

## Uranium Stocks Continue to Swing on Elevated Market Volatility

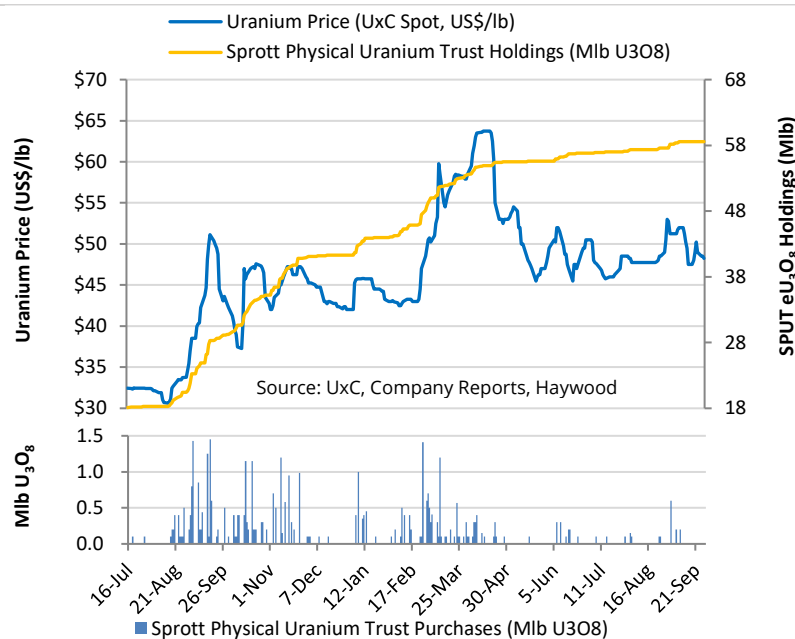
### WEAKNESS STILL = OPPORTUNITY

#### Uranium Price Update & Sector Commentary: Close of September 28<sup>th</sup>, 2022

Broader market volatility continued to accelerate early this week with the VIX peaking at almost 35, up 27.5% from since last Thursday. Uranium stocks continue to exhibit significant beta to major benchmarks with amplified returns on both up and down days. Yesterday as the broader markets rallied around 2%, our uranium equity universe rallied an average of 3.7%, with the 'Producers/NEO Producers' sub-group leading the pack, up an average of 4.9%. A couple of weeks back we highlighted that weakness=opportunity in uranium stocks which are currently overreacting to market swings. We see the down-days in this high-volatility environment often producing quick materially discounted prices in the uranium names creating great entry points and trade opportunities for those looking to take advantage of the swings. As volatility wanes, we expect the 'market discount to NAV' condition seen in the Sprott Physical Uranium Trust (aka SPUT, U.UN-T (C\$), U.U-T (US\$), Not Rated) to correct and stabilize, which should drive incremental additions to its physical holdings. In 'Demand' news, we saw France making moves to lubricate the bureaucratic process facing new reactor construction in the Country. President Macron expects the Country to build a minimum of 6 new reactors to meet the future carbon neutrality mandate. The Country plans to commence construction of its first EPR2 reactor ahead of May 2027, before Macron's presidential term ends. That reactor is expected to enter commercial operations in 2035-36, reflecting a >8-year construction window. For that to happen, the bureaucratic process must be completed within 5-years, with a new Bill being drafted designed to ensure that's possible. France expects to invest ~US\$50 B for the proposed 6 new reactors.

#### Uranium Equities - News

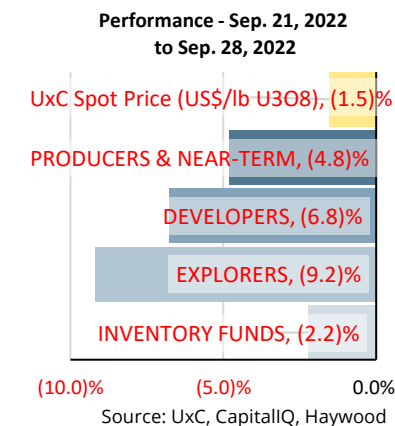
- ◆ **Global Atomic Corporation (GLO-T, Not Rated):** Commenced the EPCM phase for its Dasa Project— [link to Sept. 28<sup>th</sup> PR](#)
- ◆ **Elevate Uranium Limited (EL8-AU, Not Rated):** Extended its Koppies 2 mineralization by 10 km— [link to Sept. 28<sup>th</sup> PR](#)
- ◆ **Skyharbour Resources Ltd. (SYH-V, Not Rated):** Signed an option agreement with Yellow Rocks Energy Ltd for the Wallee and Usam Island Uranium Projects— [link to Sept. 28<sup>th</sup> PR](#)



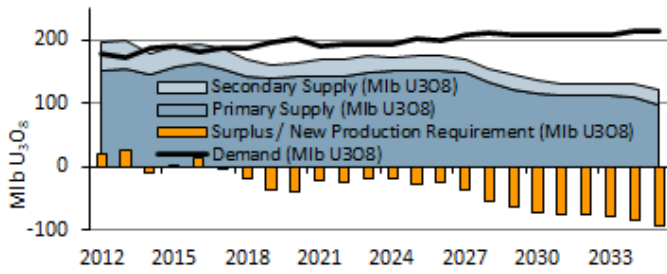
**Uranium required and cost to make 1kg of EUP (4.5% U<sup>235</sup>):** Mine/plant output of 26.7 lb U<sub>3</sub>O<sub>8</sub> (\$1,288 cost) -> Conversion to UF<sub>6</sub> (\$388 cost) -> delivers 10.22 kgU as UF<sub>6</sub> (\$1,677 cumulative cost) -> enrichment: 6.23 SWU (\$573 cost) -> delivers 1kg EUP (\$2,250 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>\$48.25 (-0.5%)</b>
(1-week Δ):	(-1.5%)
(1-month Δ):	(-9.0%)
<b>3-year (1-week Δ):</b>	\$54.50 (unchanged)
<b>5-year (1-week Δ):</b>	\$58.25 (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

