrow deposit, with its massive scale and strong economics. [Link to Most Recent Report](#)

- ◆ **Top Asset:** We view the Arrow deposit as ‘the best undeveloped uranium asset globally and highly strategic’. The February 2021 Feasibility Study outlined a >21 Mlb U<sub>3</sub>O<sub>8</sub> per year, 10-year mine operation with an after-tax NPV<sub>8%</sub> of \$3.47B at US\$50/lb uranium.
- ◆ **Take-Out Candidate:** We believe that it is critical for major producers to control this deposit because of its disruptive potential and that this is the strategic key to preserving the value of existing deposits and maintaining the ability to affect price with output decisions.
- ◆ **Ultra Low-Cost:** The Feb. 2021 Arrow Feasibility Study suggests cash operating costs of US\$5.69/lb implying an industry leading margin for a tier 1 scale operation.
- ◆ **Catalysts:** H2/2022 results of field programs, including updates on FEED work and results of field and exploration activities.
- ◆ **Cash of \$164 million**

### Denison Mines (DML-T, Rating: BUY, Target: \$2.90)

**Our Take:** The core strength of Denison remains its ability to leverage its technical team and knowledge gained in studying ISR and its applicability to unconformity-hosted uranium deposits in the Basin. Denison’s unique (to the Athabasca) plan to in-situ leach the Phoenix deposit is perceived as technically challenging, but with a very high potential reward, with a PFS-supported cost profile among the lowest in the world, due to the extremely high grades at Phoenix. [Link to Most Recent Report](#)

- ◆ **De-risking Phoenix with freeze-wall trade-off study.** Late 2020, Denison announced the results of a trade-off study examining the use of ‘freeze walls’ and sequential ISR mining phases to replace the ‘freeze dome’ outlined for the Phoenix deposit in the Wheeler River project Preliminary Feasibility Study (PFS). The proposed freeze wall approach is **simpler and offers more control in each mining cell/phase and improves the risk profile on the mine plan.**
- ◆ **New approach should mean lower CAPEX hurdle.** Mining of Phoenix via ISR was already a very attractive economic proposition, with initial CAPEX in the PFS at <\$325M and OPEX of US\$3.33/lb U<sub>3</sub>O<sub>8</sub>. The trade-off study is preliminary but **lower initial CAPEX is supportable as the phased freeze wall approach is simpler and less costly to initial production.**
- ◆ **Catalysts:** H1/2022 - **Further technical work** to de-risk the ISR mining approach to Phoenix at Wheeler River in support of a future full Feasibility Study (estimated late 2022 delivery) for Wheeler River integrating the extensive technical advancements made since the 2018 PFS. **2022 - Exploration results** - seeking satellite deposits at Wheeler River; and Studies for other potentially ISR amenable projects similar to THT/Waterbury.
- ◆ **Cash of ~\$56 million, plus 2.5 Mlb U<sub>3</sub>O<sub>8</sub> as long-term investment.**

### Other Covered Names

- ◆ **Energy Fuels Inc. (EFR-T, UUUU-US) – Rating: Buy; Target: US\$6.75 Target ([last report](#))**
- ◆ **IsoEnergy. (ISO-V) – Rating: Buy; Target: \$7.00 ([last report](#))**
- ◆ **Uranium Energy Corp. (UEC-US) – Rating: Buy; Target: US\$6.60 Target ([last report](#))**

### Coverage Universe

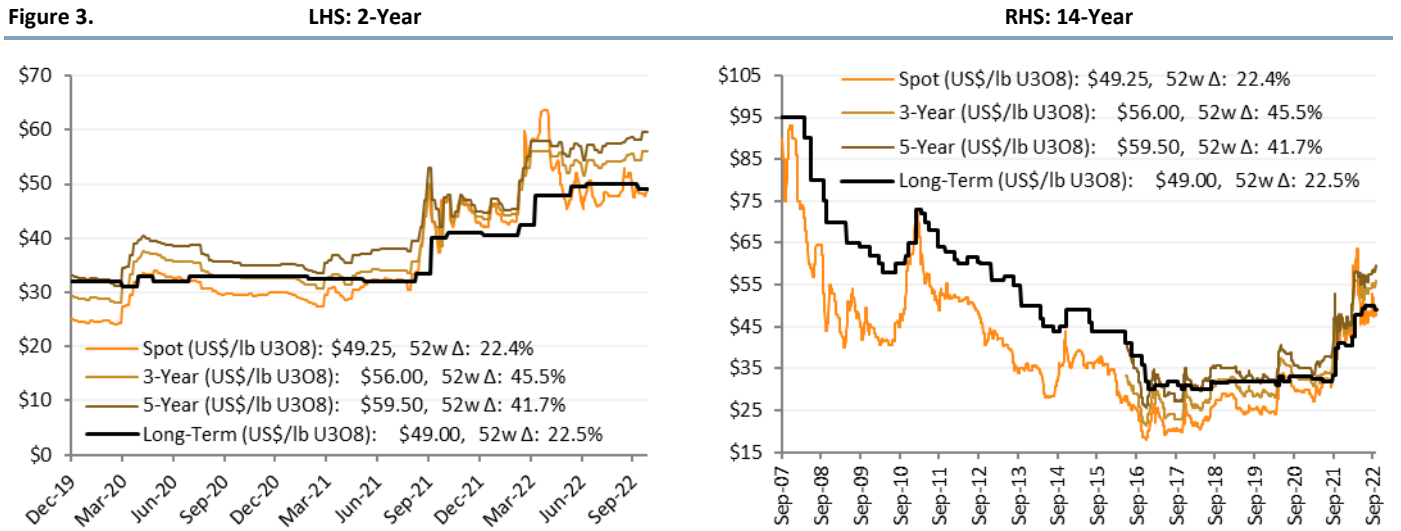
Figure 2. Uranium Sector Haywood Coverage

Company	Ticker	Analyst	Last Price (C\$)	Shares O/S (M)	MC (C\$M)	EV (C\$M)	Target (C\$)	Return (%)	Rating	NAVPS (US\$)	CFPS (US\$) 2022E	CFPS (US\$) 2023E
Denison Mines	DML-T	CH	\$1.59	818	\$1,300	\$1,234	\$2.90	82%	BUY	C\$2.85	(\$0.01)	(\$0.01)
Energy Fuels	UUUU-US	CH	US\$6.15	158	US\$969	US\$1,218	US\$6.75	10%	BUY	\$6.73	(\$0.02)	\$0.20
IsoEnergy Ltd.	ISO-V	CH	\$3.63	107	\$388	\$397	\$7.00	93%	BUY	C\$7.02	(\$0.07)	(\$0.07)
NexGen Energy	NXE-T	CH	\$5.03	480	\$2,413	\$2,340	\$7.50	49%	BUY	C\$7.50	(\$0.03)	(\$0.03)
Uranium Energy	UEC-US	CH	US\$3.66	346	US\$1,266	US\$1,234	US\$6.60	80%	BUY	\$6.55	(\$0.08)	(\$0.08)

