

URANIUM WEEKLY

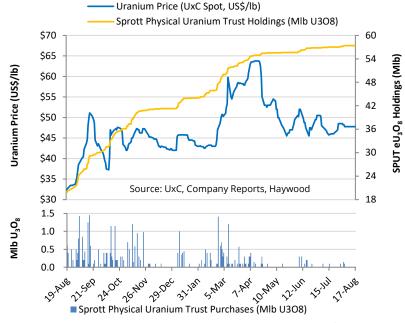


Uranium Unchanged in 9 Sessions Stalling Equities

SK GROUP (KOREA) SIGNALS STRONG SUPPORT FOR SMRs

Uranium Price Update & Sector Commentary: Close of August 17th, 2022

With the uranium price in a holding pattern for 9 straight trading days and the Sprott Physical Uranium Trust (aka SPUT, U.UN-T (C\$), U.U-T (US\$), Not Rated) sidelined by a persistent market discount to NAV, uranium stocks retraced since our last weekly. If the SPUT NAV discount is any indicator of short-term investor sentiment for physical uranium, we could see further softness. With our bullish long-term thesis underpinned by strong sector fundamentals, we see opportunity in periodic weakness to add to positions. We have added a couple of charts this week (Figure 1) depicting the evolution of the global civil nuclear reactor pipeline alongside uranium price, and point-in-time snapshots of the data for comparative periods. Earlier this week we saw a major nod signalling a bright future for small modular reactors (SMRs) as TerraPower successfully closed an equity raise of "a minimum of US\$750 million." The raise was co-led by Korea's 2nd largest conglomerate, SK Group, and TerraPower founder Bill Gates, with SK investing US\$250M. TerraPower is in the process of developing the Natrium demonstration plant in Wyoming, supported in part by the U.S. Department of Energy's Advanced Reactor Demonstration Program, which requires a match of 50% of the project costs, up to US\$2 billion. The Natrium reactor technology was co-developed by TerraPower and GE Hitachi, and is based on a sodium fast reactor combined with a molten salt energy storage system. The energy storage system can augment the base reactor output of 345MWe up to 500MWe for over 5 ½ hours to support periods of spiking demand. We recommend reading up on TerraPower's Travelling Wave Reactor tech as well.



Uranium required and cost to make 1kg of EUP (4.5% U^{235}): Mine/plant output of 26.7 lb U₃O₈ (\$1,275 cost) -> Conversion to UF₆ (\$378 cost) -> delivers 10.22 kgU as UF₆ (\$1,653 cumulative cost) -> enrichment: 6.23 SWU (\$558 cost) -> delivers 1kg EUP (\$2,211 cumulative cost). (US\$, spot U₃O₈, tails assay of 0.30% U^{235})

Uranium Equities - News

- UEX Corporation (UEX-T, Not Rated): UEX shareholders approve acquisition arrangement with UEC (UEC-US, BUY Rating, \$6.60 Target) — link to Aug. 17th PR
- Purepoint Uranium Group Inc. (PTU-V, Not Rated): Provided an update on its summer exploration programs – <u>link to Aug. 16th PR</u>
- ◆ Traction Uranium Corp. (TRAC-CSE, Not Rated): Option agreement with UGreenco Energy Corp. for the Key Lake South Property— link to Aug. 16th PR
- Peninsula Energy Limited (PEN-AU, Not Rated): Completed a Definitive Feasibility Study for the Ross and Kendrick Production Areas—link to Aug. 15th PR
- Valor Resources Limited. (VAL-AU, Not Rated): Announced the initial findings of a reconnaissance field program at the Surprise Creek Project – link to Aug. 11th PR
- Lotus Resources Limited (LOT-AU, Not Rated): Announced results from its Definitive Feasibility Study for the restart of the Kayelekera Project—link to Aug. 11th PR

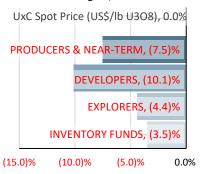
UxC U_3O_8 Prices (USD per pound) SPOT (1-day Δ): \$47.75 (unchanged) (1-week Δ): (unchanged)

(1-month Δ): (+3.8%)

3-year (1-week Δ): \$54.25 (unch.)
5-year (1-week Δ): \$57.50 (unch.)
LT (@July 25th, 1-mth Δ): \$50.00 (unch.)

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

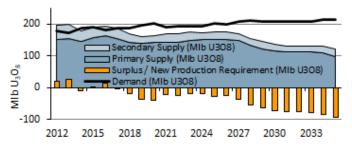
Performance - Aug. 10, 2022 to Aug. 17, 2022



Source: UxC, CapitallQ, Haywood



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



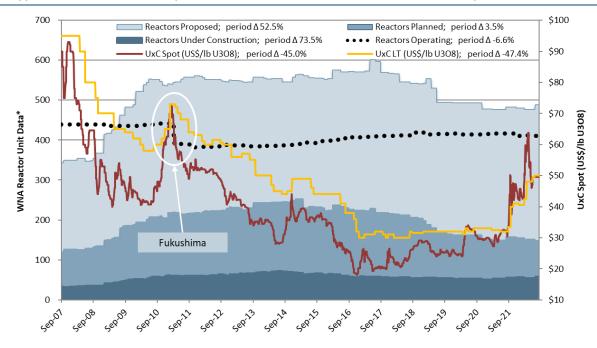
Commodity Price History	2015	2016	2017	2018	2019	2020	2021
Spot price (US\$/lb U ₃ O ₈)	\$37	\$26	\$22	\$25	\$26	\$29	\$40
Long Term price (US\$/lb U ₃ O ₈)	\$47	\$40	\$31	\$31	\$32	\$32	\$35
Commodity Price Forecast	2022	2023	2024	2025	2026	2027	2027
Spot price (US\$/lb U ₃ O ₈)	\$47	\$55	\$64	\$65	\$65	\$65	\$65
Long Term price (US\$/lb U ₃ O ₈)	\$55	\$63	\$70	\$65	\$65	\$65	\$65

