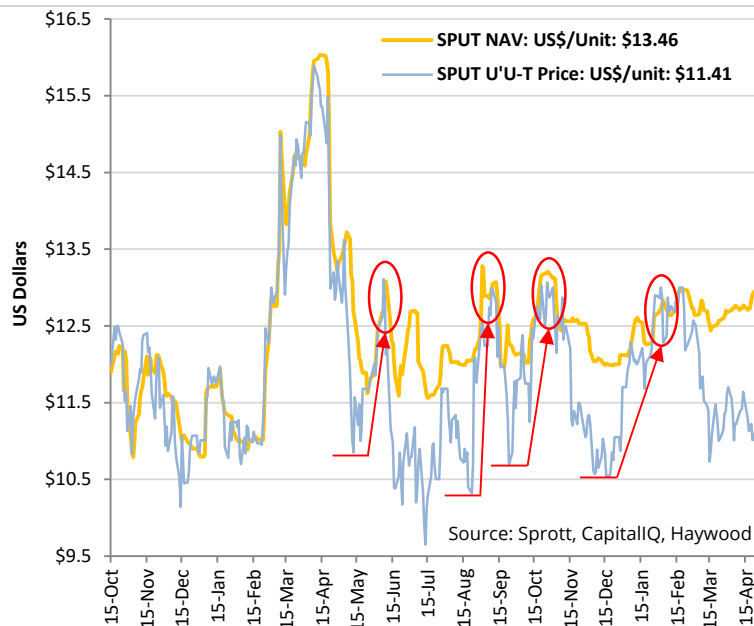


Uranium Gains ~6% on Five Consecutive Upticks as SPUT Returns to Spot Market after >50 Days

SPUT DISCOUNT RIPE FOR CORRECTION

Uranium Price Update & Sector Commentary: Close of April 26th, 2023

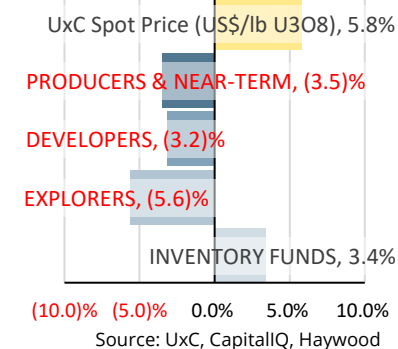
After weeks of an uninspired uranium spot price tape, the past week was highlighted by **reinvigorated interest, with five consecutive upticks in spot price delivering an ~5.8% gain to nearly US\$54/lb U₃O₈ as of last night, capping the best rolling weekly performance for uranium spot price in nearly 8-months (since Sept. 2, 2022).** The positive price action coincides with the **Sprott Physical Uranium Trust's first inventory purchase since March 3rd, adding 100klb U₃O₈ on Tuesday, reminding us of the tightness of the spot market in the SPUT era.** At the same time, SPUT continued to post a double-digit market discount to NAV (currently -15.2%) amid a mild spike in border market volatility (VIX +16%) over the past week. The chart on the right shows the SPUT daily NAV and market price for the Trust units, highlighting the episodic closure of outlier NAV discounts in the recent past. At the current discount, and with uranium ticking positively, we see an opportunity in SPUT units with an expectation that the units will revert to something closer to their mean NAV discount of ~4%. Per the chart, most often the discount has been rectified by positive correction in the unit price catalysed by a positive uranium price move rather than NAV consolidation. Positive price moves were not restricted to the spot market, as the UxC published its month-end price indicators Monday showing upticks in both the 3-year (+US\$1.00 to US\$58/lb U₃O₈) and 5-year (+US\$1.00 to US\$62/lb U₃O₈) price indicators, and a 2.8% increase in UF₆ spot price (expected - the U₃O₈ input, which is currently ~78% of UF₆'s value, increased 3.5% since the last monthly indicator was posted). With the gains in U₃O₈ this week and the slight uptick MoM in spot conversion (+0.6%), UF₆ should be priced around \$181/kg (+5.7% MoM).



UxC U ₃ O ₈ Prices	(USD per pound)
SPOT (1-day Δ):	\$53.95 (+0.8)
(1-week Δ):	(+5.8%)
(1-month Δ):	(+6.3%)
3-year (1-mth Δ):	\$58.00 (+1.8%)
5-year (1-mth Δ):	\$62.00 (+1.6%)
LT (@Apr. 24 th , 1-mth Δ):	\$53.00 (unch.)

* UxC Spot Price published daily. 3y, 5y and UxC Long-Term price published last Monday of month.

Performance - Apr. 19, 2023 to Apr. 26, 2023



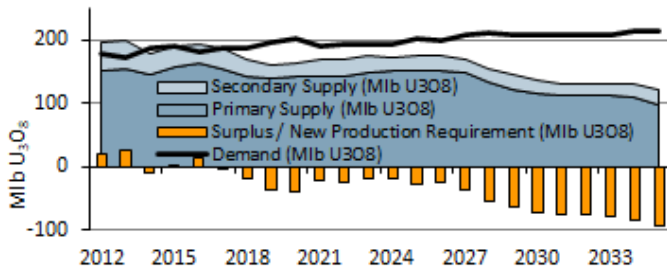
Uranium required and cost to make 1kg of EUP (4.5% U²³⁵): Mine/plant output of 26.7 lb U₃O₈ (\$1,440 cost) -> Conversion to UF₆ (\$406 cost) -> delivers 10.22 kgU as UF₆ (\$1,847 cumulative cost) -> enrichment: 6.23 SWU (\$810 cost) -> delivers 1kg EUP (\$2,657 cumulative cost). (US\$, spot U₃O₈, tails assay of 0.30% U²³⁵)

Uranium Equities - News

- ◆ **Purepoint Uranium Group Inc. (PTU-V, Not Rated):** Provided an update on its Winter Exploration Program at Red Willow Project - [link to Apr. 26th](#)
- ◆ **Alligator Energy Limited (AGE-AU, Not Rated):** Announced retention lease application for ISR trial at Samphire Uranium Project - [link to Apr. 26th](#)
- ◆ **Traction Uranium Corp. (TRAC-CSE, Not Rated):** Announced update on uranium bearing boreholes from Winter Program - [link to Apr. 26th](#)
- ◆ **Kraken Energy Corp. (UUSA-CSE, Not Rated):** Completed VTEM airborne geophysical survey at Apex Property - [link to Apr. 26th](#)
- ◆ **Laramide Resources Ltd. (LAM-T, Not Rated):** Announced drill results from Westmoreland Uranium Project - [link to Apr. 24th](#)
- ◆ **IsoEnergy Ltd. (ISO-V, Rating: BUY, Target: \$7.00):** Announced an update on Larocque East, Hawk and Geiger Projects - [link to Apr. 21th](#) - [Haywood Note](#)