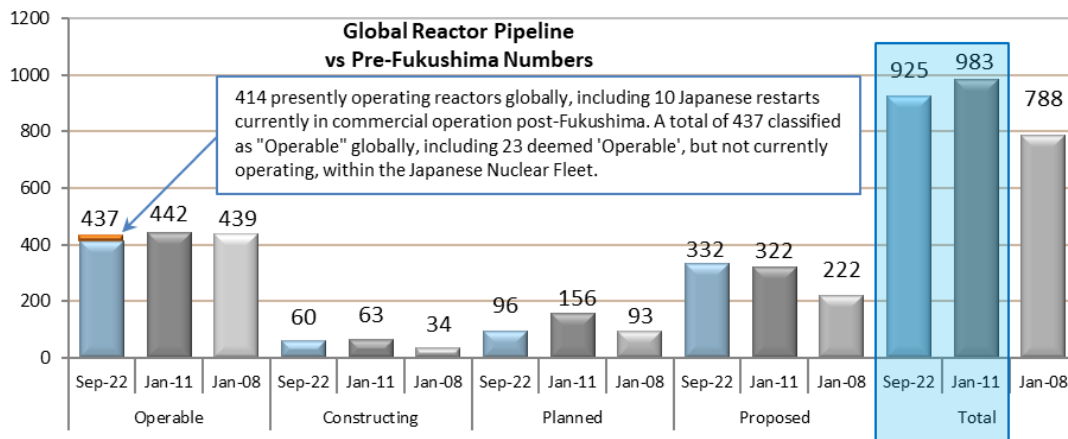
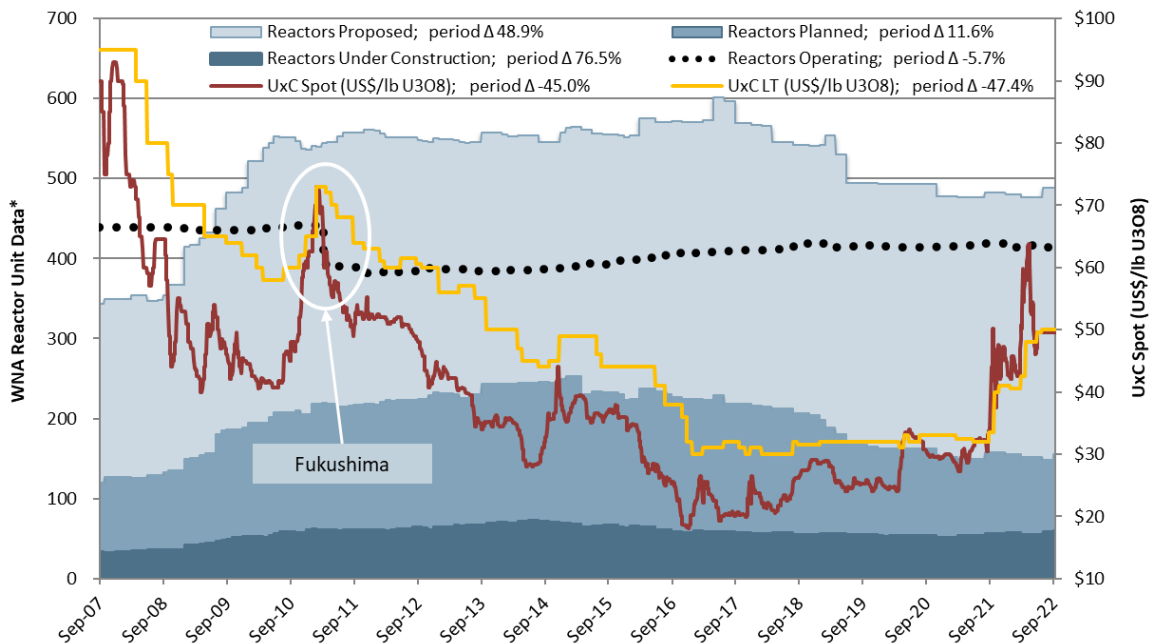
Commodity Price History	2015	2016	2017	2018	2019	2020	2021
Spot price (US\$/lb U <sub>3</sub> O <sub>8</sub> )	\$37	\$26	\$22	\$25	\$26	\$29	\$40
Long Term price (US\$/lb U <sub>3</sub> O <sub>8</sub> )	\$47	\$40	\$31	\$31	\$32	\$32	\$35

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

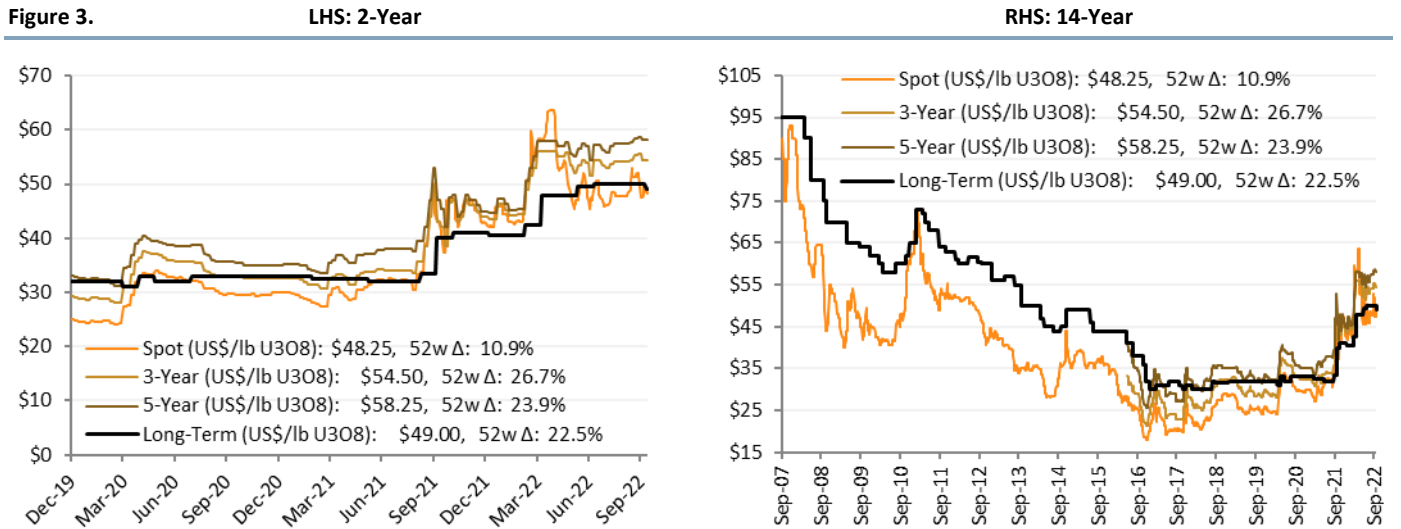
Figure 2. Uranium Sector Haywood Coverage

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	2023E
Denison Mines	DML-T	CH	\$1.62	818	\$1,325	\$1,258	\$2.90	79%	BUY	C\$2.85	(\$0.01)	(\$0.01)	
Energy Fuels	UUUU-US	CH	US\$6.25	158	US\$985	US\$1,215	US\$6.75	8%	BUY	\$6.73	(\$0.02)	\$0.20	
IsoEnergy Ltd.	ISO-V	CH	\$3.54	107	\$378	\$387	\$7.00	98%	BUY	C\$7.02	(\$0.07)	(\$0.07)	
NexGen Energy	NXE-T	CH	\$5.45	480	\$2,613	\$2,540	\$7.50	38%	BUY	C\$7.50	(\$0.03)	(\$0.03)	
Uranium Energy	UEC-US	CH	US\$3.70	335	US\$1,239	US\$1,216	US\$6.60	78%	BUY	\$6.55	(\$0.08)	(\$0.08)	