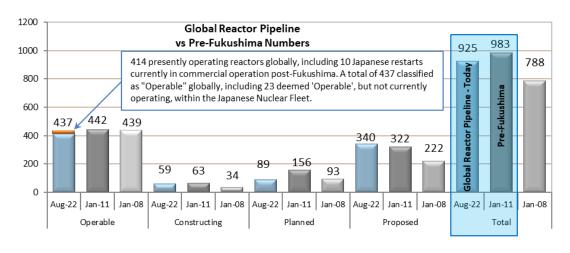
Source: UxC history, Haywood Forecast

Source: UxC, WNA, IAEA, IEA, Haywood

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, 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 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: 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. <u>Link to Most Recent Report</u>

- 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 U₃O₈. 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 ~\$64 million, plus 2.5 Mlb U₃O₈ 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

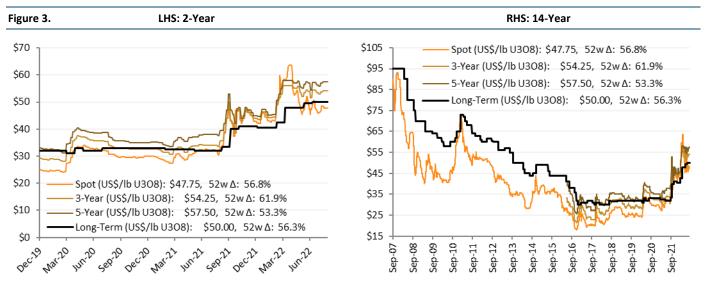
Figure 2. Uranium Sector Haywood Coverage

Company	Ticker	Analyst	Analyst	Analyst	Analyst	Last	Shares	MC	EV	Target	Return	Rating	NAVPS	CFPS	(US\$)
Company	ricker		Price (C\$)	O/S (M)	(C\$M)	(C\$M)	(C\$)	(%)	Raung	(US\$)	2022E	2023E			
Denison Mines	DML-T	CH	\$1.38	818	\$1,129	\$1,152	\$2.90	110%	BUY	C\$2.85	(\$0.01)	(\$0.01)			
Energy Fuels	UUUU-US	CH	US\$6.18	158	US\$974	US\$1,255	US\$6.75	9%	BUY	\$6.73	(\$0.02)	\$0.20			
IsoEnergy Ltd.	ISO-V	CH	\$3.10	107	\$331	\$351	\$7.00	126%	BUY	C\$7.02	(\$0.07)	(\$0.07)			
NexGen Energy	NXE-T	CH	\$4.86	479	\$2,330	\$2,473	\$7.50	54%	BUY	C\$7.50	(\$0.03)	(\$0.03)			
Uranium Energy	UEC-US	CH	US\$3.66	286	US\$1,048	US\$1,111	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)