Source: Haywood Securities

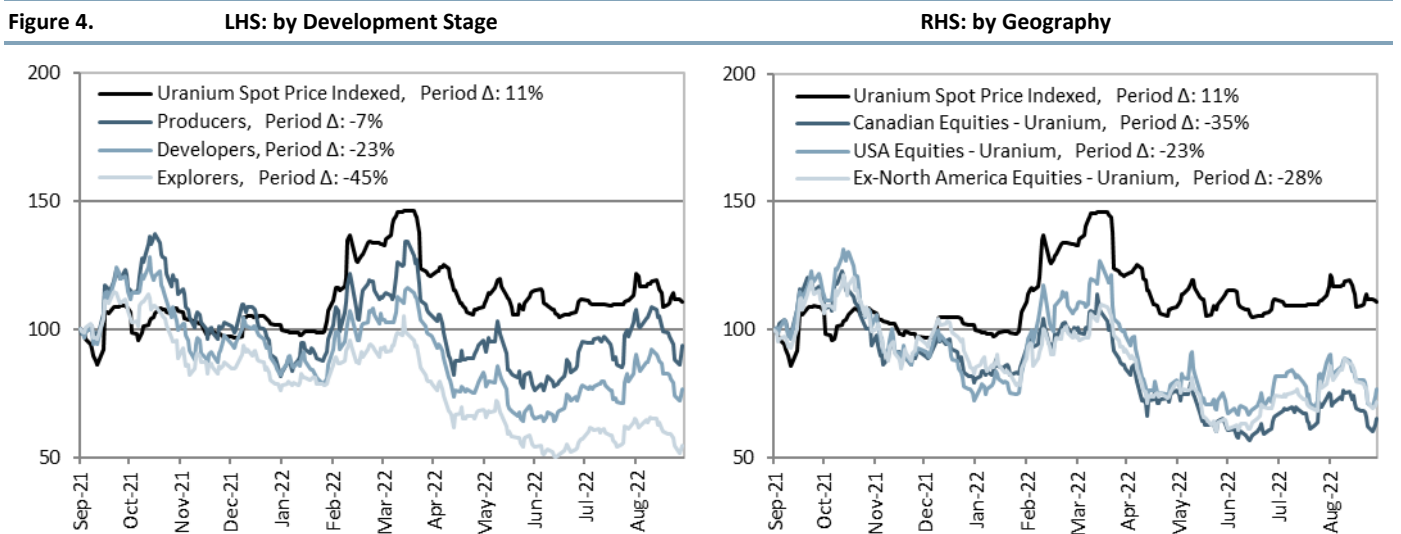


Uranium Price Charts



Source: UxC, Haywood Securities

Uranium Equity Relative Performance Charts (1-year, indexed to 100)