Source: Haywood Securities

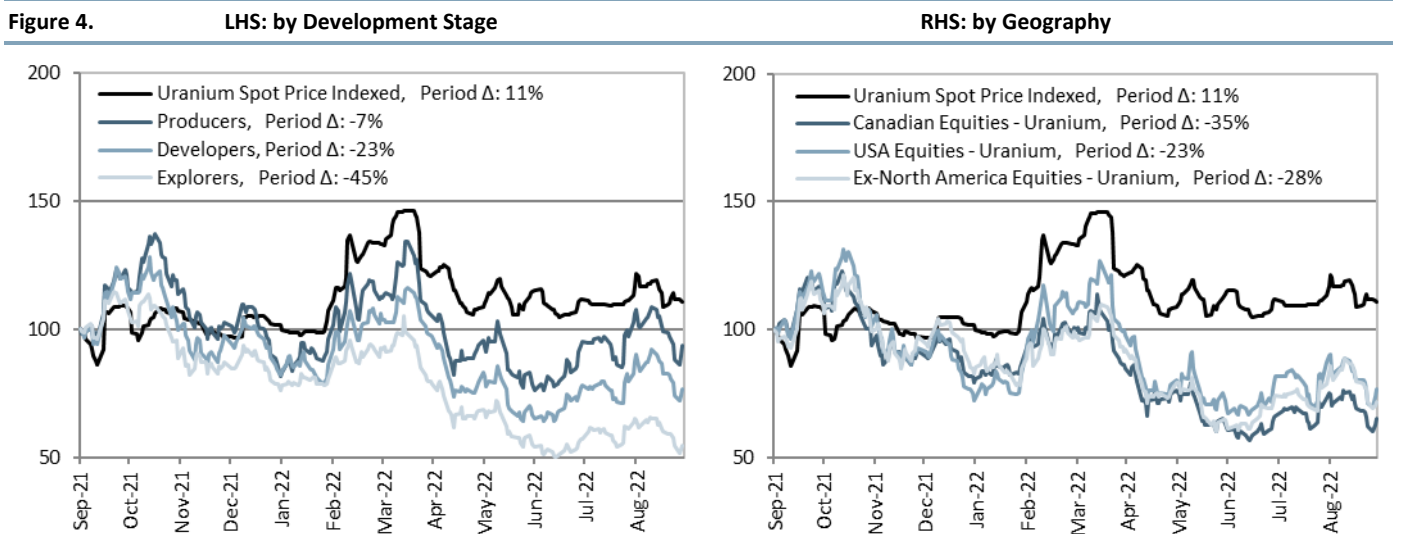


Uranium Price Charts



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 Sep. 21, 2022 to Sep. 28, 2022
		Consensus Target	Implied Return			Enterprise Value (USD) (millions)	Total Reserves & Resources (M lb)	USD EV/lb Resource	IBES Consensus NAV	Price / Nav	2022 P/CFPS	2023 P/CFPS	2024 P/CFPS	
<b>PRODUCERS &amp; NEAR-TERM</b>														
Haywood Covered Names bold														
Cameco Corporation (CCO-T)	\$37.19	\$44.08	19%	398	\$14,818	\$10,548	1078.5	\$9.78	\$28.76	1.29x	36.8x	19.7x	19.2x	(1.4)%
Kazatomprom (KAP-LSE)	\$28.42	\$38.35	35%	259	\$7,371	\$7,440	1339.5	\$5.55	\$34.34	0.83x	11.5x	7.5x	6.8x	(4.5)%
Paladin Energy (PDN-AU)	\$0.77	\$0.74	(5)%	2,978	\$2,299	\$1,276	381.7	\$3.34	\$1.24	0.62x	4825.0x			(10.5)%
Uranium Energy (UEC-US)	\$3.70	\$6.57	78%	335	\$1,239	\$1,216	306.7	\$3.97	\$5.98	0.62x				1.9%
Energy Fuels (UUUU-US)	\$6.25	\$9.70	55%	158	\$985	\$888	119.6	\$7.42	\$8.83	0.71x	21.2x		156.3x	0.0%
Boss Energy (BOE-AU)	\$2.50	\$3.26	30%	353	\$881.4	\$451.2	71.4	\$6.32	\$3.20	0.78x	27.5x			(6.4)%
EnergyResources (ERA-AU)	\$0.21			3,691	\$775.2	\$393.5	302.3	\$1.30						(13.0)%
Ur-Energy Inc. (URE-T)	\$1.64	\$4.08	148%	223	\$365.4	\$237.8	41.3	\$5.75	\$4.08	0.40x	20.5x			(2.7)%
Lotus Resources (LOT-AU)	\$0.23	\$0.31	38%	1,326	\$298.3	\$180.3	44.2	\$4.08	\$0.32	0.70x				(6.8)%
Peninsula Energy (PEN-AU)	\$0.17	\$0.35	115%	999	\$164.8	\$91.1	53.7	\$1.70	\$0.40	0.41x	116.2x			(8.2)%
<b>Group Average - Producers</b>								<b>\$4.92</b>		<b>0.71x</b>	<b>54.8x</b>	<b>978.8x</b>	<b>52.4x</b>	<b>(4.8)%</b>
<b>DEVELOPERS</b>														
NexGen Energy (NXE-T)	\$5.45	\$9.47	74%	480	\$2,613	\$1,856	337.8	\$5.49	\$8.57	0.64x				(1.7)%
Denison Mines (DML-T)	\$1.62	\$2.15	33%	818	\$1,325	\$919	207.5	\$4.43	\$2.53	0.64x				(2.7)%
Global Atomic (GLO-T)	\$3.61	\$6.50	80%	178	\$642.4	\$458.8	161.1	\$2.85	\$6.47	0.56x				(6.0)%
Deep Yellow (DYL-AU)	\$0.84			732	\$614.5	\$335.1	392.2	\$0.85						(13.5)%
Fission Uranium (FCU-T)	\$0.73	\$1.28	75%	682	\$497.5	\$336.8	130.3	\$2.59	\$1.43	0.51x				0.7%
American Lithium (LI-V)	\$2.08	\$9.42	353%	208	\$432.9	\$304.6	123.4	\$2.47	\$11.00	0.19x				0.3%
IsoEnergy Ltd. (ISO-V)	\$3.54	\$6.50	84%	107	\$378.2	\$282.7	51.3	\$5.51	\$6.60	0.54x				(4.0)%
enCore Energy (EU-V)	\$3.47	\$7.60	119%	108	\$373.4	\$250.2	129.6	\$1.93	\$7.55	0.46x				(10.8)%
Bannerman Energy (BMN-AU)	\$1.95	\$2.96	52%	150	\$291.0	\$140.9	238.8	\$0.59						(8.5)%
GovEx Uranium (GXU-V)	\$0.26	\$0.70	176%	593	\$151.1	\$113.8	201.7	\$0.56	\$0.89	0.29x				(0.1)%
Forsys Metals (FSY-T)	\$0.60			195	\$117.1	\$72.5	127.0	\$0.57						(8.2)%
Laramide Resources (LAM-T)	\$0.49	\$0.80	63%	208	\$102.0	\$72.0	122.7	\$0.59						(5.9)%
A-Cap Energy (ACB-AU)	\$0.08			1,232	\$97.4	\$54.1	190.6	\$0.28						(8.4)%
Berkeley Energia (BKY-AU)	\$0.29			446	\$127.1	\$29.1	89.4	\$0.33						(9.0)%
Western Uranium (WUC-L)	\$1.77			44	\$77.2	\$45.8	52.4	\$0.87						2.0%