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



Source: UxC, WNA, IAEA, IEA, Haywood

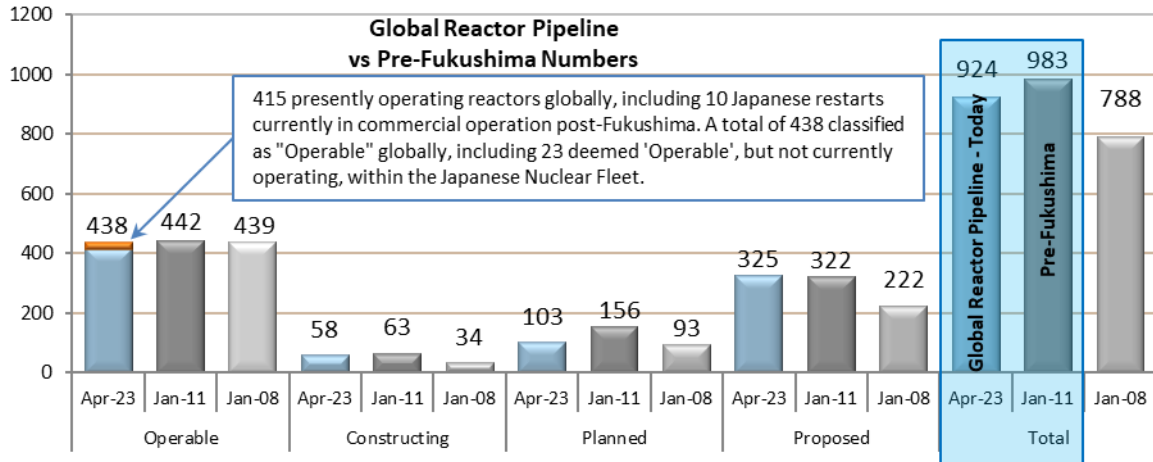
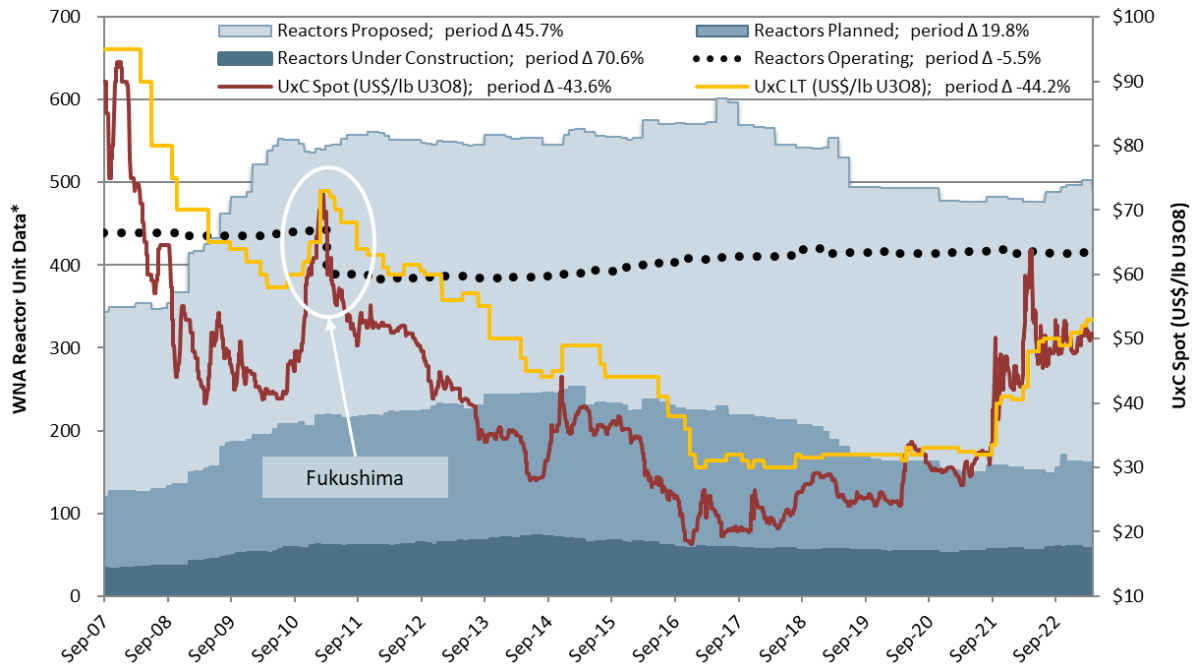
Commodity Price History	2015	2016	2017	2018	2019	2020	2021
Spot price (US\$/lb U ₃ O ₈)	\$37	\$26	\$22	\$25	\$26	\$29	\$40
Long Term price (US\$/lb U ₃ O ₈)	\$47	\$40	\$31	\$31	\$32	\$32	\$35

Commodity Price Forecast	2022	2023	2024	2025	2026	2027	2027
Spot price (US\$/lb U ₃ O ₈)	\$50	\$55	\$64	\$65	\$65	\$65	\$65
Long Term price (US\$/lb U ₃ O ₈)	\$48	\$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 (April 2023 data), UxC, Haywood Securities

Uranium Sector Top Picks & Covered Names

NexGen (NXE-T, Rating: BUY, Target: \$11.00)

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 U₃O₈ per year, 10-year mine operation with an after-tax NPV_{8%} 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: H1/2023:** Updates on the review process for the Environmental Impact Statement and Licensing application. **2023:** Results of field programs, including updates on FEED work and results of field and exploration activities.
- ◆ **Cash of \$137 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 PFS, freeze-wall trade-off study and FFT.** Denison already demonstrated the ultra-low-cost potential of ISR application to Phoenix in its 2018 Preliminary Feasibility Study (PFS), with initial CAPEX in the PFS at <\$325M and OPEX of US\$3.33/lb U₃O₈. In late 2020, Denison then 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 PFS. The trade-off study is preliminary but **lower initial CAPEX is supportable as the phased freeze wall approach is much simpler and less costly to initial production due to the smaller footprint and cheaper installation techniques.** The proposed freeze wall approach also offers more control in each mining cell/phase and improves the risk profile on the mine plan. Over the past year, DML has made even further progress on de-risking Phoenix through its Feasibility Field Test (FFT), where technical work to date has further supported our thesis that DML will be successful in mining Phoenix by the ISR technique resulting in an extremely low production cost profile and is therefore a ‘must own’ for uranium sector investors.
- ◆ **Catalysts: H1/2023 - Further technical work** to de-risk the ISR mining approach to Phoenix at Wheeler River - including advancement of the FS / EA process and results of the "recovered solution management" phase of the Feasibility Field Test. **2023 - Full Feasibility Study** for Wheeler River integrating the extensive technical advancements made since the 2018 PFS. **2023 - Exploration results** - seeking satellite deposits at Wheeler River; and, Studies for other potentially ISR amenable projects similar to THT/Waterbury.
- ◆ **Cash of ~\$55 million, plus 2.5 Mlb U₃O₈ as long-term investment.**

Other Covered Names

- ◆ **enCore Energy Corp. (EU-US) – Rating: Buy; Target: US\$5.00 Target (last report)**
- ◆ **Energy Fuels Inc. (EFR-T, UUUU-US) – Rating: Buy; Target: US\$9.25 Target (last report)**
- ◆ **IsoEnergy. (ISO-V) – Rating: Buy; Target: \$7.00 Target (last report)**
- ◆ **Uranium Energy Corp. (UEC-US) – Rating: Buy; Target: US\$6.60 Target (last report)**

Coverage Universe

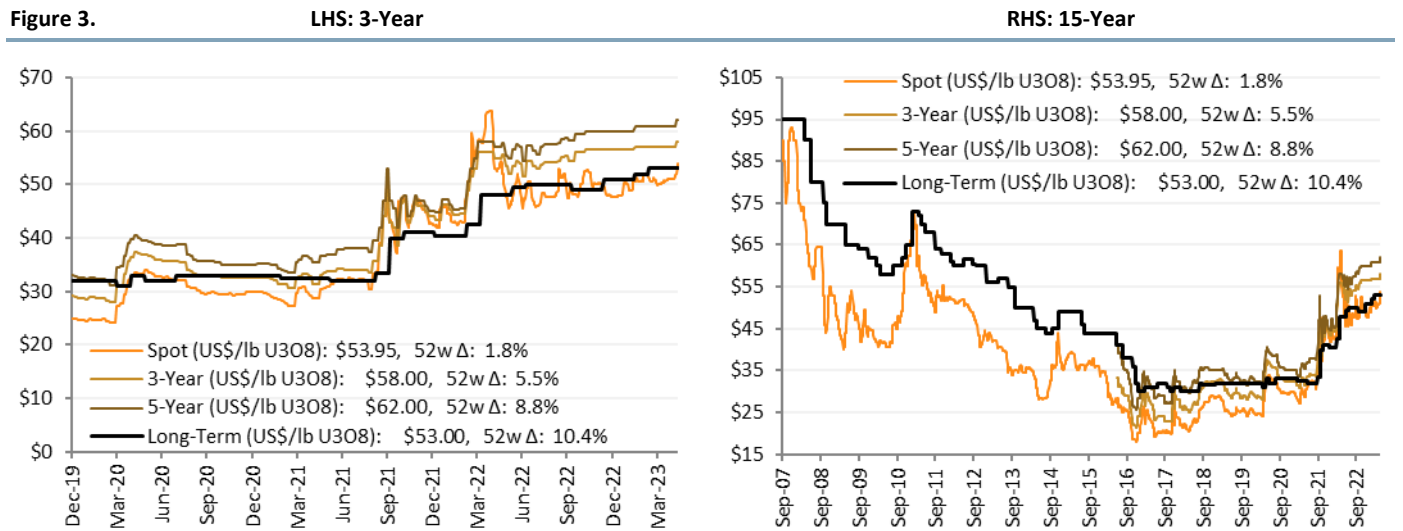
Figure 2. Uranium Sector Haywood Coverage