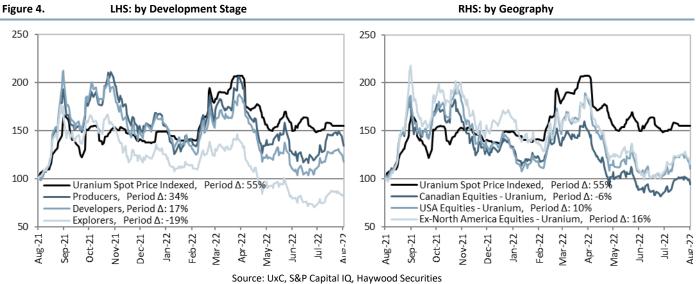




Figure 5. Uranium Sector Comps with 1-Week Performance Data

		Consensus	Targets				Comps - EV/lb		NAV C	omps	Cash Flow Comps			
		IBES		Shares	Market		Total Reserves		IBES			P/CFPS		Performance
Company (Ticker)		Consensus		Outst.	Capitalization	. ,	& Resources		Consensus					Aug. 10, 2022
Haywood Covered Names bold	Share Price	Target	Return	(millions)	(millions)	(millions)	(M lb)	Resource	NAV	Nav	2021	2022	2023	to Aug. 17, 202
Cameco Corporation (CCO-T)	\$31.62	\$44.08	39%	398	\$12,599	\$9,457	1,078	\$8.77	\$28.74	1.10x	62.7x	31.3x	16.8x	(4.0)%
(Azatomprom (KAP-LSE)	\$27.30	\$36.52	34%	259	\$7,080	\$7,543	1,339	\$5.63	\$33.87	0.81x	10.4x	9.2x	7.0x	(2.9)%
Paladin Energy (PDN-AU)	\$0.73	\$0.74	2%	2,978	\$2,174	\$1,497	381.7	\$3.92	\$1.14	0.64x				(4.5)%
Jranium Energy (UEC-US)	\$3.66	\$6.34	73%	286	\$1,048	\$1,025	157.1	\$6.53	\$5.94	0.62x				(14.1)%
Energy Fuels (UUUU-US)	\$6.19	\$9.70	57%	158	\$975	\$877.0	119.6	\$7.34	\$8.83	0.70x			21.0x	(10.9)%
Energy Resources (ERA-AU)	\$0.25			3,691	\$904.4	\$512.3	302.3	\$1.69						(2.5)%
Ur-Energy Inc. (URE-T)	\$1.38	\$3.11	125%	223	\$307.5	\$207.1	41.3	\$5.01	\$3.64	0.38x			17.3x	(8.5)%
Lotus Resources (LOT-AU)	\$0.23	\$0.32	41%	1,209	\$272.0	\$178.8	44.2	\$4.05	\$0.32	0.70x				(4.6)%
Peninsula Energy (PEN-AU)	\$0.16	\$0.38	138%	997	\$159.6	\$100.5	53.6	\$1.87	\$0.50	0.32x		112.7x		(15.7)%
Group Average - Producers								\$4.98		0.66x	36.6x	51.0x	15.5x	(7.5)%
NexGen Energy (NXE-T)	\$4.86	\$9.47	95%	479	\$2,330	\$1,746	337.8	\$5.17	\$8.54	0.57x				(10.5)%
Denison Mines (DML-T)	\$1.38	\$2.52	83%	818	\$1,129	\$821.9	207.5	\$3.96	\$2.80	0.49x				(10.3)%
Boss Energy (BOE-AU)	\$2.45	\$3.08	26%	353	\$863.8	\$584.9	71.4	\$8.19	\$0.10	24.50x				(2.1)%
merican Lithium (LI-V)	\$3.19	\$9.42	195%	208	\$662.7	\$500.5	123.4	\$4.06	\$11.00	0.29x				4.0%
Global Atomic (GLO-T)	\$3.02	\$6.50	115%	178	\$536.9	\$404.4	52.7	\$7.67	\$6.47	0.47x				(12.3)%
ission Uranium (FCU-T)	\$0.65	\$1.25	92%	681	\$443.0	\$314.6	135.2	\$2.33	\$1.39	0.47x				(16.6)%
Deep Yellow (DYL-AU)	\$0.74	Ψ1.20	J2 /0	732	\$541.5	\$324.8	366.3	\$0.89	ψ1.00	0.417				(9.2)%
nCore Energy (EU-V)	\$1.22	\$2.75	125%	322	\$392.5	\$276.5	143.6	\$1.93	\$2.08	0.59x				(13.3)%
annerman Energy (BMN-AU)	\$1.22	\$2.75	58%	150	\$279.8	\$187.2	238.8	\$0.78	Ψ2.00	0.038				(13.3)%
EX Corporation (UEX-T)	\$0.43	\$0.60	40%	557	\$279.6	\$107.2	149.6	\$1.20	\$0.57	0.75x				(11.1)%
GoviEx Uranium (GXU-V)	\$0.43	\$0.60	194%	593	\$239.3 \$142.2	\$176.9	201.7	\$0.57	\$0.57	0.75x 0.32x				(12.4)%
(/		φυ./ Ι	194%	195			127.0	\$0.57 \$0.58	φ0./3	U.JZX				. ,
orsys Metals (FSY-T) aramide Resources (LAM-T)	\$0.58 \$0.47	\$0.80	72%	208	\$113.2 \$96.7	\$73.7 \$72.2	127.0	\$0.58 \$0.59						(20.4)%
, ,	\$0.47 \$0.07	φ0.80	12%	1,232	\$96.7 \$87.5	\$72.2 \$57.7	190.6	\$0.59 \$0.30						(13.4)%
-Cap Energy (ACB-AU) /estern Uranium (WUC-L)														(3.8)%
\ /	\$1.57			43	\$68.0	\$49.9	52.4	\$0.95						(11.9)%
erkeley Energia (BKY-AU)	\$0.34			446	\$151.6	\$50.5	89.4	\$0.56						(6.6)%
oro Energy (TOE-AU)	\$0.02			3,897	\$58.5	\$34.8	90.9	\$0.38						(18.7)%
nfield Energy (AEC-V)	\$0.08	\$0.25	233%	624	\$46.8	\$29.9	22.5	\$1.33	\$0.42	0.18x				5.8%
Energy Metals (EME-AU) Group Average - Developers	\$0.15			210	\$31.5	\$11.5	57.6	\$0.20 \$2.19		2.86x				11.5% (10.1)%