Toro Energy (TOE-AU)	\$0.02			3,897	\$66.3	\$38.0	90.9	\$0.42						(12.9)%
Anfield Energy (AEC-V)	\$0.06	\$0.25	317%	624	\$37.4	\$21.4	22.5	\$0.95	\$0.42	0.14x				(21.7)%
EnergyMetals (EME-AU)	\$0.15			210	\$31.5	\$10.9	57.6	\$0.19						(11.5)%
<b>Group Average - Developers</b>								<b>\$1.75</b>		<b>0.44x</b>				<b>(6.8)%</b>
<b>EXPLORERS</b>														
Alligator Energy (AGE-AU)	\$0.05			3,303	\$175.0	\$92.5								(19.4)%
Consolidated Uranium (CUR-V)	\$1.91	\$4.15	117%	77	\$146.7	\$88.8	89.6	\$0.99						(6.0)%
Elevate Uranium (EL8-AU)	\$0.46			275	\$126.7	\$66.7	137.5	\$0.48						(12.2)%
DevEx Resources (DEV-AU)	\$0.32			360	\$113.3	\$68.6								(13.6)%
Mega Uranium (MGA-T)	\$0.23			359	\$82.5	\$49.5								0.1%
Skyharbour Resources (SYH-V)	\$0.46	\$0.98	112%	144	\$66.2	\$45.3	7.0	\$6.51	\$1.01	0.46x				2.4%
Baseload Energy (FIND-V)	\$0.69			86	\$59.6	\$35.7								(7.4)%
ValOre Metals (VO-V)	\$0.34	\$1.05	213%	154	\$51.5	\$35.5	43.5	\$0.82						0.9%
Appia Rare (APIL)	\$0.51			123	\$62.8	\$40.2	55.8	\$0.72						6.3%
Azimut Exploration (AZM-V)	\$0.58	\$2.65	357%	79	\$46.0	\$19.0			\$2.66	0.22				(13.9)%
92 Energy (92E-AU)	\$0.51			88	\$44.8	\$21.7								(13.6)%
Aurania Resources (ARU-V)	\$0.50			54	\$26.7	\$23.6								(4.9)%
CanAlaska Uranium (CWV-V)	\$0.50			102	\$51.0	\$28.4								(2.1)%
Blue Sky (BSK-V)	\$0.15			200	\$29.0	\$19.3	22.7	\$0.85						(2.1)%
Okapi Resources (OKR-AU)	\$0.24			136	\$31.9	\$18.1								(18.3)%
Purepoint Uranium (PTU-V)	\$0.07			369	\$25.8	\$15.7								(14.3)%
Globex Mining (GMX-T)	\$0.71			56	\$39.5	\$14.5								(9.7)%
GTI Energy (GTR-AU)	\$0.02			1,505	\$27.1	\$12.1								(12.4)%
Forum Energy (FMC-V)	\$0.12			171	\$20.5	\$12.5	0.6	\$21.10						(9.6)%
Standard Uranium (STND-V)	\$0.09			148	\$13.3	\$9.4								(19.9)%
Fission 3.0 (FUU-V)	\$0.10			302	\$30.2	\$9.0								(2.1)%
Azincourt Energy (AAZ-V)	\$0.06			227	\$12.5	\$1.4								(17.1)%
ALX Resources (AL-V)	\$0.04			208	\$8.3	\$4.4								(2.1)%
Cauldron Energy (CXU-AU)	\$0.01			535	\$7.0	\$3.7	30.9	\$0.12						(15.6)%
Tarku Resources (TKU-V)	\$0.05			86	\$4.3	\$3.2								(30.0)%
Northern Uranium (UNOH-V)	\$0.02			162	\$3.2	\$2.4								(2.1)%
X-Terra Resources (XTT-V)	\$0.03			99	\$2.5	\$1.6								22.4%
Avrupa Minerals (AVU-V)	\$0.03			55	\$1.4	\$0.7								(51.0)%
International Prospect (IZZ-V)	\$0.05			40	\$2.0	\$1.4	0.6	\$2.25						8.8%
Vanadian Energy (VEC-V)	\$0.03			42	\$1.3	\$1.1								(16.1)%
UraVan Minerals (UVN-V)	\$0.16			5	\$0.8	\$0.3								(2.1)%
Eros Resources (ERC-V)	\$0.06			98	\$5.4	(\$4.8)								(17.1)%
<b>Group Average - Explorers</b>								<b>\$3.76</b>						<b>(9.2)%</b>
<b>INVENTORY FUNDS</b>														
Sprott Physical (U.UN-T)	\$16.12	\$23.50	46%	234	\$2,761	\$2,828	58.6	\$48.29						1.3%
Yellow Cake (YCA-LN)	£3.98	£5.30	33%	183	£729.1	\$658.8	19.8	\$33.22						(5.7)%
<b>ROYALTY COMPANIES</b>														
Uranium Royalty (URC-V)	\$3.35	\$7.13	113%	97	\$326.1	\$167.4			\$5.08	0.66x				(2.9)%