Company	Ticker	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	\$1.40	835	\$1,170	\$1,111	\$2.90	107%	BUY	C\$2.86	(\$0.01)	(\$0.01)
enCore Energy Corp.	EU-US	US\$1.98	143	US\$283	US\$380	US\$5.00	153%	BUY	US\$5.02	(\$0.22)	(\$0.40)
Energy Fuels	UUUU-US	US\$5.23	158	US\$826	US\$758	US\$9.25	77%	BUY	US\$9.27	(\$0.10)	(\$0.03)
IsoEnergy Ltd.	ISO-V	\$2.39	109	\$261	\$263	\$7.00	193%	BUY	C\$7.02	(\$0.07)	(\$0.07)
NexGen Energy	NXE-T	\$4.98	487	\$2,427	\$2,406	\$11.00	121%	BUY	C\$8.03	(\$0.02)	(\$0.01)
Uranium Energy	UEC-US	US\$2.52	375	US\$946	US\$914	US\$6.60	162%	BUY	US\$6.55	(\$0.06)	\$0.01

Source: Haywood Securities

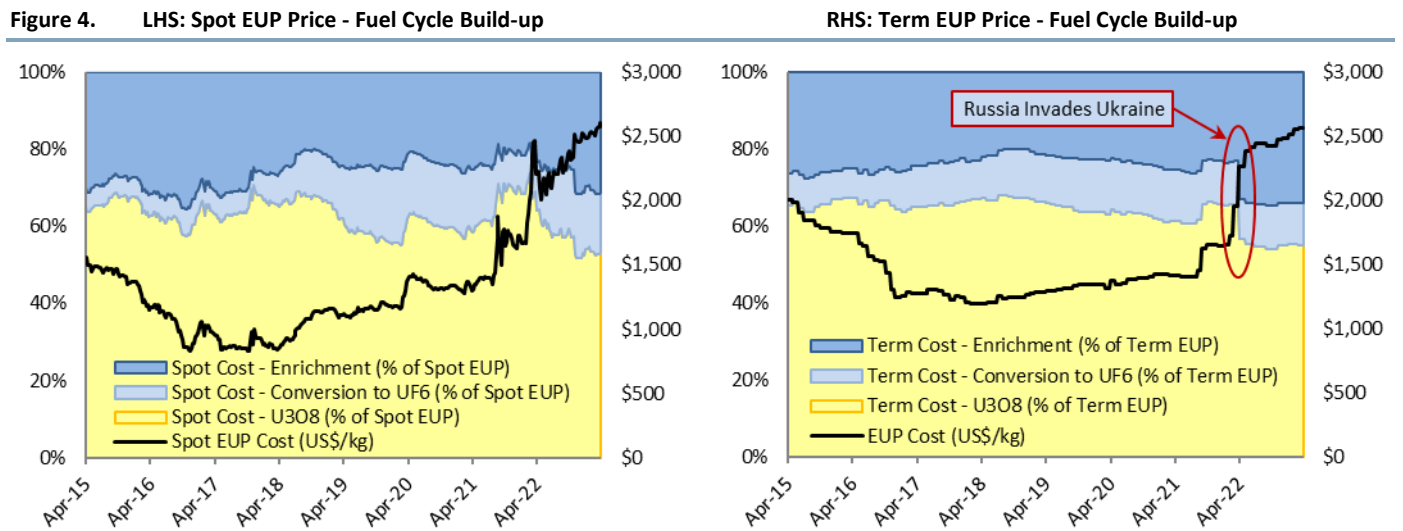


Uranium Price Charts



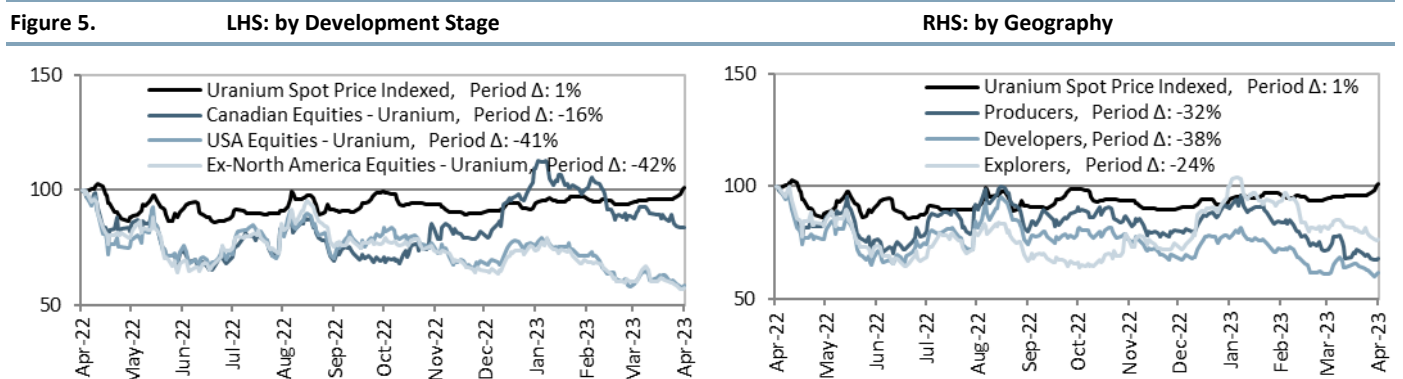
Source: UxC, Haywood Securities

Uranium Price Charts



Source: UxC, Haywood Securities (example based on an EUP at 4.5% U²³⁵, tails assay of 0.30% U²³⁵)