Stoup Average - Developers								Φ2.13		2.00x				(10.1)%
soEnergy Ltd. (ISO-V)	\$3.10	\$6.50	110%	107	\$331.2	\$263.1	51.3	\$5.13	\$6.62	0.47x				(10.5)%
lligator Energy (AGE-AU)	\$0.06			3,301	\$184.9	\$112.3	0.0							(13.3)%
onsolidated Uranium (CUR-V)	\$2.05	\$4.15	102%	77	\$157.4	\$99.8	89.6	\$1.11	\$4.12	0.50x				(3.6)%
levate Uranium (EL8-AU)	\$0.40			275	\$110.2	\$65.0	137.5	\$0.47						(13.3)%
evEx Resources (DEV-AU)	\$0.39			314	\$122.5	\$76.2	0.0							1.4%
zimut Exploration (AZM-V)	\$0.88	\$2.95	235%	82	\$72.3	\$40.5	0.0		\$2.66	0.33				(1.2)%
aselode Energy (FIND-V)	\$0.71			86	\$61.3	\$34.9	0.0							(10.1)%
lega Uranium (MGA-T)	\$0.20			358	\$69.7	\$42.5	0.0							(18.0)%
urania Resources (ARU-V)	\$0.60			54	\$32.4	\$27.6	0.0							(19.9)%
alOre Metals (VO-V)	\$0.39	\$1.05	173%	142	\$54.9	\$35.0	43.5	\$0.81						(9.5)%
lobex Mining (GMX-T)	\$0.96			56	\$53.4	\$26.1	0.0							4.2%
ppia Rare (API-L)	\$0.31			123	\$38.2	\$21.2	55.8	\$0.38						(22.5)%
kyharbour Resources (SYH-V)	\$0.38	\$0.98	157%	137	\$51.9	\$33.9	7.0	\$4.87	\$1.01	0.38x				(12.7)%
2 Energy (92E-AU)	\$0.47			88	\$41.3	\$21.9	0.0							(9.2)%
lue Sky (BSK-V)	\$0.16			200	\$32.0	\$23.3	22.7	\$1.03						(12.2)%
urepoint Uranium (PTU-V)	\$0.07			369	\$24.0	\$16.6	0.0							(19.8)%
TIEnergy (GTR-AU)	\$0.02			1,492	\$23.9	\$13.2	0.0							(13.3)%
orum Energy (FMC-V)	\$0.15			171	\$25.6	\$17.2	0.6	\$29.04						(4.4)%
anAlaska Uranium (CW-V)	\$0.42			102	\$42.8	\$21.8	0.0	,,						(20.2)%
tandard Uranium (STND-V)	\$0.42			148	\$19.2	\$12.8	0.0							7.0%
ission 3.0 (FUU-V)	\$0.09			297	\$26.7	\$6.8	0.0							(11.1)%
orthern Uranium (UNO'H-V)	\$0.03			162	\$3.2	\$2.5	0.0							(1.2)%
arku Resources (TKU-V)	\$0.02			79	\$5.5	\$4.3	0.0							(1.2)%
auldron Energy (CXU-AU)	\$0.07			535	\$5.5 \$5.4	\$3.2	30.9	\$0.10						8.3%
LX Resources (AL-V)	\$0.01			208	\$5.4 \$9.4	\$3.2	0.0	ψυ. ι υ						
ternational Prospect (IZZ-V)								\$2 OF						(1.2)%
. , ,	\$0.07			40	\$2.6	\$1.8	0.6	\$2.95						28.4%
-Terra Resources (XTT-V)	\$0.02			99	\$2.0	\$1.1	0.0							31.7%
rupa Minerals (AVU-V)	\$0.03			55	\$1.6	\$0.9	0.0							(1.2)%
	\$0.03			42	\$1.1	\$1.0	0.0							23.5%
	\$0.16			5	\$0.8	\$0.3	0.0							(1.2)%
Iravan Minerals (UVN-V)	\$0.07			227	\$15.9	\$2.7	0.0							(1.2)%
Iravan Minerals (UVN-V) zincourt Energy (AAZ-V)				98	\$7.3	(\$9.1)	0.0	64.50						(1.2)%
Jravan Minerals (UVN-V) zincourt Energy (AAZ-V) fros Resources (ERC-V)	\$0.08							\$4.59						(4.4)%
Jravan Minerals (UVN-V) vzincourt Energy (AAZ-V) Eros Resources (ERC-V)														\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
Jravan Minerals (UVN-V) zincourt Energy (AAZ-V) cros Resources (ERC-V) Group Average - Explorers														
Jravan Minerals (UVN-V) vincount Energy (AAZ-V) cros Resources (ERC-V) croup Average - Explorers VENTORY FUNDS		\$23.50	70%	231	\$2,472	\$2,739	57.4	\$47.74						(4.4)%
/anadian Energy (VEC-V) /dravan Minerals (UVN-V) /dzincourt Energy (AZ-V) /dzincourt Energy (AZ-V) /dzincourt Energy (ERC-V) /dzincourt Energy (VEX-V) /dzincourt Energy (VEX-V) /dzincourt Energy (VEX-V)	\$0.08	\$23.50 £5.30	70% 48%	231 183	\$2,472 £654.0	\$2,739 \$647.5	57.4 19.8							(4.4)% (2.6)%
Jravan Minerals (UVN-V) vaincourt Energy (AAZ-V) Eros Resources (ERC-V) Group Average - Explorers VENTORY FUNDS Sprott Physical (U.U.N-T)	\$0.08 \$13.84							\$47.74						(4.4)%