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





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

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:BMN	Bannerman Energy Ltd	1.73	11.777	(29%)	39	21	1
TSXV:FIND	Baselode Energy Corp.	1.48	10.687	15%	52	28	19
ASX:EL8	Elevate Uranium Ltd	1.47	11.000	(19%)	32	14	10
ASX:PEN	Peninsula Energy Limited	1.45	13.092	(32%)	5	23	4
US:UEC	Uranium Energy Corp.	1.45	9.357	21%	21	27	8
TSXV:AEC	Anfield Energy Inc.	1.45	10.732	(54%)	28	6	2
ASX:TOE	Toro Energy Limited	1.40	10.574	(48%)	51	37	45
TSX:FSY	Forsys Metals Corp.	1.38	9.707	(35%)	18	13	27
ASX:AGE	Alligator Energy Limited	1.30	9.531	(26%)	19	12	13
ASX:DYL	Deep Yellow Limited	1.30	10.609	(18%)	4	1	33
TSXV:URC	Uranium Royalty Corp.	1.29	10.478	(38%)	31	20	12
TSXV:UNO.H	Northern Uranium Corp.	1.28	8.455	(50%)	30	25	14
CNSX:WUC	Western Uranium & Vanadium I	1.27	9.378	(36%)	29	16	7
TSXV:FMC	Forum Energy Metals Corp.	1.23	8.419	(73%)	10	9	21
TSX:FCU	Fission Uranium Corp.	1.15	9.499	(11%)	15	18	16
TSXV:GXU	GoviEx Uranium Inc.	1.14	8.242	(37%)	55	57	18
ASX:OKR	Okapi Resources Limited	1.14	8.949	(49%)	33	43	17
TSX:URE	Ur-Energy Inc.	1.12	10.076	(24%)	26	19	37
ASX:LOT	Lotus Resources Limited	1.12	10.106	(8%)	1	3	30
TSXV:SYH	Skyharbour Resources Ltd.	1.11	8.426	(34%)	16	33	38
TSX:EFR	Energy Fuels Inc.	1.11	8.906	4%	8	15	35
TSXV:AAZ	Azincourt Energy Corp.	1.10	9.156	(73%)	61	60	31
ASX:92E	92 Energy Limited	1.09	8.602	(30%)	34	47	11
TSXV:FUU	Fission 3.0 Corp.	1.08	8.206	(41%)	37	44	15
TSX:MGA	Mega Uranium Ltd.	1.06	8.174	(21%)	13	22	36
TSXV:EU	enCore Energy Corp.	1.06	9.497	(36%)	7	10	47
ASX:GTR	GTI Energy Ltd	1.05	7.859	(38%)	6	7	51
ASX:BOE	Boss Energy Limited	1.04	10.925	25%	44	40	52
TSX:GLO	Global Atomic Corporation	1.04	9.662	15%	9	17	29
TSX:DML	Denison Mines Corp.	0.97	8.986	(8%)	42	41	25
TSX:NXE	NexGen Energy Ltd.	0.97	9.492	(8%)	3	5	22
ASX:PDN	Paladin Energy Ltd	0.96	9.963	(1%)	46	50	9
TSXV:ISO	IsoEnergy Ltd.	0.92	6.684	(13%)	25	35	23
ASX:ACB	A-Cap Energy Limited	0.91	5.404	(5%)	20	31	34
TSXV:PTU	Purepoint Uranium Group Inc.	0.88	7.711	(44%)	2	8	6
TSXV:CVV	CanAlaska Uranium Ltd.	0.85	5.504	(23%)	53	45	20
ASX:BKY	Berkeley Energia Limited	0.83	6.665	(11%)	49	51	24
AIM:YCA	Yellow Cake plc	0.83	12.313	21%	60	54	57
TSX:CCO	Cameco Corporation	0.80	9.388	40%	23	29	32
TSXV:BSK	Blue Sky Uranium Corp.	0.75	6.838	(47%)	63	63	63
TSX:U.U	Sprott Physical Uranium Trust Fi	0.71	11.552	15%	36	46	26
TSXV:CUR	Consolidated Uranium Inc.	0.68	7.058	(23%)	40	42	46
TSX:GMX	Globex Mining Enterprises Inc.	0.67	8.145	(25%)	17	26	48
ASX:EME	Energy Metals Limited	0.66	7.202	(58%)	35	39	44
TSXV:AVU	Avrupa Minerals Ltd.	0.65	4.302	(67%)	43	36	28
ASX:DEV	DevEx Resources Limited	0.64	4.428	0%	27	38	40
TSXV:XTT	X-Terra Resources Inc.	0.61	3.696	(62%)	14	32	62
TSXV:STND	Standard Uranium Ltd.	0.60	4.913	(72%)	48	49	60
CNSX:API	Appia Rare Earths & Uranium Cc	0.59	4.397	(22%)	24	34	43
TSXV:VEC	Vanadian Energy Corp.	0.58	2.949	(71%)	22	24	61
ASX:ERA	Energy Resources of Australia Li	0.57	7.977	(47%)	54	48	54
KAS:KZAP	JSC National Atomic Company K	0.56	8.672	(14%)	59	61	53
TSXV:VO	ValOre Metals Corp.	0.53	5.584	(15%)	62	62	39
TSXV:AL	ALX Resources Corp.	0.47	5.007	(60%)	12	30	49
TSXV:LI	American Lithium Corp.	0.43	3.267	(14%)	47	55	55
TSXV:ERC	Eros Resources Corp.	0.38	4.036	(39%)	45	52	56
TSXV:UVN	Uravan Minerals Inc.	0.37	3.495	(51%)	58	59	58
TSXV:IZZ	International Prospect Venture	0.32	2.815	(69%)	50	58	59
ASX:CXU	Cauldron Energy Limited	0.27	1.839	(59%)	57	56	50
TSXV:AZM	Azimut Exploration Inc.	0.26	3.719	(68%)	56	53	42
ASX:LAM	Laramide Resources Ltd.	0.21	2.369	(29%)	41	4	5
TSXV:TKU	Tarku Resources Ltd.	0.06	0.280	(38%)	38	2	3
TSXV:ARU	Aurania Resources Ltd.	-0.04	-0.437	(79%)	11	11	41