Source: UxC, S&P Capital IQ, Haywood Securities



Figure 5. Uranium Sector Comps with 1-Week Performance Data

Company (Ticker)	Share Price	Consensus Targets		Shares Outst. (millions)	Market Capitalization (millions)	In-Situ Comps - EV/lb U3O8			NAV Comps		Cash Flow Comps			Performance Oct. 05, 2022 to Oct. 12, 2022
		Consensus Target	Implied Return			Enterprise Value (USD) (millions)	Total Reserves & Resources (M lb) Resource	USD EV/lb Resource	IBES Consensus NAV	Price / Nav	2022 P/CFPS	2023	2024	
<b>PRODUCERS &amp; NEAR-TERM</b>														
Haywood Covered Names bold														
Cameco Corporation (CCO-T)	\$35.62	\$44.20	24%	398	\$14,193	\$10,022	1078.5	\$9.29	\$29.91	1.19x	34.9x	17.0x	18.4x	(6.9)%
Kazatomprom (KAP-LSE)	\$27.60	\$38.24	39%	259	\$7,158	\$7,323	1339.5	\$5.47	\$39.42	0.70x	11.1x	7.1x	6.2x	(4.8)%
Paladin Energy (PDN-AU)	\$0.76	\$0.72	(4)%	2,978	\$2,248	\$1,272	381.7	\$3.33	\$1.28	0.59x	4718.8x			(8.3)%
Uranium Energy (UEC-US)	\$3.65	\$6.57	80%	346	\$1,262	\$1,296	306.7	\$4.23	\$5.99	0.61x			40.6x	(10.1)%
Energy Fuels (UUUU-US)	\$6.17	\$9.70	57%	158	\$972	\$896.5	119.6	\$7.50	\$8.96	0.69x	20.9x		154.3x	(10.4)%
Boss Energy (BOE-AU)	\$2.53	\$3.30	31%	353	\$892.0	\$476.3	71.4	\$6.67	\$3.20	0.79x			27.7x	(7.9)%
EnergyResources (ERA-AU)	\$0.21			3,691	\$756.7	\$392.3	302.3	\$1.30						(2.8)%
Ur-Energy Inc. (URE-T)	\$1.58	\$4.08	158%	223	\$352.0	\$221.6	41.3	\$5.36	\$4.11	0.38x		19.8x		(7.9)%
Lotus Resources (LOT-AU)	\$0.21	\$0.31	48%	1,326	\$278.5	\$171.1	44.2	\$3.88	\$0.32	0.66x				(15.0)%
Peninsula Energy (PEN-AU)	\$0.16	\$0.35	122%	999	\$159.8	\$92.4	53.7	\$1.72	\$0.40	0.40x	112.7x			(5.8)%
<b>Group Average - Producers</b>								<b>\$4.87</b>		<b>0.67x</b>	<b>52.9x</b>	<b>956.7x</b>	<b>49.4x</b>	<b>(8.2)%</b>
<b>DEVELOPERS</b>														
NexGen Energy (NXE-T)	\$5.03	\$9.32	85%	480	\$2,413	\$1,687	337.8	\$4.99	\$8.35	0.60x				(10.8)%
Denison Mines (DML-T)	\$1.59	\$2.12	33%	818	\$1,300	\$871.4	207.5	\$4.20	\$2.55	0.62x				(8.4)%
Global Atomic (GLO-T)	\$3.65	\$6.07	66%	180	\$658.6	\$445.1	161.1	\$2.76	\$5.64	0.65x				(1.7)%
Deep Yellow (DYL-AU)	\$0.77	\$1.05	36%	732	\$563.3	\$315.0	392.2	\$0.80						(12.0)%
Fission Uranium (FCU-T)	\$0.65	\$1.28	96%	682	\$443.1	\$304.9	130.3	\$2.34	\$1.43	0.46x				(11.7)%
American Lithium (LI-V)	\$1.98	\$8.63	336%	208	\$412.1	\$285.9	123.4	\$2.32	\$11.00	0.18x				(15.0)%
IsoEnergy Ltd. (ISO-V)	\$3.63	\$6.50	79%	107	\$387.8	\$258.3	51.3	\$5.04	\$6.61	0.55x				(8.0)%
enCore Energy (EU-V)	\$3.45	\$7.60	120%	108	\$371.2	\$231.3	129.6	\$1.79	\$7.55	0.46x				(10.5)%
Bannerman Energy (BMN-AU)	\$1.83	\$2.96	62%	150	\$273.0	\$138.7	238.8	\$0.58						(11.3)%
GovEx Uranium (GXU-V)	\$0.22	\$0.70	220%	593	\$130.4	\$95.9	201.7	\$0.48	\$0.89	0.25x				(5.2)%
Forsys Metals (FSY-T)	\$0.57			195	\$111.2	\$72.0	127.0	\$0.57						(16.9)%
Laramide Resources (LAM-T)	\$0.49	\$0.80	65%	208	\$101.1	\$70.1	122.7	\$0.57						(11.0)%
A-Cap Energy (ACB-AU)	\$0.07			1,232	\$82.6	\$44.1	190.6	\$0.23						(9.6)%
Berkeley Energia (BKY-AU)	\$0.26			446	\$115.9	\$22.6	89.4	\$0.25						(6.4)%
Western Uranium (WUC-L)	\$1.40			44	\$61.0	\$36.9	52.4	\$0.70						(15.9)%
Toro Energy (TOE-AU)	\$0.02			3,897	\$66.3	\$38.0	90.9	\$0.42						(2.8)%
Anfield Energy (AEC-V)	\$0.07	\$0.25	257%	624	\$43.7	\$24.9	22.5	\$1.11	\$0.42	0.17x				(7.5)%
EnergyMetals (EME-AU)	\$0.15			210	\$31.5	\$10.5	57.6	\$0.18						8.0%
<b>Group Average - Developers</b>								<b>\$1.63</b>		<b>0.44x</b>				<b>(8.7)%</b>
<b>EXPLORERS</b>														
Alligator Energy (AGE-AU)	\$0.05			3,303	\$168.5	\$88.7								(11.5)%
Consolidated Uranium (CUR-V)	\$1.86	\$4.15	123%	77	\$143.0	\$92.2	89.6	\$1.03						(8.7)%
Elevate Uranium (EL8-AU)	\$0.45			275	\$122.6	\$67.1	137.5	\$0.49						(11.8)%
DevEx Resources (DEV-AU)	\$0.31			360	\$111.5	\$65.2								(2.8)%
Mega Uranium (MGA-T)	\$0.22			359	\$77.2	\$44.0								(9.3)%
Skyharbour Resources (SYH-V)	\$0.40	\$0.98	147%	144	\$57.0	\$36.7	7.0	\$5.27	\$1.01	0.39x				(13.9)%
Baselode Energy (FIND-V)	\$0.70			87	\$60.6	\$36.1								(6.2)%
ValOre Metals (VO-V)	\$0.37	\$1.05	184%	154	\$56.9	\$39.7	43.5	\$0.91						(0.9)%
Appia Rare (APL)	\$0.49			123	\$60.3	\$41.7	55.8	\$0.75						(8.4)%
Azimut Exploration (AZM-V)	\$0.57	\$2.65	365%	79	\$45.2	\$17.7			\$2.66	0.21				(2.6)%
92 Energy (92E-AU)	\$0.48			88	\$41.8	\$18.7								(12.1)%
Aurania Resources (ARU-V)	\$0.46			54	\$24.8	\$22.0								4.8%
CanAlaska Uranium (CWV-V)	\$0.43			102	\$43.4	\$23.0								(11.3)%
Blue Sky (BSK-V)	\$0.14			200	\$28.0	\$19.2	22.7	\$0.84						(13.3)%
Okapi Resources (OKR-AU)	\$0.23			136	\$30.6	\$18.4								(12.5)%
Purepoint Uranium (PTU-V)	\$0.07			369	\$24.0	\$15.6								(8.0)%
Globex Mining (GMX-T)	\$0.76			56	\$42.3	\$14.8								4.6%
GTI Energy (GTR-AU)	\$0.02			1,505	\$22.6	\$9.8								(2.8)%
Forum Energy (FMC-V)	\$0.11			172	\$18.9	\$11.3	0.6	\$19.05						(16.1)%
Standard Uranium (STND-V)	\$0.11			166	\$18.3	\$12.5								3.8%
Fission 3.0 (FUU-V)	\$0.09			302	\$25.7	\$5.7								(0.9)%
Azincourt Energy (AAZ-V)	\$0.05			227	\$11.4	(\$0.3)								(9.9)%
ALX Resources (AL-V)	\$0.05			208	\$9.4	\$4.4								11.5%
Cauldron Energy (CXU-AU)	\$0.01			535	\$5.9	\$3.8	30.9	\$0.12						(10.9)%
Tarku Resources (TKU-V)	\$0.03			86	\$2.6	\$1.6								(18.5)%
Northern Uranium (UNOH-V)	\$0.02			162	\$2.4	\$1.8								(0.9)%
X-Terra Resources (XTT-V)	\$0.02			99	\$2.0	\$1.2								(20.7)%
Avrupa Minerals (AVU-V)	\$0.02			55	\$1.1	\$0.7								(20.7)%
International Prospect (IZZ-V)	\$0.05			40	\$1.8	\$1.2	0.6	\$2.03						(0.9)%
Vanadian Energy (VEC-V)	\$0.03			42	\$1.3	\$1.1								19.0%
Uravan Minerals (UVN-V)	\$0.16			5	\$0.8	\$0.3								(0.9)%
Eros Resources (ERC-V)	\$0.06			98	\$5.9	(\$4.4)								8.1%
<b>Group Average - Explorers</b>								<b>\$3.39</b>						<b>(5.8)%</b>
<b>INVENTORY FUNDS</b>														
Sprott Physical (U.UN-T)	\$16.20	\$23.50	45%	235	\$2,755	\$2,884	58.6	\$49.24						(4.9)%
Yellow Cake (YCALN)	£3.86	£5.55	44%	183	£706.8	\$653.9	19.8	\$32.98						(9.1)%
														(7.0)%
<b>ROYALTY COMPANIES</b>														
Uranium Royalty (URC-V)	\$3.08	\$6.72	118%	97	\$299.8	\$144.6			\$3.91	0.79x				(13.5)%