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



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



Figure 6. Uranium Sector Comps with 1-Week Performance Data

Company (Ticker)	Consensus Targets		Shares	Market	In-Situ Comps - EV/lb U3O8			NAV Comps		Cash Flow Comps			Performance Apr. 19, 2023 to Apr. 26, 2023	
	Share Price	Consensus Target			Implied Return	Outst. (millions)	Capitalization (millions)	Enterprise Value (USD) (millions)	Total Reserves & Resources (M lb)	USD EV/lb Resource	Consensus NAV	Price / Nav		PICFPS 2022
PRODUCERS & NEAR TERM														
Haywood Covered Names bold														
Cameco Corporation (CCO-T)	\$35.79	\$48.06	34%	433	\$15,500	\$10,507	1057.5	\$9.94	\$31.51	1.14x	44.0x	21.1x	11.5x	4.1%
Kazatomprom (KAP-LSE)	\$28.90	\$36.77	27%	259	\$7,495	\$8,604	1264.3	\$6.81	\$39.03	0.74x	12.0x	7.3x	7.1x	(0.9)%
Uranium Energy (UEC-NYSEAM)	\$2.52	\$6.85	172%	375	\$946	\$914	363.5	\$2.52	\$6.94	0.36x		37.8x		(7.7)%
Paladin Energy (PDN-AU)	\$0.63	\$0.67	6%	2,980	\$1,869	\$1,083	381.7	\$2.84	\$0.80	0.79x		313.5x	36.9x	(2.0)%
Energy Fuels (UUU-US)	\$5.23	\$9.65	85%	158	\$826.5	\$758.1	108.0	\$7.02	\$8.85	0.59x			1046.0x	0.8%
Boss Energy (BOE-AU)	\$2.40	\$3.27	36%	353	\$844.4	\$468.8	71.4	\$6.57	\$3.20	0.75x			21.1x	0.6%
EnergyResources (ERA-AU)	\$0.04			3,691	\$151.3	\$48.7								(16.3)%
Ur-Energy Inc. (URE-T)	\$1.19	\$2.60	119%	265	\$315.0	\$209.5	41.4	\$5.07	\$3.20	0.37x			7.9x	(4.8)%
Lotus Resources (LOT-AU)	\$0.18	\$0.35	99%	1,344	\$237.8	\$143.5	44.2	\$3.25	\$0.38	0.47x				(1.7)%
Peninsula Energy (PEN-AU)	\$0.14	\$0.37	171%	1,257	\$169.7	\$86.7	53.7	\$1.61	\$0.38	0.36x	95.1x		30.3x	(6.9)%
Group Average - Producers								\$5.07		0.62x	50.4x	94.9x	165.8x	(3.5)%
DEVELOPERS														
NexGen Energy (NXE-T)	\$4.98	\$9.82	97%	487	\$2,427	\$1,767	337.8	\$5.23	\$8.89	0.56x				2.0%
Denison Mines (DML-T)	\$1.40	\$2.09	50%	835	\$1,170	\$815.9	207.6	\$3.93	\$2.44	0.57x				2.2%
American Lithium (LI-V)	\$2.79	\$7.94	185%	214	\$598.0	\$426.9	123.4	\$3.46	\$11.44	0.24x				(7.3)%
enCore Energy (EU-V)	\$2.66	\$5.87	121%	143	\$380.4	\$380.0	149.8	\$2.54	\$5.45	0.49x				6.0%
Fission Uranium (FCU-T)	\$0.59	\$1.28	116%	717	\$423.0	\$280.4	130.3	\$2.15	\$1.43	0.41x				1.7%
Global Atomic (GLO-T)	\$2.69	\$5.98	122%	202	\$542.8	\$393.2	273.6	\$1.44	\$5.40	0.50x				1.5%
Deep Yellow (DYL-AU)	\$0.50	\$0.90	80%	756	\$375.6	\$207.6	392.2	\$0.53						(3.5)%
IsoEnergy Ltd. (ISO-V)	\$2.39	\$6.23	160%	109	\$261.3	\$193.1	51.3	\$3.77	\$5.83	0.41x				(1.6)%
Bannerman Energy (BMN-AU)	\$1.30	\$2.96	128%	151	\$195.7	\$95.7	237.9	\$0.40						(5.8)%
GovEx Uranium (GXU-V)	\$0.16	\$0.60	287%	641	\$99.3	\$81.0	191.2	\$0.42	\$0.82	0.19x				(27.9)%
Laramide Resources (LAM-T)	\$0.36			225	\$80.0	\$57.2	122.7	\$0.47						(5.3)%
Berkeley Energia (BKY-AU)	\$0.35			446	\$153.8	\$51.0	89.4	\$0.57						(2.8)%
Forsys Metals (FSY-T)	\$0.42			195	\$82.0	\$47.8	127.0	\$0.38						(3.4)%
A-Cap Energy (ACB-AU)	\$0.05			1,232	\$61.6	\$34.8	190.6	\$0.18						0.0%
Anfield Energy (AEC-V)	\$0.06	\$0.20	264%	679	\$37.3	\$22.8	18.5	\$1.23	\$0.29	0.19x				(8.3)%
Toro Energy (TOE-AU)	\$0.01			4,359	\$47.9	\$27.8	90.9	\$0.31						0.0%
Western Uranium (WUC-L)	\$1.07			44	\$46.7	\$24.6	52.4	\$0.47						(4.5)%
Energy Metals (EME-AU)	\$0.12			210	\$24.1	\$6.8	57.6	\$0.12						0.0%
Group Average - Developers								\$1.53		0.40x				(3.2)%
EXPLORERS														
Aura Energy (AEE-AU)	\$0.24	\$0.40	67%	559	\$134.1	\$88.4								(4.0)%
Consolidated Uranium (CUR-V)	\$1.17	\$5.00	327%	99	\$115.9	\$69.6	253.0	\$0.28	\$4.93	0.24x				(1.7)%
F3 Uranium (FUU-V)	\$0.35			338	\$116.5	\$75.1								7.8%
Azmut Exploration (AZM-V)	\$1.36	\$3.60	165%	80	\$108.4	\$71.9								(4.2)%
Alligator Energy (AGE-AU)	\$0.03			3,305	\$105.7	\$54.9								0.0%
Elevate Uranium (EL8-AU)	\$0.33			275	\$89.5	\$50.1	137.5	\$0.36						(5.8)%
DevEx Resources (DEV-AU)	\$0.31			371	\$114.9	\$59.0								14.8%
Mega Uranium (MGA-T)	\$0.18			360	\$64.7	\$36.2								0.0%
Skyharbour Resources (SYH-V)	\$0.38	\$0.85	124%	149	\$56.4	\$36.5	7.0	\$5.24						7.0%
ValOre Metals (VO-V)	\$0.19	\$1.05	453%	172	\$32.7	\$24.7	43.5	\$0.57						(5.0)%
CanAlaska Uranium (CAU-V)	\$0.30			123	\$36.3	\$12.0								(11.9)%
Aurania Resources (ARU-V)	\$0.39			66	\$25.7	\$23.5								(4.9)%
Baselode Energy (FIND-V)	\$0.40			93	\$36.7	\$22.9								(6.0)%
Appia Rare (APH-L)	\$0.21			131	\$26.8	\$14.4	55.8	\$0.26						(10.9)%
Purepoint Uranium (PTU-V)	\$0.05			418	\$18.8	\$10.9								(18.2)%
Blue Sky (BSK-V)	\$0.09	\$0.37	335%	218	\$18.5	\$12.3	22.7	\$0.54						(10.5)%
Globex Mining (GMX-T)	\$0.79			55	\$43.6	\$16.1								(11.2)%
92 Energy (92E-AU)	\$0.35			93	\$32.2	\$16.3								(11.0)%
District Metals (DMX-V)	\$0.09			107	\$9.6	\$6.5								(10.0)%
Okapi Resources (OKR-AU)	\$0.13			184	\$22.9	\$13.7								0.0%
Strathmore Plus (SUU-V)	\$0.70			39	\$27.2	\$18.1	0.0							(17.6)%
X-Terra Resources (XTT-V)	\$0.55			18	\$10.1	\$6.6								(17.9)%
Forum Energy (FMC-V)	\$0.09			189	\$17.0	\$11.4	0.6	\$19.31						0.0%
Standard Uranium (STND-V)	\$0.04			182	\$6.4	\$3.4								(12.5)%
Tarku Resources (TKU-V)	\$0.08			108	\$8.1	\$5.9								(6.3)%
Cauldron Energy (CXU-AU)	\$0.01			932	\$6.5	\$2.6	30.9	\$0.08						0.0%
GTI Energy (GTR-AU)	\$0.01			1,792	\$14.3	\$8.1								(11.1)%
ALX Resources (AL-V)	\$0.04			234	\$8.2	\$4.3								0.0%
Azincourt Energy (AAZ-V)	\$0.04			237	\$9.5	\$1.2								(11.1)%
International Prospect (IZZ-V)	\$0.04			51	\$1.8	\$1.0								(22.2)%
Uravan Minerals (UVN-V)	\$0.45			6	\$2.5	\$1.7								0.0%
Northern Uranium (UNOH-V)	\$0.01			162	\$1.6	\$1.2								0.0%
Arupa Minerals (AVU-V)	\$0.04			55	\$1.9	\$1.2								(12.5)%
Radio Fuels (CAKE-L)	\$0.13			140	\$18.1	(\$1.1)								0.0%
Eros Resources (ERC-V)	\$0.06			98	\$5.9	(\$3.6)								0.0%
Group Average - Explorers								\$3.33		0.24x				(5.6)%
INVENTORY FUNDS														
Sprott Physical (U.UN-T)	\$15.54	\$23.50	51%	248	\$2,835	\$3,324	61.7	\$53.84						3.1%
Yellow Cake (YCALN)	\$3.74	\$5.57	49%	198	\$740.9	\$908.1	18.8	\$48.29						3.8%
														3.4%
ROYALTY COMPANIES														
Uranium Royalty (URC-V)	\$2.53	\$6.17	144%	100	\$252.1	\$184.5			\$5.07	0.50x	28.1x	253.0x		(5.9)%
URANIUM / NUCLEAR ETFs														
Global X (URA-US)	\$19.23			69	\$1,329									(1.1)%
Sprott Funds (URNM-US)	\$29.44			28	\$815.3									(1.1)%
VanEck Vectors (NLR-US)	\$55.11			1	\$58.8									(0.4)%
Horizons Global (HURA-T)	\$21.70			2	\$47.3									2.9%
														0.1%