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		1.9%	0.9%	(3.8)%	(6.0)%	(1.1)%	(12.1)%	(7.6)%	14.8%
S&P/TSX VENTURE COMPOSITE	.JX-T		2.4%	1.6%	(6.7)%	(8.7)%	(4.8)%	(37.4)%	(32.3)%	(17.1)%
S&P/TSX 60 INDEX	T.XLX-T		1.7%	0.7%	(3.6)%	(5.7)%	(1.4)%	(12.1)%	(6.5)%	15.8%
<b>PRODUCERS</b>										
CAMECO CORPORATION	CCO-T	5.5% / 2.2	2.5%	8.2%	0.2%	(1.9)%	37.4%	34.8%	39.8%	174.9%
KAZATOMPROM S	KAP-LN		1.6%	4.6%	(11.2)%		9.6%	(22.7)%	(18.8)%	97.4%
PALADIN ENERGY L	PDN-AU	5.9% / 6.1	(2.0)%	(7.0)%	(14.5)%	(4.5)%	26.7%	(16.5)%	(5.2)%	502.5%
URANIUM ENERGY CORP	UEC-US	14.3% / 4.1	7.9%	12.8%	(4.6)%	(17.2)%	20.1%	10.4%	20.9%	266.3%
ENERGY FUELS INC	UUUU-US	18.4% / 6.2	8.9%	11.8%	(4.0)%	(19.5)%	27.3%	(18.1)%	(2.6)%	263.4%
BOSS EN FPO	BOE-AU	2.6% / 2.9	2.0%	1.2%	(6.0)%	4.6%	40.7%	10.7%	24.5%	332.3%
ENERGY RESOURCES	ERA-AU	0.0% / 0.1	(4.8)%	(11.1)%	(16.7)%	(20.0)%	5.3%	(41.2)%	(46.7)%	33.3%
UR ENERGY INC	URE-T	4.3% / 3.7	4.5%	8.6%	(1.2)%	(7.3)%	21.5%	6.5%	(23.7)%	144.8%
LOTUS RESOURCES	LOT-AU	1.0% / 0.8	0.0%	(4.3)%	(6.4)%	(10.2)%	2.3%	(29.0)%	(10.2)%	168.3%
PENINSULA ENERGY	PEN-AU	1.2% / 1.7	0.0%	(3.1)%	(13.9)%	(8.8)%	0.0%	(22.5)%	(34.0)%	134.8%
<b>DEVELOPERS</b>										
NEXGEN ENERGY LTD	NXE-T	6.1% / 4.1	7.1%	13.8%	(2.3)%	(5.5)%	18.0%	(1.6)%	(7.6)%	130.0%
DENISON MINES CORPORATION	DML-T	6.1% / 3.7	4.5%	11.7%	(3.0)%	(8.0)%	27.6%	(6.9)%	(8.5)%	184.2%
GLOBAL ATOMIC CORPORATION	GLO-T	1.1% / 2.3	5.2%	5.6%	(2.7)%	(9.8)%	28.0%	(13.8)%	15.0%	455.4%
DEEP YELLOW	DYL-AU	0.6% / 0.9	(1.9)%	(14.1)%	(25.8)%	(14.1)%	32.8%	(8.1)%	(22.2)%	135.8%
FISSION URANIUM CORP	FCU-T	1.2% / 2.0	9.0%	7.4%	(3.9)%	(8.8)%	19.7%	(6.4)%	(11.0)%	108.6%
AMERICAN LITHIUM CORP	LI-V	0.8% / 1.8	2.5%	15.6%	(3.3)%	(18.1)%	12.4%	(51.2)%	(13.7)%	70.5%
ISOENERGY LTD	ISO-V	1.5% / 2.5	3.5%	5.7%	(11.5)%	(16.1)%	14.2%	(5.3)%	(12.8)%	224.8%
ENCORE ENERGY CORP	EU-V	0.5% / 0.9	1.5%	2.4%	(14.3)%	(21.8)%	7.1%	(27.7)%	(36.4)%	204.4%
BANNERMAN ENERGY	BMN-AU	0.7% / 1.1	3.0%	(1.3)%	(11.6)%	(2.6)%	11.8%	(29.6)%	(30.9)%	363.4%
GOVIEK URANIUM INC	GXU-V	0.5% / 1.4	6.3%	8.5%	(8.9)%	(16.4)%	8.5%	(28.2)%	(37.0)%	82.1%
FORSYS METALS CORP	FSY-T	0.6% / 2.2	1.7%	7.1%	(7.7)%	(20.0)%	7.1%	(29.4)%	(35.5)%	252.9%
LARAMIDE RESOURCES LTD	LAM-T	1.8% / 4.6	5.4%	4.3%	(12.5)%	(10.9)%	(3.9)%	(31.0)%	(38.8)%	84.9%
A-CAP ENERGY	ACB-AU	0.1% / 0.2	(5.3)%	(5.3)%	(23.7)%	(6.6)%	12.7%	(51.0)%	(10.1)%	273.7%
BERKELEY ENERGIA	BKY-AU	0.0% / 0.0	1.8%	(3.4)%	(3.4)%	(8.1)%	(19.7)%	23.9%	(10.9)%	(56.8)%
WESTERN URANIUM & VANADIUM CORP	WUC-L	0.1% / 0.3	5.4%	28.3%	6.6%	(4.8)%	43.9%	(5.3)%	(36.1)%	129.9%
TORO ENERGY	TOE-AU	0.1% / 0.1		(0.0)%	(5.6)%	6.2%	41.7%	(22.7)%	(48.5)%	30.8%
ANFIELD ENERGY INC	AEC-V	0.2% / 0.3	0.0%	(7.7)%	(7.7)%	(25.0)%	(25.0)%	(36.8)%	(53.8)%	
ENERGY MET FPO	EME-AU		0.0%	(6.3)%	(11.8)%	(16.7)%	30.4%	(44.4)%	(57.7)%	
<b>EXPLORES</b>										
ALLIGATOR ENERGY	AGE-AU	2.3% / 2.1	3.8%	(11.3)%	(20.3)%	(3.5)%	12.2%	0.0%	(23.6)%	1,000.0%
CONSOLIDATED URANIUM INC	CUR-V	0.4% / 1.2	6.1%	4.4%	(9.5)%	(18.7)%	6.7%	(33.4)%	(23.0)%	
ELEVATE URANIUM	ELB-AU	1.8% / 3.8	(4.4)%	(12.2)%	(15.7)%	(4.4)%	17.8%	(7.5)%	(23.2)%	424.4%
DEVEX RESOURCES	DEV-AU	0.1% / 0.9	(1.6)%	(4.5)%	(12.5)%	(14.9)%	43.2%	(35.7)%	0.0%	5.0%
MEGA URANIUM LTD	MGA-T	0.5% / 1.5	9.5%	12.2%	(4.2)%	(13.2)%	17.9%	(9.8)%	(20.7)%	64.3%
SKYHARBOUR RESOURCES LTD	SYH-V	0.1% / 0.2	8.2%	21.1%	2.2%	(4.2)%	43.8%	(5.2)%	(34.3)%	155.6%
BASELODE ENERGY CORP	FIND-V	0.1% / 0.1	0.0%	(4.2)%	(9.2)%	(18.8)%	(11.5)%	(14.8)%	15.0%	38.0%
VALORE METALS CORP	VO-V	0.2% / 1.1	11.7%	8.1%	(6.9)%	(16.3)%	6.3%	(39.1)%	(15.2)%	13.6%
APIA RARE EARTHS & URANIUM CORP	API-L	0.1% / 0.2	14.6%	21.4%	34.2%	14.6%	50.0%	(12.1)%	(21.5)%	32.5%
AZIMUT EXPLORATION INC	AZM-V	0.1% / 1.0	(1.7)%	(7.9)%	(14.7)%	(32.6)%	(40.8)%	(64.8)%	(68.3)%	(47.3)%
92 ENERGY	92E-AU	8.1% / 6.2	(1.0)%	(7.2)%	(14.9)%	5.1%	14.4%	(24.3)%	(29.5)%	
AURANIA RESOURCES LTD	ARU-V	0.1% / 0.7	0.0%	(9.1)%	(3.8)%	(16.7)%	(39.8)%	(57.3)%	(79.0)%	(90.9)%
CANALASKA URANIUM LTD	CAV-V	0.1% / 0.3	4.2%	16.3%	(2.0)%	(9.1)%	75.4%	13.6%	(23.1)%	117.4%
BLUE SKY URANIUM CORP	BSK-V	2.1% / 9.1	0.0%	3.6%	(6.5)%	(23.7)%	3.6%	(25.6)%	(47.3)%	16.0%
OKAPI RESOURCES	OKR-AU	0.0% / 0.0	0.0%	(13.0)%	(19.0)%	9.3%	27.0%	(31.9)%	(52.0)%	30.6%
PUREPOINT URANIUM GRP INC	PTU-V	0.1% / 0.3	7.7%	7.7%	(6.7)%	(22.2)%	7.7%	(17.6)%	(44.0)%	55.6%
GLOBEX MINING ENTERPRISES INC	GMX-T	0.2% / 0.7	1.4%	(2.7)%	(12.3)%	(16.5)%	(30.4)%	(35.5)%	(25.3)%	(6.6)%
GTI ENERGY	GTR-AU	0.0% / 0.0	(0.0)%	(5.6)%	(19.0)%	6.2%	41.7%	(29.2)%	(41.4)%	(15.0)%
FORUM ENERGY METALS CORP	FMC-V	0.1% / 0.2	0.0%	0.0%	(17.2)%	(31.4)%	20.0%	(29.4)%	(73.0)%	0.0%
STANDARD URANIUM LTD	STND-V	3.6% / 8.5	0.0%	0.0%	(21.7)%	(33.3)%	12.5%	(58.1)%	(72.3)%	(64.0)%
FISSION 3.0 CORP	FUU-V	0.1% / 0.2	11.1%	17.6%	(4.8)%	(13.0)%	33.3%	(54.5)%	(41.2)%	42.9%
AZINCOURT ENERGY CORP	AAZ-V	0.1% / 0.1	10.0%	(5.2)%	(15.4)%	(21.4)%	0.0%	(68.6)%	(72.5)%	(12.7)%
ALX RESOURCES CORP	AL-V	0.5% / 2.3	14.3%	0.0%	0.0%	14.3%	14.3%	(55.6)%	(60.0)%	(42.9)%
CAULDRON ENERGY	CXU-AU	0.0% / 0.0	(7.7)%	0.0%	(7.7)%	20.0%	71.4%	(58.6)%	(62.5)%	(71.4)%
TARKU RESOURCES LTD	TKU-V	0.1% / 1.9	0.0%			(16.7)%		(37.5)%	(37.5)%	(47.4)%
NORTHERN URANIUM CORP	UNO'H-V	0.1% / 3.1	0.0%	33.3%		0.0%		(42.9)%	(50.0)%	
X-TERRA RESOURCES INC	XTT-V	0.1% / 0.1	0.0%	0.0%	0.0%			(16.7)%	(61.5)%	(82.1)%
AVRUPA MINERALS LTD	AVU-V	0.0% / 0.4	(16.7)%		(50.0)%		(16.7)%			(79.2)%
INTERNATIONAL PROSPECT VENTURES LTD	IZZ-V	0.0% / 0.5		0.0%				(68.8)%	(68.8)%	(58.3)%
VANADIAN ENERGY CORP	VEC-V	0.0% / 0.0		0.0%	(14.3)%	0.0%		(40.0)%	(71.4)%	
URAVAN MINERALS INC	UVN-V	0.10%							(50.8)%	(36.0)%
EROS RESOURCES CORP	ERC-V	0.0% / 0.0								(38.9)%
<b>INVENTORY FUNDS</b>										
SPROTT PHYSICAL URANIUM TRUST	U.UN-T	1.5% / 1.9	2.2%	10.5%	1.7%	0.8%	16.2%	15.7%	15.3%	
YELLOW CAKE PLC	YCA-LN	0.1% / 0.2	(2.3)%	2.9%	(4.2)%		19.3%	14.0%	18.0%	97.8%
<b>ROYALTY COMPANIES</b>										
URANIUM ROYALTY CORP	URC-V	1.2% / 1.2	8.1%	12.4%	(2.6)%	(17.5)%	15.5%	(26.9)%	(38.3)%	186.3%