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



Figure 6. Uranium Equities  $\beta$  to Uranium price, plus  $\beta_{\text{uranium}/\sigma_{\text{equity}}}$

Ticker	Company	$\beta_{\text{uranium}}$ (Last 1-year, Weekly Simple Returns)	$\beta_{\text{uranium}}/\sigma_{\text{equity}}$	Absolute Return (%)	Rank Beta	Rank $\beta_{\text{uranium}}/\sigma_{\text{equity}}$	Rank Absolute Return
ASX:EL8	Elevate Uranium Ltd	1.65	12.262	(8%)	1	4	11
TSXV:AEC	Anfield Energy Inc.	1.57	11.514	(50%)	2	7	43
US:UEC	Uranium Energy Corp.	1.52	9.970	10%	3	15	5
ASX:TOE	Toro Energy Limited	1.50	11.676	(43%)	4	5	39
ASX:PEN	Peninsula Energy Limited	1.45	13.800	(30%)	5	1	28
ASX:BMN	Bannerman Energy Ltd	1.41	11.126	(40%)	6	10	35
TSXV:FMC	Forum Energy Metals Corp.	1.40	9.451	(78%)	7	21	63
ASX:DYL	Deep Yellow Limited	1.37	11.308	(15%)	8	8	14
ASX:AGE	Alligator Energy Limited	1.36	10.053	(16%)	9	14	15
TSX:FSY	Forsys Metals Corp.	1.31	9.502	(41%)	10	20	36
ASX:92E	92 Energy Limited	1.29	10.073	(29%)	11	13	26
CNSX:WUC	Western Uranium & Vanadium I	1.26	9.552	(57%)	12	19	48
ASX:LOT	Lotus Resources Limited	1.25	11.561	(18%)	13	6	16
TSXV:URC	Uranium Royalty Corp.	1.23	10.520	(47%)	14	12	41
ASX:OKR	Okapi Resources Limited	1.22	9.704	(55%)	15	17	46
ASX:GTR	GTI Energy Ltd	1.22	9.106	(38%)	16	23	31
TSXV:FIND	Baselode Energy Corp.	1.19	9.817	(28%)	17	16	22
TSX:URE	Ur-Energy Inc.	1.19	10.823	(29%)	18	11	25
TSXV:ISO	IsoEnergy Ltd.	1.12	7.953	(23%)	19	36	20
TSXV:GXU	GoviEx Uranium Inc.	1.08	8.104	(46%)	20	33	40
TSX:EFR	Energy Fuels Inc.	1.06	8.730	(9%)	21	27	12
ASX:BOE	Boss Energy Limited	1.04	11.256	29%	22	9	1
ASX:BKY	Berkeley Energia Limited	1.04	8.354	(12%)	23	32	13
TSX:MGA	Mega Uranium Ltd.	1.02	8.059	(31%)	24	34	29
TSXV:EU	enCore Energy Corp.	0.96	8.914	(43%)	25	24	37
ASX:ACB	A-Cap Energy Limited	0.96	6.510	(1%)	26	45	9
TSX:FCU	Fission Uranium Corp.	0.93	8.443	(38%)	27	31	32
TSXV:SYH	Skyharbour Resources Ltd.	0.92	7.352	(43%)	28	39	38
TSXV:UNO.H	Northern Uranium Corp.	0.91	6.676	(63%)	29	43	53
TSXV:FUU	Fission 3.0 Corp.	0.89	7.228	(54%)	30	40	45
ASX:PDN	Paladin Energy Ltd	0.87	9.580	3%	31	18	6
TSX:DML	Denison Mines Corp.	0.87	8.552	(22%)	32	29	19
AIM:YCA	Yellow Cake plc	0.87	13.192	12%	33	2	3
TSXV:XTT	X-Terra Resources Inc.	0.87	5.242	(60%)	34	49	51
TSX:GLO	Global Atomic Corporation	0.86	8.824	(6%)	35	26	10
TSXV:CVV	CanAlaska Uranium Ltd.	0.83	5.415	(39%)	36	48	34
TSXV:AAZ	Azincourt Energy Corp.	0.82	7.582	(76%)	37	37	62
TSX:NXE	NexGen Energy Ltd.	0.82	8.609	(28%)	38	28	23
TSXV:PTU	Purepoint Uranium Group Inc.	0.82	7.438	(55%)	39	38	47
TSX:CCO	Cameco Corporation	0.77	9.330	1%	40	22	7
ASX:EME	Energy Metals Limited	0.75	8.009	(57%)	41	35	50
TSXV:VEC	Vanadian Energy Corp.	0.75	3.758	(63%)	42	56	53
TSX:U.U	Sprott Physical Uranium Trust Fi	0.75	12.273	18%	43	3	2
TSX:GMX	Globex Mining Enterprises Inc.	0.73	8.885	(21%)	44	25	18
ASX:DEV	DevEx Resources Limited	0.68	4.831	11%	45	50	4
TSXV:CUR	Consolidated Uranium Inc.	0.68	7.170	(26%)	46	41	21
TSXV:BSK	Blue Sky Uranium Corp.	0.67	6.152	(57%)	47	47	48
CNSX:API	Appia Rare Earths & Uranium Cc	0.63	4.670	(38%)	48	51	33
TSXV:VO	ValOre Metals Corp.	0.61	6.570	0%	49	44	8
TSXV:AVU	Avrupa Minerals Ltd.	0.60	4.104	(75%)	50	55	60
TSXV:STND	Standard Uranium Ltd.	0.57	4.619	(70%)	51	52	58
TSXV:AL	ALX Resources Corp.	0.56	6.191	(63%)	52	46	53
KAS:KZAP	JSC National Atomic Company K	0.52	8.538	(18%)	53	30	17
ASX:ERA	Energy Resources of Australia Li	0.46	6.926	(47%)	54	42	42
TSXV:UVN	Uravan Minerals Inc.	0.45	4.324	(50%)	55	53	43
TSXV:ERC	Eros Resources Corp.	0.40	4.247	(29%)	56	54	27
TSXV:IZZ	International Prospect Venture	0.37	3.348	(75%)	57	57	60
TSXV:LI	American Lithium Corp.	0.28	2.098	(29%)	58	59	24
ASX:LAM	Laramide Resources Ltd.	0.28	3.177	(35%)	59	58	30
ASX:CXU	Cauldron Energy Limited	0.22	1.530	(61%)	60	61	52
TSXV:AZM	Azimut Exploration Inc.	0.12	1.872	(63%)	61	60	53
TSXV:TKU	Tarku Resources Ltd.	0.06	0.233	(63%)	62	62	53
TSXV:ARU	Aurania Resources Ltd.	-0.05	-0.479	(71%)	63	63	59