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



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

Ticker	Company	βuranium (Last 1-year, Weekly Simple Returns)	$eta_{\sf uranium}/\sigma_{\sf equity}$	Absolute Return (%)	Rank Beta	Rank $eta_{\sf uranium}$ / $oldsymbol{\sigma}_{\sf equity}$	Rank Absolute Return
TSXV:UNO.H	Northern Uranium Corp.	1.71	6.507	0%	1	35	37
ASX:BMN	Bannerman Energy Ltd	1.60	9.280	56%	2	6	11
ASX:AGE	Alligator Energy Limited	1.48	9.526	133%	3	5	1
ASX:TOE	Toro Energy Limited	1.46	8.189	7%	4	11	30
ASX:92E	92 Energy Limited	1.45	8.108	96%	5	12	3
ASX:ACB	A-Cap Energy Limited	1.41	5.875	39%	6	42	16
ASX:PEN	Peninsula Energy Limited	1.39	10.580	33%	7	3	21
ASX:EL8	Elevate Uranium Ltd	1.29	9.192	48%	8	7	13
TSXV:URC	Uranium Royalty Corp.	1.23	7.944	2%	9	15	35
TSXV:GXU	GoviEx Uranium Inc.	1.19	7.422	17%	10	21	25
US:UEC	Uranium Energy Corp.	1.18	7.371	83%	11	22	5
TSX:FCU	Fission Uranium Corp.	1.16	8.013	37%	12	13	18
ASX:EME	Energy Metals Limited	1.13	7.955	(23%)	13	14 4	48
ASX:BOE	Boss Energy Limited	1.12	9.658	119%	14 15	23	2 44
TSX:FSY	Forsys Metals Corp.	1.10	7.334	(15%)	16	17	49
TSXV:AEC ASX:GTR	Anfield Energy Inc. GTI Energy Ltd	1.10	7.609	(25%)	17	16	
ASX:PDN	Paladin Energy Limited	1.07 1.02	7.765 8.557	(6%) 62%	18	9	41 8
TSX:URE	Ur-Energy Inc.	1.02	8.384	4%	19	10	34
TSXV:FUU	Fission 3.0 Corp.	1.02	7.097	6%	20	27	31
TSXV:ISO	IsoEnergy Ltd.	1.02	5.873	53%	21	43	12
TSXV:ISO	Azincourt Energy Corp.	1.01	7.265	(38%)	22	24	52
ASX:DYL	Deep Yellow Limited	1.00	9.140	17%	23	8	26
TSXV:FMC	Forum Energy Metals Corp.	1.00	6.669	(52%)	24	31	55
TSXV:SYH	Skyharbour Resources Ltd.	0.97	6.212	19%	25	40	24
TSXV:FIND	Baselode Energy Corp.	0.97	6.815	71%	26	29	7
CNSX:WUC	Western Uranium & Vanadium		6.592	(43%)	27	33	53
TSX:EFR	Energy Fuels Inc.	0.93	7.107	35%	28	26	20
TSXV:EU	enCore Energy Corp.	0.91	7.571	5%	29	18	33
ASX:LOT	Lotus Resources Limited	0.91	7.110	45%	30	25	14
TSX:MGA	Mega Uranium Ltd.	0.87	6.457	5%	31	37	32
TSXV:CVV	CanAlaska Uranium Ltd.	0.83	5.340	(2%)	32	44	39
AIM:YCA	Yellow Cake plc	0.82	10.827	38%	33	2	17
TSX:U.U	Sprott Physical Uranium Trust F	0.79	11.142	37%	34	1	19
TSXV:BSK	Blue Sky Uranium Corp.	0.76	6.294	0%	35	38	37
TSX:GLO	Global Atomic Corporation	0.75	6.579	28%	36	34	22
TSX:DML	Denison Mines Corp.	0.75	6.606	10%	37	32	29
ASX:ERA	Energy Resources of Australia L	0.73	7.465	(6%)	38	20	40
TSX:NXE	NexGen Energy Ltd.	0.72	6.750	1%	39	30	36
TSXV:PTU	Purepoint Uranium Group Inc.	0.71	5.955	(28%)	40	41	51
ASX:BKY	Berkeley Energia Limited	0.65	5.163	15%	41	46	27
TSXV:VO	ValOre Metals Corp.	0.64	6.476	57%	42	36	9
TSX:CCO	Cameco Corporation	0.62	6.888	56%	43	28	10
TSXV:STND	Standard Uranium Ltd.	0.62	4.726	(50%)	44	48	54
TSX:UEX	UEX Corporation	0.59	5.067	43%	45	47	15
TSXV:AVU	Avrupa Minerals Ltd.	0.57	4.351	(60%)	46	50	57
TSXV:CUR	Consolidated Uranium Inc.	0.55	5.334	13%	47	45	28
ASX:DEV	DevEx Resources Limited	0.54	3.479	77%	48	56	6
KAS:KZAP	JSC National Atomic Company k		7.534	23%	49	19	23
TSXV:VEC	Vanadian Energy Corp.	0.54	3.512	(62%)	50	55	59
TSXV:IZZ	International Prospect Venture		3.772	(66%)	51	52	60
ASX:LAM TSX:GMX	Laramide Resources Ltd. Globex Mining Enterprises Inc.	0.52 0.51	4.723 6.286	(11%) (17%)	52 53	49 39	42 45
ASX:CXU	Cauldron Energy Limited	0.47			54	53	61
TSXV:AL	ALX Resources Corp.	0.42	3.558 3.795	(69%) (18%)	55	51	47
TSXV:AL TSXV:UVN	Uravan Minerals Inc.	0.42	2.826	(26%)	56	58	50
TSXV:XTT	X-Terra Resources Inc.	0.40	2.460	(73%)	57	59	62
TSXV:ATT	Eros Resources Corp.	0.32	3.525	(12%)	58	54	43
TSXV:LI	American Lithium Corp.	0.32	2.189	96%	59	60	43
CNSX:API	Appia Rare Earths & Uranium Co		1.748	(54%)	60	61	56
TSXV:AZM	Azimut Exploration Inc.	0.21	2.914	(60%)	61	57	58
TSXV:AZIVI	Tarku Resources Ltd.	0.20	1.027	(18%)	62	62	46
TSXV:ARU	Aurania Resources Ltd.	0.01	0.112	(75%)	63	63	63

