

Equity Research October 20, 2021

Metals & Minerals

Uranium Weekly: Another Uranium Fund Preparing to Join the Fray

The Ux Consulting (UxC) weekly spot price indicator, published earlier this week, increased to US\$47.00/lb (up \$9.75/lb), +26% versus the previous week. Approximately 2.8 million pounds was transacted in the spot market last week, including one spot request for ~500,000 pounds. We estimate that since the end of September, the Sprott Physical Uranium Trust (SPUT) has purchased ~4.9 million pounds of uranium in the spot market.

Since mid-August, SPUT has purchased ~15.7 million pounds of uranium increasing its holdings by ~87%. We estimate that the Trust has deployed roughly 50% of the US\$1.3 billion available under its current ATM. We note that the ATM can be expanded and that there is effectively no limit on the funds that can be raised via the ATM mechanism.

SPUT was not the only recent buyer in the spot market. Uranium Royalty Corp. (URC) announced on October 19 that it is entering into contracts for an additional four spot purchases totaling 400,000 pounds of uranium at an average cost of US\$45.00/lb. Deliveries will be made in October-December 2021 through book transfers to URC's storage account at Cameco's Fuel Services facilities in Ontario. Once the deliveries are complete, URC will hold a physical inventory of 1,048,068 pounds of uranium at a weighted average cost of US\$37.64 per pound.

Kazatomprom has passed a resolution to participate in a physical uranium fund, ANU Energy OEIC Ltd., established on the Astana International Financial Centre (AIFC). The Fund will hold physical uranium as a long-term investment with its initial purchases financed through the founders' round investment totaling US \$50 million, sourced from Kazatomprom at 48.5%, National Investment Corporation of the National Bank of Kazakhstan (NIC) at 48.5%, and Genchi Global Limited (the Fund Manager) at 3%. Once the Fund is operating, a second stage of development is expected to be carried out through an additional public or private offering, with the timing and details to be determined by market conditions. At the second stage, the Fund is expected to raise capital of up to US\$500 million from institutional and/or private investors, with the proceeds to be used for additional uranium purchases.

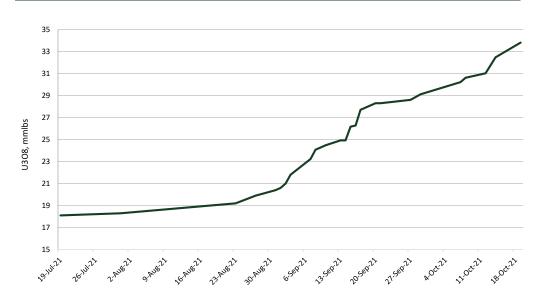
While still relatively early, we believe that a uranium contracting cycle appears to be underway with fund buying pushing utilities into the term market. Increasing price volatility, tightening supply in the spot market, and an increasing realization that longer term supply is under threat following a decade-long bear market, are all contributing to nuclear utilities becoming more concerned about security of supply. We expect continued upward pressure on spot and term uranium prices in the coming months.

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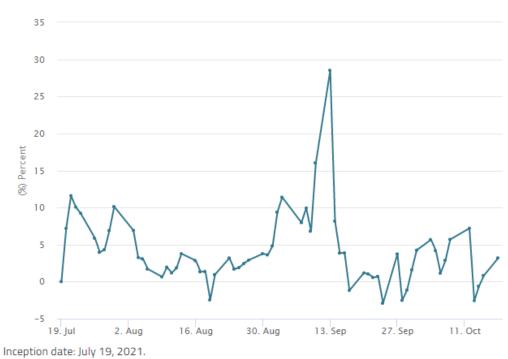
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Exhibit 1. Sprott Physical Uranium Trust – Uranium Holdings Since Inception (July 19, 2021)



Source: Sprott Physical Uranium Trust; TD Securities estimates

Exhibit 2. Sprott Physical Uranium Trust - Share Price Premium to NAV



Source: Sprott Physical Uranium Trust



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Exhibit 3. Uranium company equity offerings and uranium purchases (excluding Sprott Physical Uranium Trust)

Total/Average		469.2	14.90	30.53		
Uranium Royalty Corp.	19-Oct-21	n/a	0.40	45.00		
Uranium Royalty Corp.	15-Sep-21	n/a	0.30	38.17		
Yellow Cake	16-Jun-21	88.0	2.00	32.23		
Western Uranium & Vanadium	2-Jun-21	n/a	0.13	31.50		
Yellow Cake	11-May-21	n/a	0.34	29.15		
Uranium Energy	20-May-21	n/a	0.20	30.00		
Uranium Participation Corp. 1	3-May-21	66.4	1.78	30.50		
Uranium Energy	6-Apr-21	12.0	0.71	31.70		
Boss Energy	29-Mar-21	46.0	1.25	30.15		
Uranium Energy	17-Mar-21	30.5	1.40	29.00		
Denison Mines	15-Mar-21	86.3	2.50	29.61		
Yellow Cake	25-Feb-21	140.0	3.90	28.78		
Company	and/or Uranium Purchase Announced	Equity Offering (US\$ millions)	Uranium Purchased or Planned to Purchase (million pounds)	Estimated Average Price of Uranium Purchases (Planned or Actual) (US\$/lb)		
	Date Equity Offering					

^{1.} TD estimate for pounds purchased and average price

Source: Company reports; TD Securities estimates

Exhibit 4. Spot and Term Uranium Prices (US\$/lb)