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



Figure 7. Uranium Equities β to Uranium price, plus $\beta_{\text{uranium}}/\sigma_{\text{equity}}$

Ticker	Company	β_{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
TSXV:UNO.H	Northern Uranium Corp.	1.94	10.019	(67%)	1	35	64
ASX:EL8	Elevate Uranium Ltd	1.85	17.529	(53%)	2	2	50
ASX:OKR	Okapi Resources Limited	1.83	16.619	(63%)	3	3	62
TSX:FSY	Forsys Metals Corp.	1.82	15.144	(41%)	4	11	32
ASX:92E	92 Energy Limited	1.79	15.953	(56%)	5	8	53
ASX:BMN	Bannerman Energy Ltd	1.76	18.500	(47%)	6	1	40
CNSX:WUC	Western Uranium & Vanadium	1.69	16.043	(43%)	7	6	34
ASX:AGE	Alligator Energy Limited	1.68	15.652	(62%)	8	9	59
ASX:DYL	Deep Yellow Limited	1.64	15.440	(48%)	9	10	44
ASX:ACB	A-Cap Energy Limited	1.63	13.024	(63%)	10	18	61
TSXV:AEC	Anfield Energy Inc.	1.54	13.748	(48%)	11	15	42
TSXV:EU	enCore Energy Corp.	1.41	14.556	(40%)	12	13	31
ASX:PEN	Peninsula Energy Limited	1.39	16.309	(44%)	13	5	37
ASX:LOT	Lotus Resources Limited	1.35	14.920	(47%)	14	12	41
TSXV:FIND	Baselode Energy Corp.	1.32	12.105	(59%)	15	24	57
TSX:MGA	Mega Uranium Ltd.	1.29	12.216	(46%)	16	22	38
ASX:GTR	GTI Energy Ltd	1.28	11.349	(62%)	17	28	58
ASX:TOE	Toro Energy Limited	1.17	10.503	(48%)	18	33	43
TSXV:ISO	IsoEnergy Ltd.	1.16	11.848	(47%)	19	25	39
TSX:EFR	Energy Fuels Inc.	1.13	12.151	(29%)	20	23	23
NYSEAM:UEC	Uranium Energy Corp.	1.11	10.897	(43%)	21	32	33
TSX:GLO	Global Atomic Corporation	1.10	13.642	(28%)	22	16	22
TSX:FCU	Fission Uranium Corp.	1.01	11.042	(34%)	23	31	26
CNSX:API	Appia Rare Earths & Uranium Cc	1.01	8.369	(63%)	24	38	60
TSX:DML	Denison Mines Corp.	1.00	11.371	(17%)	25	26	16
TSX:URE	Ur-Energy Inc.	0.97	11.090	(32%)	26	30	25
ASX:BOE	Boss Energy Limited	0.91	12.851	(10%)	27	19	14
ASX:PDN	Paladin Energy Ltd	0.91	12.736	(23%)	28	20	20
TSXV:AAZ	Azincourt Energy Corp.	0.88	7.380	(73%)	29	44	66
CNSX:CAKE	Radio Fuels Energy Corp.	0.87	8.225	(49%)	30	40	45
TSXV:CUR	Consolidated Uranium Inc.	0.86	10.324	(52%)	31	34	48
US:URNM	Sprott Funds Trust - Sprott Uran	0.86	12.266	(21%)	32	21	18
TSX:HURA	Horizons Global Uranium Index	0.84	14.245	(9%)	33	14	13
TSXV:GXU	GoviEx Uranium Inc.	0.83	6.798	(59%)	34	45	56
TSXV:AVU	Avrupa Minerals Ltd.	0.82	4.660	(56%)	35	51	54
TSXV:SUU	Strathmore Plus Uranium Corp.	0.79	4.906	180%	36	50	1
TSXV:URC	Uranium Royalty Corp.	0.79	9.052	(43%)	37	37	35
TSX:CCO	Cameco Corporation	0.79	11.303	6%	38	29	6
AIM:YCA	Yellow Cake plc	0.77	16.015	(7%)	39	7	11
TSXV:SYH	Skyharbour Resources Ltd.	0.76	8.228	(28%)	40	39	21
TSX:NXE	NexGen Energy Ltd.	0.76	9.803	(22%)	41	36	19
ASX:EME	Energy Metals Limited	0.76	7.790	(52%)	42	42	49
ASX:BKY	Berkeley Energia Limited	0.74	8.140	(12%)	43	41	15
TSX:U.UN	Sprott Physical Uranium Trust Fi	0.73	13.234	(6%)	44	17	10
US:URA	Global X Funds - Global X Uranit	0.69	11.358	(18%)	45	27	17
TSXV:LI	American Lithium Corp.	0.68	5.507	(8%)	46	47	12
KAS:KZAP	JSC National Atomic Company K	0.66	16.612	(4%)	47	4	9
TSXV:FUU	F3 Uranium Corp.	0.61	2.275	146%	48	62	3
TSXV:PTU	Purepoint Uranium Group Inc.	0.59	5.286	(50%)	49	48	46
TSXV:VO	ValOre Metals Corp.	0.52	5.714	(56%)	50	46	55
TSXV:UVN	Uravan Minerals Inc.	0.52	2.569	165%	51	61	2
TSXV:CVV	CanAlaska Uranium Ltd.	0.49	3.349	(36%)	52	57	27
ASX:DEV	DevEx Resources Limited	0.47	4.381	(39%)	53	53	30
TSXV:AL	ALX Resources Corp.	0.46	4.081	(36%)	54	56	28
TSXV:FMC	Forum Energy Metals Corp.	0.44	4.500	(50%)	55	52	46
TSXV:ERC	Eros Resources Corp.	0.38	5.090	(37%)	56	49	29
TSXV:ARU	Aurania Resources Ltd.	0.35	2.871	(30%)	57	58	24
TSX:GMX	Globex Mining Enterprises Inc.	0.33	4.296	(44%)	58	54	36
TSXV:STND	Standard Uranium Ltd.	0.32	2.620	(76%)	59	60	67
ASX:LAM	Laramide Resources Ltd.	0.30	4.140	(53%)	60	55	51
TSXV:BSK	Blue Sky Uranium Corp.	0.26	2.733	(65%)	61	59	63
TSXV:XTT	X-Terra Resources Inc.	0.23	0.815	124%	62	63	4
US:NLR	VanEck Vectors ETF Trust - VanE	0.21	7.421	(1%)	63	43	8
ASX:ERA	Energy Resources of Australia LI	0.09	0.764	(88%)	64	64	68
ASX:CXU	Cauldron Energy Limited	-0.10	-0.655	(53%)	65	65	52
TSXV:AZM	Azimut Exploration Inc.	-0.20	-1.069	3%	66	66	7
TSXV:TKU	Tarku Resources Ltd.	-0.62	-2.099	7%	67	67	5
TSXV:IZZ	International Prospect Venture:	-0.62	-5.379	(71%)	68	68	65