Source: UxC, CapitalIQ, Bloomberg, Haywood



Figure 7. Uranium Comps Performance with Short Interest / Days to Cover

Index	Ticker	Short Interest / Days to Cover	1-Day Δ (%)	5-Day Δ (%)	10-Day Δ (%)	30-Day Δ (%)	90-Day Δ (%)	YTD Δ (%)	12-Mth Δ (%)	2-year Δ (%)
S&P/TSX COMPOSITE INDEX	.TTT-T		(0.0)%	(2.0)%	(1.3)%	(8.9)%	(0.6)%	(14.2)%	(10.9)%	10.0%
S&P/TSX VENTURE COMPOSITE	.JX-T		(0.2)%	(3.5)%	(1.2)%	(11.0)%	0.2%	(37.5)%	(34.5)%	(19.8)%
S&P/TSX 60 INDEX	T.XLX-T		(0.1)%	(2.0)%	(1.6)%	(8.9)%	(1.1)%	(14.5)%	(10.3)%	11.0%
<b>PRODUCERS</b>										
CAMECO CORPORATION	CCO-T	4.2% / 2.0	(12.8)%	(15.3)%	(15.3)%	(21.1)%	7.1%	12.6%	1.9%	142.7%
KAZATOMPROM S	KAP-LN		(1.4)%	(2.5)%	9.6%	(15.9)%	15.8%	(24.9)%	(30.8)%	101.5%
PALADIN ENERGY L	PDN-AU	5.8% / 7.1	(2.6)%	(3.2)%	0.0%	(17.9)%	24.8%	(14.2)%	2.7%	518.9%
URANIUM ENERGY CORP	UEC-US	13.9% / 4.8	(2.6)%	(6.3)%	6.9%	(15.2)%	13.7%	11.6%	11.6%	263.1%
ENERGY FUELS INC	UUUU-US	18.0% / 7.7	(1.1)%	(8.4)%	1.0%	(18.3)%	16.4%	(19.0)%	(17.5)%	263.5%
BOSS EN FPO	BOE-AU	3.4% / 4.4	(0.4)%	(5.6)%	(4.2)%	(12.2)%	31.8%	12.4%	29.1%	379.2%
ENERGY RESOURCES	ERA-AU	0.0% / 0.1	1.0%	(2.4)%	(0.0)%	(19.6)%	(0.0)%	(39.7)%	(47.4)%	32.3%
UR ENERGY INC	URE-T	4.3% / 5.4	0.6%	(3.1)%	2.0%	(16.1)%	15.6%	1.3%	(28.8)%	155.7%
LOTUS RESOURCES	LOT-AU	0.9% / 1.4	0.0%	(6.7)%	(6.7)%	(20.8)%	5.0%	(32.3)%	(17.6)%	133.3%
PENINSULA ENERGY	PEN-AU	1.3% / 2.8	0.0%	(3.0)%	(3.0)%	(17.9)%	6.7%	(20.0)%	(30.4)%	150.0%
<b>DEVELOPERS</b>										
NEXGEN ENERGY LTD	NXE-T	6.2% / 4.6	0.6%	(4.6)%	0.2%	(15.9)%	5.9%	(9.2)%	(28.2)%	121.6%
DENISON MINES CORPORATION	DML-T	6.2% / 5.4	3.2%	(3.0)%	(0.6)%	(14.0)%	16.8%	(8.0)%	(21.2)%	236.8%
GLOBAL ATOMIC CORPORATION	GLO-T	1.6% / 3.7	6.9%	2.8%	6.9%	(12.7)%	33.8%	(11.2)%	(4.9)%	472.3%
DEEP YELLOW	DYL-AU	1.6% / 2.4	(1.3)%	(6.7)%	(4.9)%	(35.8)%	24.2%	(10.5)%	(15.4)%	140.6%
FISSION URANIUM CORP	FCU-T	1.5% / 3.0	1.5%	(2.9)%	3.0%	(17.1)%	4.6%	(12.8)%	(35.8)%	119.4%
AMERICAN LITHIUM CORP	LI-V	0.8% / 2.2	1.0%	(7.0)%	(2.5)%	(18.1)%	23.6%	(53.3)%	(28.2)%	44.2%
ISOENERGY LTD	ISO-V	1.4% / 2.7	14.5%	4.2%	(5.8)%	(21.4)%	28.7%	(0.5)%	(20.3)%	264.7%
ENCORE ENERGY CORP	EU-V	0.4% / 1.5	5.8%	(2.5)%	(3.6)%	(23.0)%	9.2%	(28.3)%	(41.5)%	183.1%
BANNERMAN ENERGY	BMN-AU	1.2% / 2.6	(4.7)%	(9.7)%	(11.0)%	(17.8)%	1.4%	(32.4)%	(40.2)%	421.4%
GOVIEK URANIUM INC	GXU-V	0.9% / 2.0	4.7%	2.3%	(2.2)%	(29.7)%	(13.5)%	(36.6)%	(46.4)%	66.7%
FORSYS METALS CORP	FSY-T	0.5% / 3.0	0.0%	(3.2)%	11.1%	(18.9)%	17.6%	(29.4)%	(37.5)%	
LARAMIDE RESOURCES LTD	LAM-T	1.9% / 5.6	3.1%	(4.8)%	0.0%	(17.5)%	12.5%	(30.3)%	(43.8)%	106.3%
A-CAP ENERGY	ACB-AU	0.1% / 0.4	(1.5)%	(2.9)%	(9.5)%	(30.2)%	9.8%	(53.8)%	(1.5)%	
BERKELEY ENERGIA	BKY-AU	0.0% / 0.0	0.0%	(3.7)%		(20.0)%	(28.8)%	13.0%	(11.9)%	(61.8)%
WESTERN URANIUM & VANADIUM CORP	WUC-L	0.1% / 0.4	(7.3)%	(9.7)%	(21.5)%	(24.9)%	7.8%	(25.7)%	(57.2)%	85.3%
TORO ENERGY	TOE-AU	0.1% / 0.3				(22.7)%	21.4%	(22.7)%	(43.3)%	30.8%
ANFIELD ENERGY INC	AEC-V	0.0% / 0.1	2.9%	(0.0)%	16.7%	(6.7)%	(0.0)%	(26.3)%	(50.0)%	
ENERGY MET FPO	EME-AU			7.1%	0.0%	(21.1)%		(44.4)%	(57.1)%	
<b>EXPLORES</b>										
ALLIGATOR ENERGY	AGE-AU	2.2% / 2.9	0.0%	(7.3)%	(8.9)%	(29.2)%	6.3%	(7.3)%	(16.4)%	920.0%