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 ∆ (%)	10-Day ∆ (%)	30-Day Δ (%)	90-Day ∆ (%)	YTD ∆ (%)	12-Mth Δ (%)	2-year (%)
S&P/TSX COMPOSITE INDEX	.ПТ-Т		(0.4)%	0.0%	2.9%	8.5%	(0.0)%	(4.9)%	(0.9)%	21.2%
S&P/TSX VENTURE COMPOSITE	.JX-T		(1.4)%	(3.0)%	(0.6)%	10.5%	(6.4)%	(29.7)%	(24.5)%	(12.1)
S&P/TSX 60 INDEX	T.XLX-T		(0.4)%	0.3%	3.0%	8.5%	0.1%	(5.1)%	(0.4)%	22.4%
CAMECO CORPORATION	CCO-T	1.0% / 1.9	(3.5)%	(2.7)%	(5.1)%	7.6%	6.8%	14.6%	55.9%	130.69
KAZATOMPROM S	KAP-LN	1.0/0 / 1.5	(0.4)%	(2.4)%	(2.5)%	10.5%	(2.5)%	(25.7)%	11.7%	90.2%
PALADIN ENERGY L	PDN-AU	6.5% / 12.0	0.0%	(2.0)%	(2.0)%	15.0%	2.8%	(17.0)%	62.2%	432.89
ENERGY FUELS INC	UUUU-US	15.6% / 9.7	(8.8)%	(11.4)%	(11.3)%	12.5%	3.0%	(18.9)%	32.5%	272.99
URANIUM ENERGY CORP	UEC-US	17.7% / 6.0	(7.6)%	(15.3)%	(14.1)%	7.0%	7.0%	9.3%	83.0%	255.39
ERA FPO 'A	ERA-AU	0.0% / 1.7	0.0%	(5.8)%	(2.0)%	14.0%	(15.5)%	(27.9)%	(5.8)%	58.19
UR ENERGY INC	URE-T	0.1% / 1.1	(6.8)%	(9.5)%	(11.5)%	(0.0)%	(5.5)%	(10.4)%	3.8%	89.09
LOTUS RESOURCES	LOT-AU	1.0% / 0.9	(4.3)%	(6.2)%	(4.3)%	7.1%	(16.7)%	(27.4)%	45.2%	104.5
PENINSULA ENERGY	PEN-AU	0.4% / 0.6	(5.9)%	(20.0)%	(13.5)%	0.0%	(3.0)%	(20.0)%	33.3%	128.6
NEVCEN ENERCY LTD	NIVE T	2.00/ /2.4	(O.E)0((7.4)0/	(11.0)0/	(4.0)0/	(4E C)0((12.2)0/	0.00/	114.1
NEXGEN ENERGY LTD	NXE-T	2.0% / 3.4	(8.5)%	(7.4)%	(11.0)%	(1.0)%	(15.6)%	(12.3)%	0.8%	114.1
DENISON MINES CORPORATION	DML-T	1.2% / 2.5	(7.4)%	(10.4)%	(8.0)%	(0.0)%	(2.8)%	(20.7)%	9.5%	119.0
AMERICAN LITHIUM CORP	LI-V	0.4% / 1.0	(5.6)%	9.2%	19.5%	89.9%	14.3%	(25.1)%	95.7%	111.3
GLOBAL ATOMIC CORPORATION	GLO-T	0.6% / 1.4	(5.9)%	(7.9)%	(13.7)%	1.3%	3.4%	(27.9)%	28.0%	337.7
BOSS EN FPO	BOE-AU	1.0% / 3.8	(2.8)%	(0.8)%	0.0%	23.7%	17.8%	8.9%	118.8%	313.9
FISSION URANIUM CORP	FCU-T	0.7% / 1.3	(9.7)%	(13.3)%	(13.3)%	1.6%	(11.0)%	(16.7)%	36.8%	75.79
ENCORE ENERGY CORP	EU-V	0.3% / 0.7	(3.9)%	(12.2)%	(14.7)%	7.0%	17.3%	(23.8)%	5.2%	253.6
DEEP YELLOW	DYL-AU	0.6% / 1.5	(3.3)%	(9.2)%	(5.1)%	13.0%	5.7%	(14.0)%	16.5%	221.7
BANNERMAN ENERGY	BMN-AU	0.3% / 1.6	(5.6)%	(8.8)%	(11.0)%	(1.6)%	1.1%	(30.7)%	55.8%	356.1
GOVIEX URANIUM INC	GXU-V	0.4% / 1.3	(5.9)%	(14.3)%	(17.2)%	(15.8)%	(14.3)%	(32.4)%	17.1%	71.49
UEX CORPORATION	UEX-T		(6.5)%	(14.0)%	(10.4)%	21.1%	65.4%	16.2%	43.3%	168.8
FORSYS METALS CORP	FSY-T	0.3% / 0.4	(9.4)%	(17.1)%	(23.7)%	7.4%	26.1%	(31.8)%	(14.7)%	
LARAMIDE RESOURCES LTD	LAM-T	1.0% / 4.1	(8.8)%	(12.3)%	(6.1)%	5.7%	1.1%	(34.5)%	8.1%	69.19
BERKELEY ENERGIA	BKY-AU	0.0% / 4.2	1.5%	(2.9)%	1.5%	(2.9)%	(2.9)%	47.8%	15.3%	(46.0
A-CAP ENERGY	ACB-AU	0.1% / 0.7	(2.7)%	(2.7)%	2.9%	14.5%	(21.1)%	(51.0)%	44.9%	343.8
WESTERN URANIUM & VANADIUM CORP	WUC-L		(1.3)%	(3.1)%	(9.8)%	20.8%	22.7%	(16.0)%	(42.9)%	134.3
TORO ENERGY	TOE-AU	0.0% / 0.0	0.0%	(6.3)%	0.0%	7.1%	(16.7)%	(31.8)%	7.1%	0.0%
ANFIELD ENERGY INC	AEC-V	0.1% / 0.5	0.0%	7.1%	(6.3)%	15.4%	(21.1)%	(21.1)%	(25.0)%	0.0%
ENERGY MET FPO	EME-AU				11.1%			(44.4)%		
ISOENERGY LTD	ISO-V	1.3% / 2.3	(3.1)%	(7.7)%	(2.8)%	(4.9)%	(4.9)%	(17.1)%	52.7%	138.5