Source: UxC, CapitalIQ, Bloomberg, Haywood



Figure 8. Uranium Comps Performance

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		(1.5)%	(1.3)%	(1.0)%	4.4%	(1.1)%	5.1%	(3.1)%	6.6%
S&P/TSX VENTURE COMPOSITE	.JX-T		(1.2)%	(2.1)%	(5.5)%	(1.5)%	(3.2)%	5.7%	(26.9)%	(35.3)%
S&P/TSX 60 INDEX	T.XLX-T		(1.4)%	(1.2)%	(0.8)%	4.9%	(0.9)%	5.2%	(3.3)%	8.2%
PRODUCERS										
CAMECO CORPORATION	CCO-T	4.6% / 4.1	3.5%	3.9%	2.3%	8.3%	(2.1)%	16.6%	4.2%	75.4%
KAZATOMPROM S	KAP-LN		(0.5)%	(1.0)%	(0.7)%	5.4%	(6.3)%	4.8%	1.7%	13.2%
URANIUM ENERGY CORP	UEC-US	13.7% / 4.4	(0.4)%	(6.7)%	(11.3)%	(7.7)%	(36.2)%	(35.1)%	(45.2)%	(12.2)%
PALADIN ENERGY L	PDN-AU	4.1% / 7.1	0.8%	(0.8)%	(5.3)%	9.6%	(22.8)%	(10.7)%		60.3%
ENERGY FUELS INC	UUUU-US	18.0% / 12.5	2.5%	1.6%	(2.8)%	5.4%	(28.9)%	(15.8)%	(35.1)%	(5.6)%
BOSS ENERGY	BOE-AU	6.2% / 9.3	3.2%	4.6%	(1.0)%	10.9%	(1.8)%	12.4%		113.8%
ENERGY RESOURCES	ERA-AU	0.2% / 1.0	(0.0)%	(16.3)%	(19.6)%	(25.5)%	(38.8)%	(26.8)%		(24.1)%
UR ENERGY INC	URE-T	3.0% / 6.3	1.7%	(1.7)%	(7.0)%	1.7%	(30.0)%	(24.2)%	(33.9)%	(10.5)%
LOTUS RESOURCES	LOT-AU	1.0% / 3.1	4.1%	(4.3)%	(9.2)%	14.2%	(24.7)%	(13.7)%		41.6%
PENINSULA ENERGY	PEN-AU	0.5% / 1.7	0.0%	(10.0)%	(12.9)%	3.8%	(10.0)%	3.8%		8.0%
DEVELOPERS										
NEXGEN ENERGY LTD	NXE-T	5.7% / 6.4	4.2%	2.0%	(0.4)%	0.0%	(20.6)%	(16.9)%	(22.1)%	10.9%
DENISON MINES CORPORATION	DML-T	5.3% / 6.8	2.9%	2.2%	2.2%	4.5%	(27.1)%	(9.7)%	(20.0)%	14.8%
GLOBAL ATOMIC CORPORATION	GLO-T	1.5% / 3.8	3.5%	2.3%	(2.5)%	1.9%	(22.9)%	(23.4)%	(29.6)%	0.7%
DEEP YELLOW	DYL-AU	5.8% / 12.5	(1.0)%	(2.9)%	(9.1)%	(2.0)%	(38.7)%	(28.6)%		(21.3)%
FISSION URANIUM CORP	FCU-T	1.5% / 3.1	5.4%	7.3%	(6.3)%	(3.3)%	(35.9)%	(26.3)%	(34.4)%	3.5%
AMERICAN LITHIUM CORP	LI-V	1.0% / 4.1	(2.1)%	(7.0)%	(11.4)%	(14.2)%	(41.3)%	(1.1)%	(14.7)%	24.0%
ISOENERGY LTD	ISO-V	0.8% / 3.1	2.1%	(0.8)%	(11.5)%	(3.2)%	(21.6)%	(17.9)%	(46.3)%	0.4%
ENCORE ENERGY CORP	EU-V	0.2% / 0.7	7.7%	7.3%	3.5%	(1.5)%	(19.4)%	(16.9)%	(44.6)%	(24.2)%
BANNERMAN ENERGY	BMN-AU	1.8% / 6.4	3.2%	(6.2)%	(8.8)%	(1.1)%	(33.4)%	(28.1)%		3.6%
GOVIEUX URANIUM INC	GXU-V	0.1% / 0.5	0.0%	(24.4)%	(22.5)%	(6.1)%	(35.4)%	(13.9)%	(58.7)%	(42.6)%
FORSYS METALS CORP	FSY-T	0.2% / 1.9	2.4%	(4.5)%	(4.5)%	0.0%	(12.5)%	(15.2)%	(40.0)%	(43.2)%
LARAMIDE RESOURCES LTD	LAM-T	1.7% / 11.2	1.4%	(4.1)%	(5.3)%	(11.3)%	(24.5)%	(24.5)%	(49.3)%	(27.6)%
A-CAP ENERGY	ACB-AU	0.1% / 1.2	4.2%	0.0%	(2.0)%	(15.3)%	(39.0)%	(28.6)%		0.0%
BERKELEY ENERGIA	BKY-AU	0.1% / 1.3	(1.4)%	(2.8)%	(12.7)%	(2.8)%	11.3%			(41.0)%
WESTERN URANIUM & VANADIUM CORP	WUC-L	0.1% / 0.1	4.9%	(3.6)%	(7.0)%	10.3%	0.0%	(9.3)%	(44.3)%	(39.2)%
TORO ENERGY	TOE-AU	0.1% / 0.3	0.0%	(8.3)%	0.0%	10.0%	0.0%	22.2%		(47.6)%
ANFIELD ENERGY INC	AEC-V	0.2% / 1.2	(8.3)%	(8.3)%	(15.4)%	0.0%	(26.7)%	(8.3)%	(45.0)%	(45.0)%
ENERGY MET FPO	EME-AU				8.7%	13.6%	(13.8)%	(3.8)%		
EXPLORERS										
ALLIGATOR ENERGY	AGE-AU	1.5% / 7.2	0.0%	(5.9)%	(5.9)%	0.0%	(23.8)%	(17.9)%		128.6%
CONSOLIDATED URANIUM INC	CUR-V	0.7% / 2.1	1.7%	(4.1)%	(3.3)%	0.9%	(37.1)%	(27.8)%	(53.8)%	(35.0)%
ELEVATE URANIUM	EL8-AU	2.1% / 12.3	1.6%	(4.4)%	(9.7)%	1.6%	(19.8)%	(12.2)%		132.1%
DEVEX RESOURCES	DEV-AU	0.1% / 2.1	8.8%	14.8%	6.9%	34.8%	0.0%	10.7%		6.9%
MEGA URANIUM LTD	MGA-T	0.3% / 1.9	2.9%	2.9%	0.0%	0.0%	(21.7)%	(10.0)%	(45.5)%	(2.7)%
SKYHARBOUR RESOURCES LTD	SYH-V	0.3% / 1.3	8.6%	4.1%	10.1%	5.6%	(16.5)%	4.1%	(32.1)%	(9.5)%
BASELODE ENERGY CORP	FIND-V	0.7% / 1.0	(3.7)%	1.3%	(16.0)%	(6.0)%	(30.7)%	(4.8)%	(59.3)%	(17.7)%
VALORE METALS CORP	VO-V	0.1% / 0.1	(13.6)%	(7.3)%	(7.3)%	(5.0)%	(36.7)%	(30.9)%	(60.0)%	(35.6)%
APIA RARE EARTHS & URANIUM CORP	API-L	0.0% / 0.1	(2.4)%	(10.9)%	(4.7)%	(28.1)%	(32.8)%	(30.5)%	(64.0)%	(67.5)%
AZIMUT EXPLORATION INC	AZM-V	0.2% / 2.1	(2.9)%	(3.5)%	(2.9)%	8.8%	(23.2)%	94.3%	5.4%	36.0%
92 ENERGY	92E-AU	0.8% / 2.4	0.0%	(9.2)%	(13.8)%	6.2%	(19.8)%	(19.8)%		32.7%
AURANIA RESOURCES LTD	ARU-V	0.2% / 1.1	(2.5)%	(2.5)%	0.0%	(11.4)%	(42.6)%	0.0%	(35.0)%	(85.1)%
CANALASKA URANIUM LTD	CVV-V	0.7% / 1.4	(10.6)%	(3.3)%	(14.5)%	(11.9)%	(50.8)%	(23.4)%	(39.2)%	(53.9)%
BLUE SKY URANIUM CORP	BSK-V	0.3% / 1.8	(5.6)%	(0.0)%	(10.5)%	(5.6)%	(32.0)%	(5.6)%	(63.8)%	(63.8)%
OKAPI RESOURCES	OKR-AU	0.0% / 0.0	0.0%	0.0%	(10.7)%	(7.4)%	(39.0)%			(30.6)%
PUREPOINT URANIUM GRP INC	PTU-V	0.0% / 0.0	(10.0)%	(18.2)%	(18.2)%	(30.8)%	(40.0)%	(25.0)%	(50.0)%	(52.6)%
GLOBEX MINING ENTERPRISES INC	GMX-T	0.2% / 0.6	(3.7)%	(6.0)%	(13.2)%	9.7%	(10.2)%	14.5%	(45.9)%	(12.2)%
GTI ENERGY	GTR-AU	0.0% / 0.0	(11.1)%	(11.1)%	0.0%	(11.1)%	(27.3)%	(27.3)%		(57.9)%
FORUM ENERGY METALS CORP	FMC-V	0.1% / 0.4	0.0%	0.0%	(5.3)%	(5.3)%	(25.0)%	(5.3)%	(52.6)%	(73.5)%
STANDARD URANIUM LTD	STND-V	0.0% / 0.1	(12.5)%	(12.5)%	(22.2)%	(30.0)%	(65.0)%	(41.7)%	(76.7)%	(82.5)%
F3 URANIUM CORP	FUU-V	2.2% / 1.3	11.3%	9.5%	3.0%	(10.4)%	(18.8)%	9.5%	146.4%	263.2%
AZINCOURT ENERGY CORP	AAZ-V	0.0% / 0.1	0.0%	0.0%	(11.1)%	0.0%	(42.9)%	(27.3)%	(73.3)%	(81.2)%
ALX RESOURCES CORP	AL-V	0.1% / 0.3	(0.0)%	(0.0)%	(12.5)%		(30.0)%	(12.5)%	(41.7)%	(61.1)%
CAULDRON ENERGY	CXU-AU	0.0% / 0.0	16.7%	(0.0)%	(0.0)%	(12.5)%		(0.0)%		(81.1)%
TARKU RESOURCES LTD	TKU-V	0.1% / 0.1	7.1%	0.0%	0.0%	(6.3)%	(16.7)%	7.1%	0.0%	(48.3)%
NORTHERN URANIUM CORP	UNO'H-V	0.1% / 8.6	0.0%	0.0%	0.0%		0.0%	(33.3)%	(66.7)%	(50.0)%
X-TERRA RESOURCES INC	XTT-V	0.1% / 0.4	(5.2)%	(15.4)%	(8.3)%	(16.7)%	(45.8)%	31.0%	124.5%	(21.4)%
AVRUPA MINERALS LTD	AVU-V	0.0% / 0.7	(0.0)%				40.0%		(58.8)%	
INTERNATIONAL PROSPECT VENTURES LTD	IZZ-V	0.0% / 0.0	(0.0)%		(22.2)%	(22.2)%				(75.9)%
URAVAN MINERALS INC	UVN-V						32.4%	16.9%	164.7%	28.6%
EROS RESOURCES CORP	ERC-V	0.0% / 1.9	0.0%							(33.3)%
INVENTORY FUNDS										
SPROTT PHYSICAL URANIUM TRUST	U.UN-T	1.6% / 2.1	2.6%	3.1%	0.7%	2.5%	(6.2)%	(1.8)%	(7.4)%	
YELLOW CAKE PLC	YCA-LN	0.2% / 0.7	5.6%	3.7%	0.8%	3.3%	(5.2)%	(0.2)%	(7.4)%	52.3%
ROYALTY COMPANIES										
URANIUM ROYALTY CORP	URC-V	2.9% / 3.8	1.2%	(2.7)%	(9.6)%	(8.3)%	(26.9)%	(20.9)%	(44.2)%	(31.8)%