CONSOLIDATED URANIUM INC	CUR-V	0.5% / 1.3	(6.1)%	1.6%	(7.5)%	(15.1)%	10.1%	(35.2)%	(26.2)%	238.2%
ELEVATE URANIUM	EL8-AU	1.9% / 5.8	(2.2)%	(9.2)%	(8.2)%	(23.9)%	20.3%	(4.3)%	(8.2)%	349.5%
DEVEX RESOURCES	DEV-AU	0.1% / 1.1	(3.1)%	(4.6)%	0.0%	(20.5)%	3.3%	(36.7)%	10.7%	3.3%
MEGA URANIUM LTD	MGA-T	0.5% / 2.1	7.1%	2.3%	2.3%	(16.7)%	28.6%	(11.8)%	(29.7)%	73.1%
SKYHARBOR RESOURCES LTD	SVH-V	0.4% / 0.6	5.9%	0.6%	(13.4)%	(25.5)%	16.7%	(17.0)%	(41.7)%	130.0%
BASELODE ENERGY CORP	FIND-V	0.2% / 0.4	(0.0)%	(2.8)%	(11.4)%	(19.5)%	(6.7)%	(13.6)%	(27.8)%	45.8%
VALORE METALS CORP	VO-V	0.2% / 1.3	(1.3)%	(1.3)%	2.8%	(1.3)%	32.1%	(32.7)%	0.0%	37.0%
APPRIA RARE EARTHS & URANIUM CORP	API-L	0.2% / 0.4	(3.8)%	(1.9)%	0.0%	4.1%	70.0%	(12.1)%	(35.4)%	39.7%
AZIMUT EXPLORATION INC	AZM-V	0.1% / 0.6	1.8%	5.6%	(1.7)%	(32.1)%	(28.8)%	(65.5)%	(62.5)%	(50.9)%
92 ENERGY	92E-AU	8.2% / 10.6	(1.0)%	(11.2)%	(9.5)%	(31.7)%	9.2%	(30.1)%	(28.6)%	
AURANIA RESOURCES LTD	ARU-V	0.2% / 1.9	(0.0)%	(2.1)%	(0.0)%	(20.7)%	(31.3)%	(60.7)%	(70.7)%	(89.4)%
CANALASKA URANIUM LTD	CVV-V	0.4% / 0.7	(4.7)%	(6.8)%	(21.2)%	(30.5)%	43.9%	(6.8)%	(41.4)%	100.0%
BLUE SKY URANIUM CORP	BSK-V	2.3% / 14.0	(3.4)%	(6.7)%	(0.0)%	(26.3)%	7.7%	(28.2)%	(56.9)%	12.0%
OKAPI RESOURCES	OKR-AU	0.3% / 0.5	(4.3)%	(4.3)%	(6.2)%	(19.6)%	25.0%	(34.8)%	(54.5)%	15.4%
PUREPOINT URANIUM GRP INC	PTU-V	0.1% / 0.4	(7.1)%	0.0%	(7.1)%	(27.8)%	8.3%	(23.5)%	(55.2)%	62.5%
GLOBEX MINING ENTERPRISES INC	GMX-T	0.1% / 0.4	5.6%	7.0%	4.1%	(12.6)%	(20.0)%	(30.9)%	(20.8)%	8.6%
GTI ENERGY	GTR-AU	0.0% / 0.0	(6.3)%	(6.3)%	(6.3)%	(25.0)%	15.4%	(37.5)%	(37.5)%	(21.1)%
FORUM ENERGY METALS CORP	FMC-V	0.1% / 0.4	0.0%	(8.3)%	(12.0)%	(26.7)%	0.0%	(35.3)%	(78.0)%	(21.4)%
STANDARD URANIUM LTD	STND-V	3.0% / 14.5	4.8%	4.8%	22.2%	(15.4)%	29.4%	(48.8)%	(69.9)%	(42.1)%
FISSION 3.0 CORP	FUU-V	0.1% / 0.4	(0.0)%	(0.0)%	(0.0)%	(29.2)%	13.3%	(61.4)%	(54.1)%	13.3%
AZINCOURT ENERGY CORP	AAZ-V	0.1% / 0.2	11.1%	0.0%	0.0%	(37.5)%	0.0%	(71.4)%	(76.5)%	(20.6)%
ALX RESOURCES CORP	AL-V	0.5% / 2.4	12.5%	12.5%	12.5%	0.0%	28.6%	(50.0)%	(62.5)%	(43.8)%
CAULDRON ENERGY	CXU-AU	0.0% / 0.0	(8.3)%		(8.3)%	10.0%	37.5%	(62.1)%	(60.7)%	(71.1)%
TARKU RESOURCES LTD	TKU-V	0.1% / 0.2	0.0%	(14.3)%	0.0%		(25.0)%	(62.5)%	(62.5)%	
NORTHERN URANIUM CORP	UNO-H-V	0.1% / 2.9	0.0%	(25.0)%		(25.0)%		(57.1)%	(62.5)%	50.0%
X-TERRA RESOURCES INC	XTT-V	0.1% / 0.2	0.0%	0.0%	(20.0)%	(33.3)%	0.0%	(33.3)%	(60.0)%	(88.6)%
AVRUPA MINERALS LTD	AVU-V	0.0% / 0.3	(20.0)%		(20.0)%		(50.0)%		(75.0)%	(83.3)%
INTERNATIONAL PROSPECT VENTURES LTD	IZZ-V	0.1% / 1.5			(10.0)%	(10.0)%		(71.9)%	(75.0)%	(65.4)%
VANADIAN ENERGY CORP	VEC-V	0.0% / 0.1			0.0%		20.0%	(40.0)%		(60.0)%
URAVAN MINERALS INC	UVN-V	0.10%								(36.0)%
EROS RESOURCES CORP	ERC-V	0.0% / 0.3	0.0%			(7.7)%	(20.0)%			(33.3)%
<b>INVENTORY FUNDS</b>										
SPROTT PHYSICAL URANIUM TRUST	U.UN-T	1.5% / 2.3	4.1%	(0.1)%	(0.8)%	(2.3)%	22.4%	16.2%	18.1%	
YELLOW CAKE PLC	YCA-LN	0.1% / 0.2	(2.3)%	(7.0)%	(4.9)%	(8.9)%	19.3%	13.5%	12.2%	91.1%
<b>ROYALTY COMPANIES</b>										
URANIUM ROYALTY CORP	URC-V	1.6% / 1.8	3.3%	(0.6)%	0.6%	(22.4)%	6.8%	(31.2)%	(46.2)%	178.8%