ALLIGATOR ENERGY	AGE-AU	2.0% / 2.7	(3.4)%	(9.7)%	(0.0)%	16.7%	(16.4)%	1.8%	133.3%	1,020.
CONSOLIDATED URANIUM INC	CUR-V	0.2% / 0.6	7.9%	(2.4)%	3.0%	21.3%	19.2%	(28.6)%	13.3%	236.1
ELEVATE URANIUM	EL8-AU	1.7% / 6.2	(4.8)%	(12.1)%	(11.1)%	(1.2)%	(21.6)%	(14.0)%	48.1%	426.3
DEVEX RESOURCES	DEV-AU	0.2% / 0.8		(2.5)%	30.0%	36.8%	5.4%	(20.4)%	77.3%	110.8
MEGA URANIUM LTD	MGA-T	0.6% / 1.8	(11.4)%	(15.2)%	(17.0)%	2.6%	(15.2)%	(23.5)%	5.4%	77.39
SKYHARBOUR RESOURCES LTD	SYH-V	0.1% / 0.3	(9.5)%	(9.5)%	(12.6)%	1.3%	(15.6)%	(21.6)%	18.8%	111.1
BASELODE ENERGY CORP	FIND-V	0.1% / 0.1	(4.1)%	(7.8)%	(9.0)%	1.4%	(16.5)%	(12.3)%	71.1%	67.19
AZIMUT EXPLORATION INC	AZM-V	0.0% / 0.2	0.0%	3.5%	1.1%	8.6%	(35.3)%	(46.7)%	(60.4)%	(49.1
APPIA RARE EARTHS & URANIUM CORP	API-L	3.3.7 3.2	(10.1)%	(8.8)%	(21.5)%	(3.1)%	(19.5)%	(46.6)%	(53.7)%	40.9
VALORE METALS CORP	VO-V	0.1% / 0.6	1.3%	1.3%	(3.8)%	24.2%	(1.3)%	(30.0)%	57.1%	32.89
BLUE SKY URANIUM CORP	BSK-V	1.0% / 9.4	0.0%	0.0%	(13.5)%	6.7%	(15.8)%	(17.9)%	0.0%	33.3
CANALASKA URANIUM LTD	CVV-V	0.2% / 0.3	(3.4)%	(16.0)%	(22.2)%	10.5%	10.5%	(4.5)%		115.4
GLOBEX MINING ENTERPRISES INC	GMX-T	0.1% / 0.5	3.2%	6.7%	6.7%	1.1%	(20.0)%	(12.7)%	(2.3)% (17.2)%	29.7
AURANIA RESOURCES LTD FORUM ENERGY METALS CORP	ARU-V FMC-V	0.2% / 2.0 0.1% / 0.3	(14.3)%	(26.8)%	(1.6)%	(6.3)%	(3.2)%	(48.7)%	(75.3)%	(86.1
PUREPOINT URANIUM GRP INC	PTU-V		(6.3)% (7.1)%	(3.2)%	(9.1)%	15.4%	15.4%	(11.8)%	(52.4)%	0.09 18.2
		0.8% / 3.6	(7.1)%	(13.3)%	(13.3)%	(7.1)%	(13.3)%	(23.5)%	(27.8)%	18.2
92 ENERGY	92E-AU	7.1% / 12.5	4.4%	(2.1)%	(6.9)%	11.9%	(12.1)%	(30.9)%	95.8%	/20.0
AZINCOURT ENERGY CORP	AAZ-V	0.2% / 0.4	(0.0)%	(6.7)%	(0.0)%	55.6%	(26.3)%	(60.0)%	(38.1)%	(30.0
FISSION 3.0 CORP	FUU-V	0.2% / 0.5	0.0%	(10.0)%	(10.0)%	20.0%	(14.3)%	(59.1)%	5.9%	5.9%
GTI ENERGY	GTR-AU	0.0% / 0.0	(5.9)%	(5.9)%	(5.9)%	14.3%	0.0%	(33.3)%	/E0.0111	(44.8
STANDARD URANIUM LTD	STND-V	0.0% / 0.1	4.0%	4.0%	(7.1)%	18.2%	0.0%	(39.5)%	(50.0)%	(56.7
ALX RESOURCES CORP	AL-V	0.0% / 0.0		12.5%	0.0%	0.0%	0.0%	(50.0)%	(18.2)%	(30.8
CAULDRON ENERGY	CXU-AU		0.0%	11.1%	0.0%	25.0%		(65.5)%	(68.8)%	
TARKU RESOURCES LTD	TKU-V	0.1% / 0.2	(6.7)%	(12.5)%	(12.5)%	100.0%	27.3%	(12.5)%		(30.0
NORTHERN URANIUM CORP	UNO'H-V		0.0%	0.0%	0.0%	0.0%	0.0%	(42.9)%	0.0%	300.0
INTERNATIONAL PROSPECT VENTURES LTD	IZZ-V	0.0% / 0.0	0.0%	0.0%		0.0%	(18.8)%	(59.4)%	(65.8)%	(50.0
AVRUPA MINERALS LTD	AVU-V	0.0% / 0.0			(14.3)%					(81.3
X-TERRA RESOURCES INC	XTT-V	0.0% / 0.1		0.0%	33.3%		(42.9)%	(33.3)%	(73.3)%	(87.5
VANADIAN ENERGY CORP	VEC-V	0.0% / 0.0		0.0%	25.0%			(50.0)%	(61.5)%	(61.5
URAVAN MINERALS INC	UVN-V	0.1% / 0.3			23.1%				(25.6)%	
EROS RESOURCES CORP	ERC-V	0.0% / 0.0			7.1%				(11.8)%	(28.6
/ENTORY FUNDS										
SPROTT PHYSICAL URANIUM TRUST	U.UN-T	1.6% / 1.9	(0.7)%	1.0%	(5.2)%	0.7%	(5.3)%	(0.6)%	36.8%	
YELLOW CAKE PLC	YCA-LN		(1.1)%	(0.8)%	0.8%	0.1%	(2.0)%	5.1%	38.4%	66.19
YALTY COMPANIES										
URANIUM ROYALTY CORP	URC-V	0.2% / 0.6	(5.3)%	(8.8)%	(15.6)%	6.3%	(9.1)%	(30.1)%	2.2%	148.1