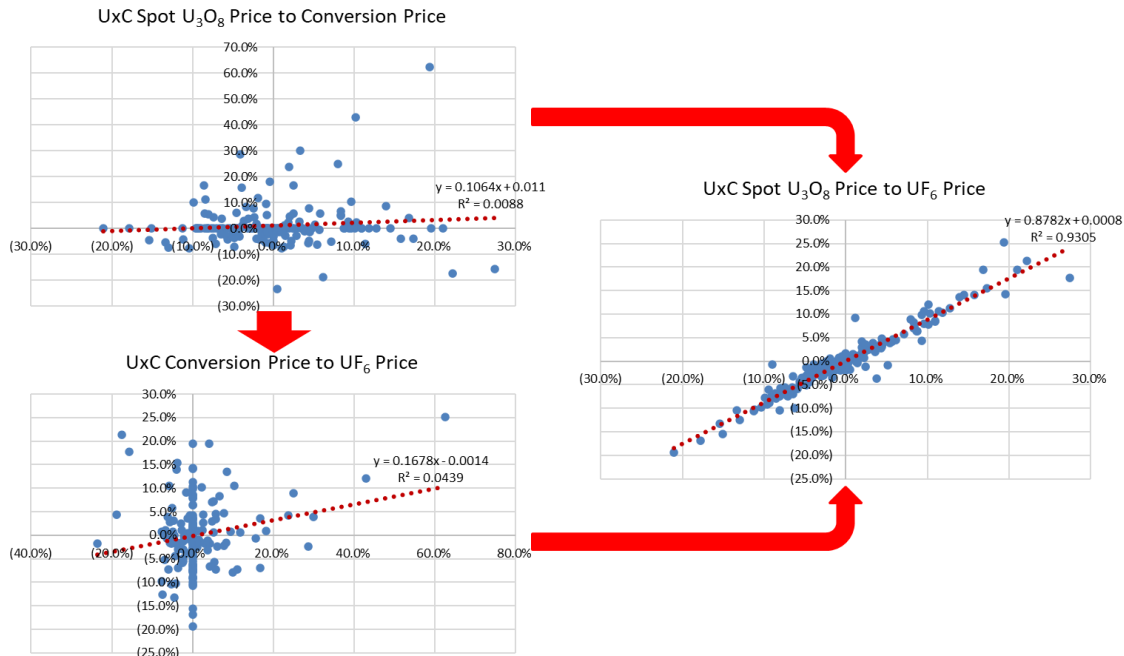
Source: UxC, CapitalIQ, Bloomberg, Haywood