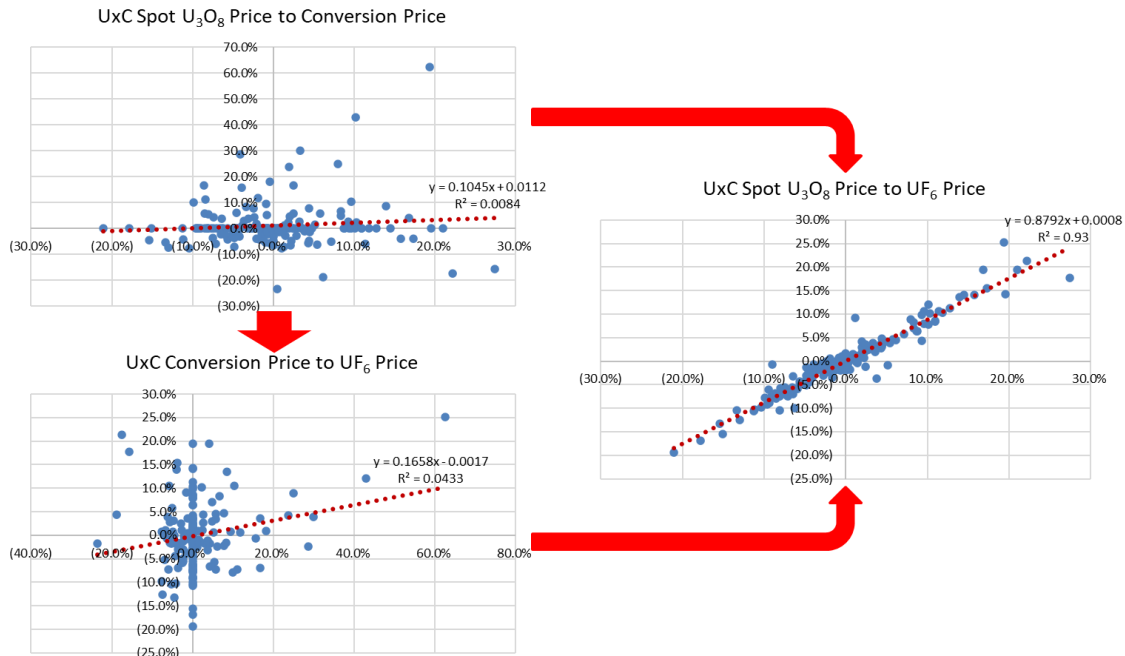
Source: UxC, CapitalIQ, Bloomberg, Haywood



Uranium Fuel Cycle Price Relationships

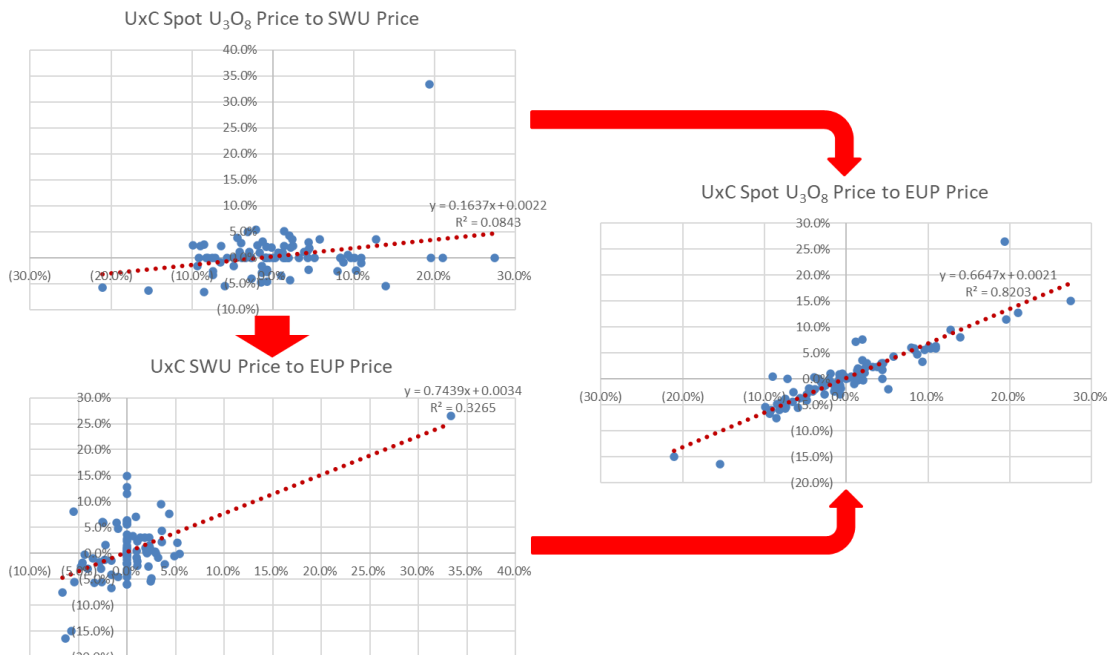
The charts below show that the price of uranium products ( $U_3O_8$ ,  $UF_6$  and EUP) are tightly correlated (monthly % $\Delta$ ) in the long term (RHS Figures 8 & 9). On the lower left chart of each Figure, we see that the cost of fuel services exhibit a much lower correlation with the monthly % change in uranium product (Conversion to  $UF_6$  [ $R^2=0.04$ ] or SWU to EUP [ $R^2=0.33$ ]), owing to the fact that the uranium embedded in the product dominates value. Historically, conversion costs have made up an average of 10.5% of the cost of  $UF_6$  (currently 22.8%), and SWU costs have made up an average of 26% of the price of EUP (currently 25.2%) (or, conversely,  $UF_6$  historically makes up 74% of the cost of EUP).