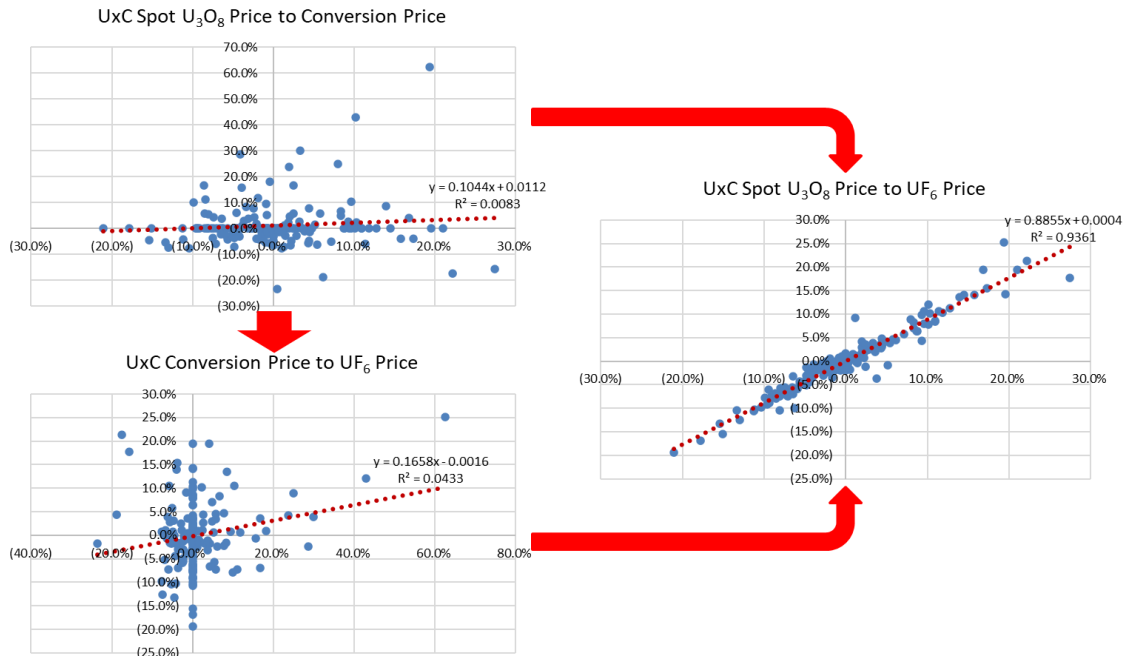
Source: UxC, CapitalIQ, Bloomberg, Haywood