Uranium Fuel Cycle Price Relationships

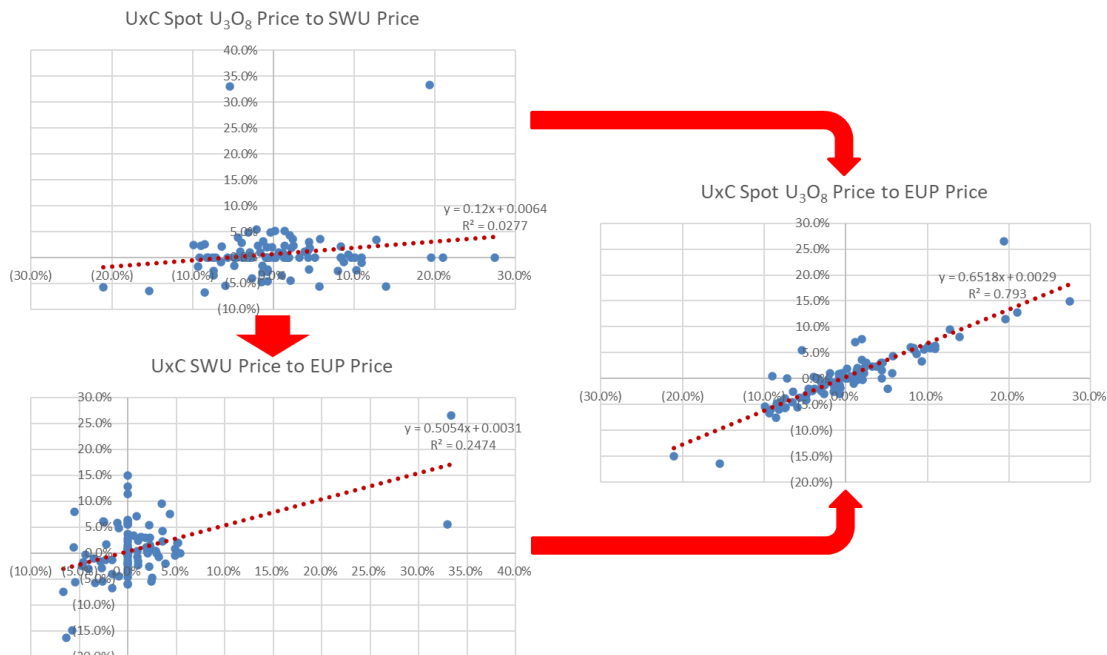
The charts below show that the price of uranium products (U_3O_8 , UF_6 and EUP) are tightly correlated (monthly % Δ) in the long term (RHS Figures 9 & 10). On the lower left chart of each Figure, we see that the cost of fuel services exhibits a much lower correlation with the monthly % change in uranium 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 22.0%), and SWU costs have made up an average of 26% of the price of EUP (currently 30.5%) (or, conversely, UF_6 historically makes up 74% of the cost of EUP).

Figure 9. U_3O_8 – Conversion – UF_6 Monthly Performance Correlations 2008 to March 31st, 2023 (at UxC spot prices)



Source: Haywood Securities Inc., UxC

Figure 10: U_3O_8 – SWU – EUP Monthly Performance Correlations – 2015 to March 31st, 2023 (at UxC spot prices)



Source: Haywood Securities Inc., UxC



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

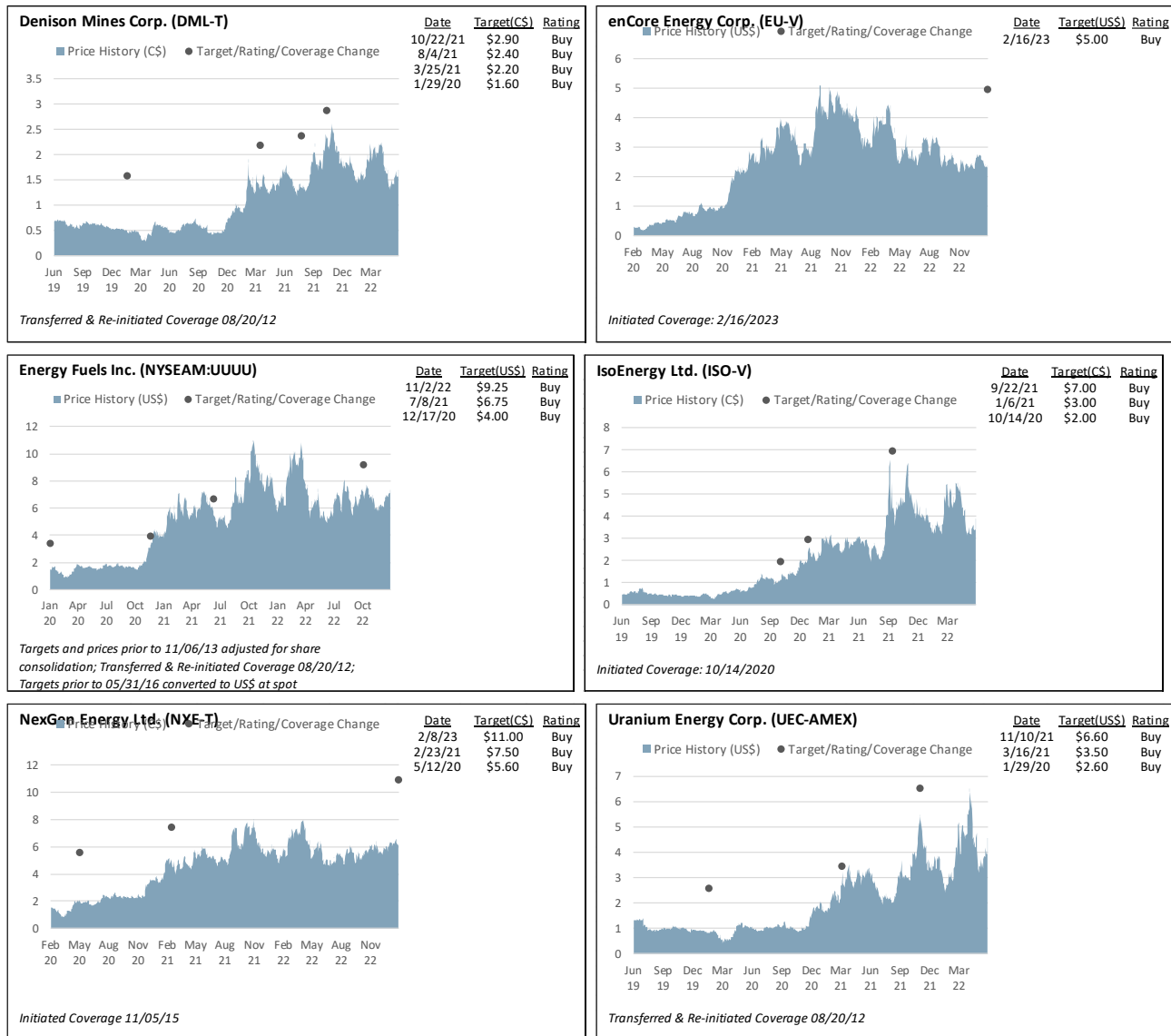
Ticker	Company	1	2	3	4	5	6	7	8	9
TSX:DML	Denison Mines Corp.			X			X			
US:EU	Encore Energy Corp.			X	X	X	X			
TSX:EFR	Energy Fuels Inc.			X						
TSXV:ISO	IsoEnergy Ltd.			X	X					
TSX:NXE	NexGen Energy Ltd.			X						
US:UEC	Uranium Energy Corp.			X						
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	%	#	IB Clients (TTM)
Buy	73.8%	76	95.2%
Hold	6.8%	7	4.8%
Sell	0.0%	0	0.0%
Tender	1.0%	1	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)	18.4%	19	0.0%



Price Chart, Rating and Target Price History (as of April 27, 2023)



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

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