Figure 8.  $U_3O_8$  – Conversion –  $UF_6$  Monthly Performance Correlations 2008 to September 30<sup>th</sup>, 2022 (at UxC spot prices)



Source: Haywood Securities Inc., UxC

Figure 9:  $U_3O_8$  – SWU – EUP Monthly Performance Correlations – 2015 to September 30<sup>th</sup>, 2022



Source: Haywood Securities Inc., UxC





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I, Colin Healey, hereby certify that the views expressed in this report (which includes the rating assigned to the issuer's shares as well as the analytical substance and tone of the report) accurately reflect my/our personal views about the subject securities and the issuer. No part of my/our compensation was, is, or will be directly or indirectly related to the specific recommendations.

### Important Disclosures

Of the companies included in the report the following Important Disclosures apply:

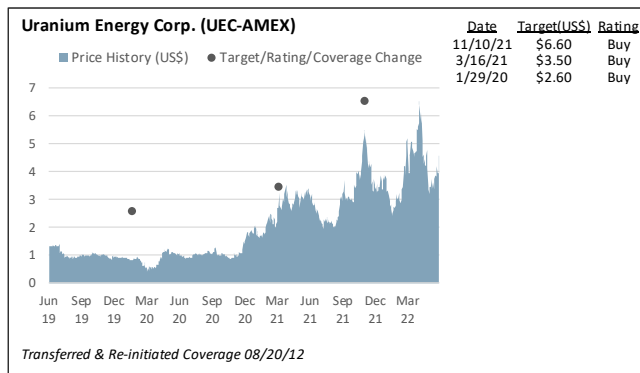
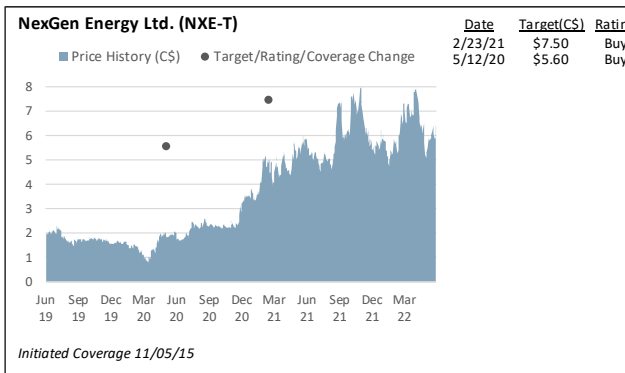
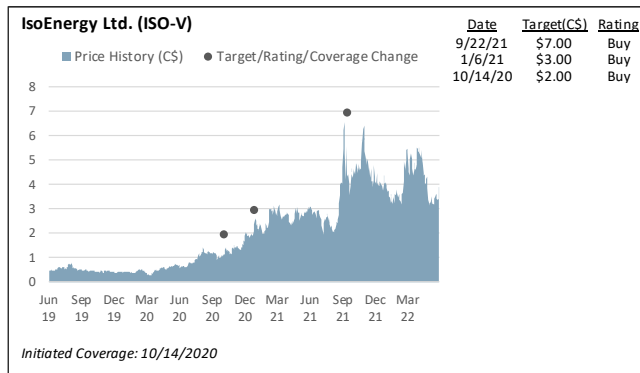
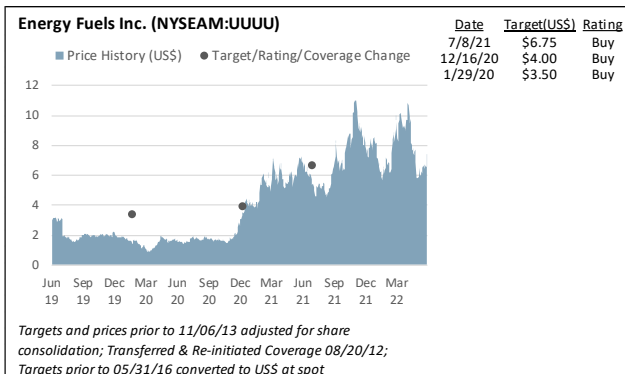
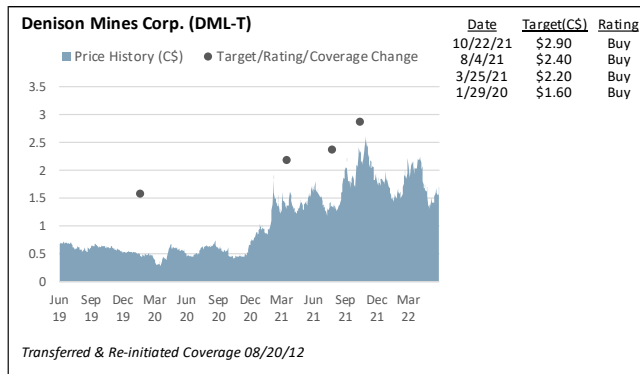
Ticker	Company	1	2	3	4	5	6	7	8	9
TSX:DML	Denison Mines Corp.			X			X			
TSX:EFR	Energy Fuels Inc.			X						
TSXV:ISO	IsoEnergy Ltd.			X						
TSX:NXE	NexGen Energy Ltd.			X						
US:UEC	Uranium Energy Corp.			X						
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### Distribution of Ratings (as of October 13, 2022)

	%	#	IB Clients (TTM)
Buy	76.0%	76	71.4%
Hold	10.0%	10	14.3%
Sell	0.0%	0	0.0%
Tender	1.0%	1	4.8%
UR (Buy)	0.0%	0	0.0%
UR (Hold)	0.0%	0	0.0%
UR (Sell)	0.0%	0	0.0%
Dropped (TTM)	13.0%	13	9.5%



Price Chart, Rating and Target Price History (as of October 13, 2022)



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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