Source: UxC, CapitalIQ, Bloomberg, Haywood



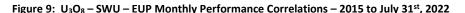
Uranium Fuel Cycle Price Relationships

The charts below show that the price of uranium products (U_3O_8 , UF₆ and EUP) are tightly correlated (monthly % Δ) in the long term (RHS Figures 7 & 8). 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 UF₆ [R²=0.04] or SWU to EUP [R²=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 UF₆ (currently 22.9%), and SWU costs have made up an average of 26% of the price of EUP (currently 25.2%) (or, conversely, UF₆ historically makes ups up 74% of the cost of EUP).

UxC Spot U_3O_8 Price to Conversion Price 70.0% 60.0% 50.0% 40.0% 30.0% 20.0% v = 0.1038x + 0.0111 $UxC Spot U_3O_8 Price to UF_6 Price$ 30.0% y = 0.8892x + 0.0007R² = 0.9377 (30.0%) (20.0%) 25.0% 20.0% (20.0%) 15.0% (30.0%) 10.0% 5.0% UxC Conversion Price to UF₆ Price (10.0%) (5.0%) (10.0%) 25.0% (15.0%) 20.0% (20.0%) v = 0.1653x - 0.0018 15.0% $R^2 = 0.0431$ (25.0%) 10.0% 20.0% (40.0%)40.0% 60.0% 80.09 (5.0%) (10.0%) (20.0%) (25.0%)

Figure 8. U₃O₈ - Conversion - UF₆ Monthly Performance Correlations 2008 to July 31st, 2022 (at UXC spot prices)

Source: Haywood Securities Inc., UxC





Source: Haywood Securities Inc., UxC



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Analyst Certification

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:

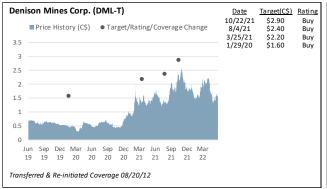
	Ticker	Company	1	2	3	4	5	6	7	8	9
TSX:	DML	Denison Mines Corp. X X									
TSX:	EFR	Energy Fuels Inc.			Χ						
TSX\	/:ISO	IsoEnergy ltd.			Χ			Х			
TSX:	NXE	NexGen Energy Ltd.			Χ						
US:L	JEC	Uranium Energy Corp.			Χ						
1	The Analyst	Analyst(s) preparing this report (or a member of the Analysts' households) have a financial interest in this company.								y.	
2	As of the end of the month immediately preceding this publication either Haywood Securities, Inc., one of its subsidiaries, its officers or directors beneficially owned 1% or more of this company.										
3	Haywood Securities, Inc. has reviewed lead projects of this company and a portion of the expenses for this travel may have been reimbursed by the issuer.										
4	Haywood Securities Inc. or one of its subsidiaries has managed or co-managed or participated as selling group in a public offering of securities for this company in the past 12 months.										
5	Haywood Securities, Inc. or one of its subsidiaries has received compensation for investment banking services from this company in the past 12 months.										
6	Haywood Securities, Inc. or one of its subsidiaries has received compensation for investment banking services from this company in the past 24 months.										
7	Haywood S	ecurities, Inc. or one of its subsidiaries is restricte	d on th	is comp	any at	the time	e of pul	olication	١.		
8		ecurities, Inc. or one of its subsidiaries expects to m this company in the next three months.	receive	e or inte	ends to	seek co	mpensa	ation fo	r invest	ment b	anking
9	Haywood Securities, Inc. or one of its subsidiaries currently provides market making services to this company, for which Haywood is compensated by the Issuer on a monthly basis.										

Distribution of Ratings (as of August 18, 2022)

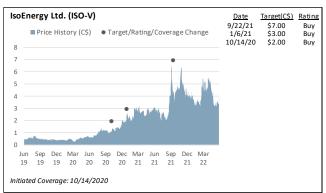
			IB Clients
	%	#	(TTM)
Buy	77.8%	77	71.4%
Hold	14.1%	14	23.8%
Sell	0.0%	0	0.0%
Tender	1.0%	1	4.8%
UR (Buy)	0.0%	0	0.0%
UR (Hold)	0.0%	0	0.0%
UR (Sell)	0.0%	0	0.0%
Dropped (TTM)	7.1%	7	0.0%



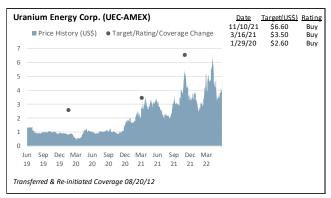
Price Chart, Rating and Target Price History (as of August 18, 2022)











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

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