### Uranium Fuel Cycle Price Relationships

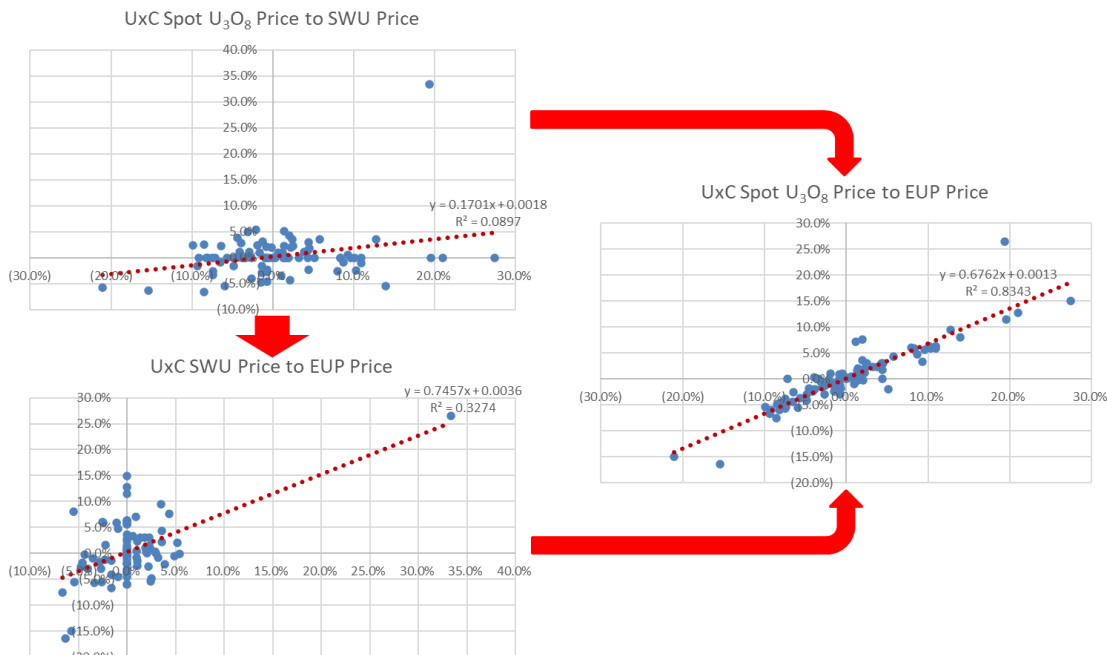
The charts below show that the price of uranium products ( $U_3O_8$ ,  $UF_6$  and EUP) are tightly correlated (monthly % $\Delta$ ) in the long term (RHS Figures 8 & 9). On the lower left chart of each Figure, we see that the cost of fuel services exhibit a much lower correlation with the monthly % 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 23.2%), and SWU costs have made up an average of 26% of the price of EUP (currently 25.5%) (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 August 31<sup>st</sup>, 2022 (at UxC spot prices)**



Source: Haywood Securities Inc., UxC

**Figure 9:  $U_3O_8$  – SWU – EUP Monthly Performance Correlations – 2015 to August 31<sup>st</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.

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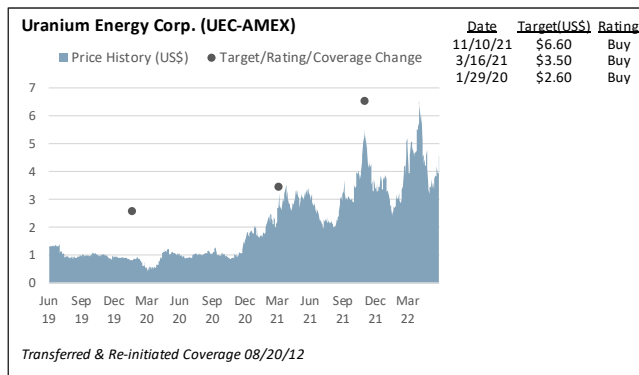
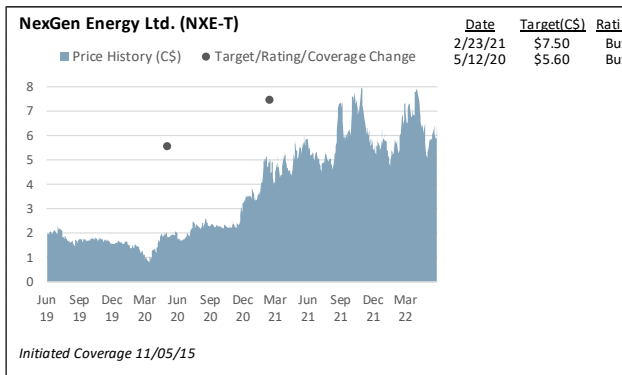
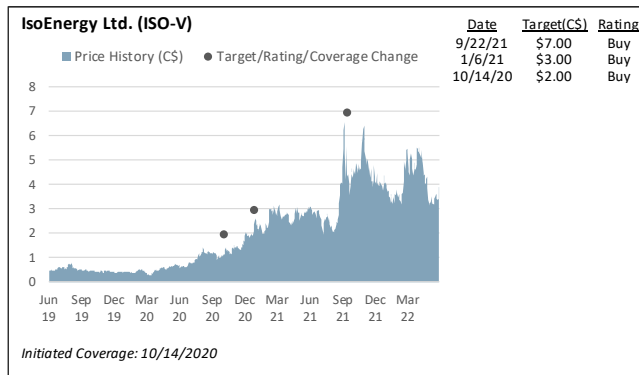
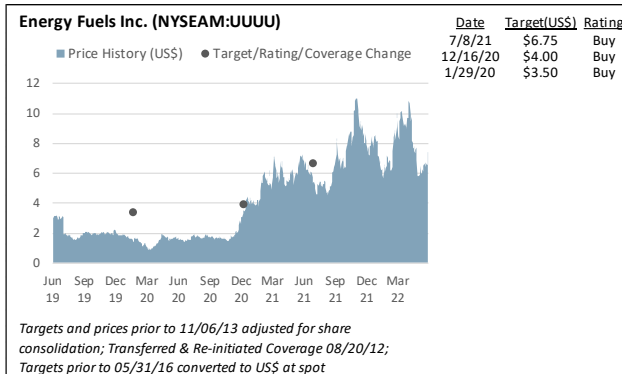
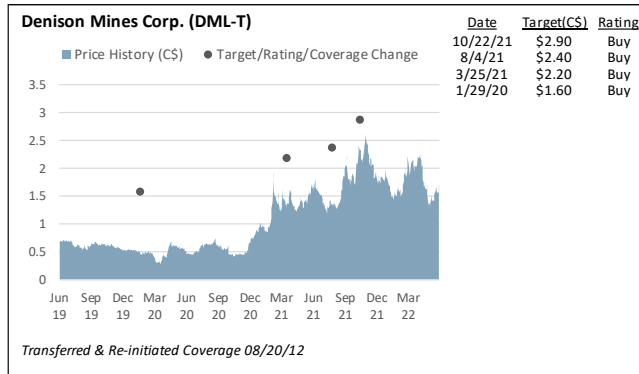
Ticker	Company	1	2	3	4	5	6	7	8	9
TSX:DML	Denison Mines Corp.			X			X			
TSX:EFR	Energy Fuels Inc.			X						
TSXV:ISO	IsoEnergy Ltd.			X						
TSX:NXE	NexGen Energy Ltd.			X						
US:UEC	Uranium Energy Corp.			X						
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	%	#	IB Clients (TTM)
Buy	74.7%	74	70.0%
Hold	11.1%	11	15.0%
Sell	0.0%	0	0.0%
Tender	1.0%	1	5.0%
UR (Buy)	0.0%	0	0.0%
UR (Hold)	0.0%	0	0.0%
UR (Sell)	0.0%	0	0.0%
Dropped (TTM)	13.1%	13	10.0%



Price Chart, Rating and Target Price History (as of September 29, 2022)



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

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