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Exhibit 5. Spot and Term Volumes

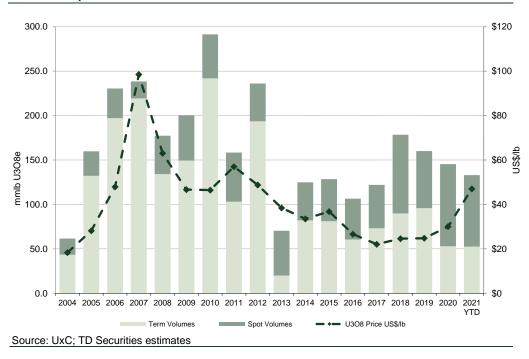
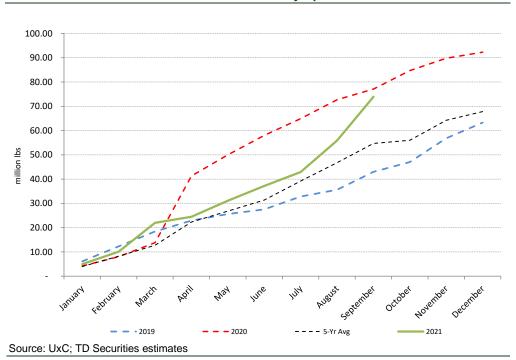


Exhibit 6. Historical vs. 2021 Cumulative Monthly Spot Volumes

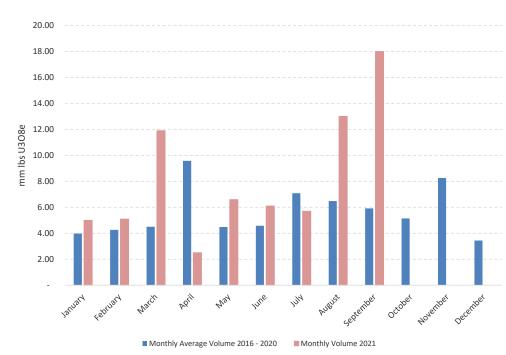


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Exhibit 7. Monthly Average Spot Volumes



Source: UxC; TD Securities estimates

Exhibit 8. Uranium Term Price Premium to Spot (US\$/lb)



Source: UxC; TD Securities estimates



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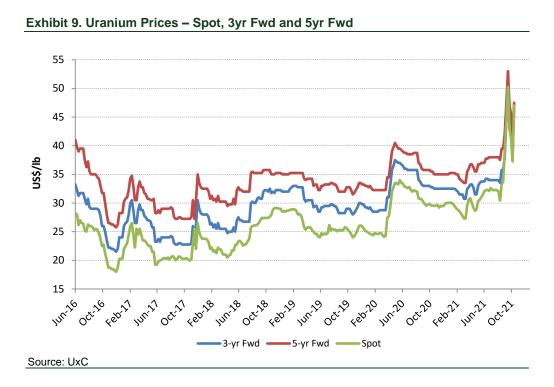
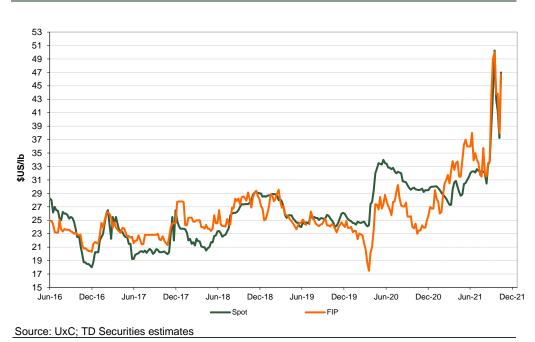


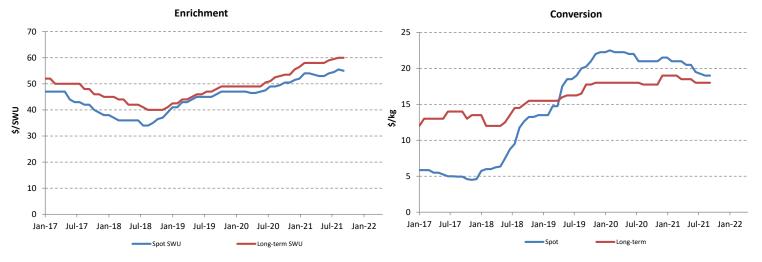
Exhibit 10. Fund Implied Price (FIP) and Spot Price





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Exhibit 11. Monthly SWU and Conversion Pricing



Source: UxC; TD Securities estimates

Exhibit 12. TD Securities Uranium Supply/Demand Model

	2017	2018	2019	2020	2021E	2022E	2023E	2024E	2025E
Mine Supply - Western World (Mlb U3O8)									
Total Mine Supply - Western World	100	83	85	81	75	80	85	88	86
Net Eastern Mine Supply (lbs U3O8)	54	54	55	44	52	53	60	66	72
Total World Mine Supply (Mlb U3O8)	154	138	140	125	127	132	145	154	158
YoY % change	-7.6%	-10.2%	1.7%	-10.9%	2.0%	4.0%	9.1%	6.8%	2.6%
Secondary Supply									
Global underfeeding and tails re-enrichment*	19	18	18	16	16	15	15	14	14
Mixed Oxide Fuel (MOX)*	5	5	6	6	6	6	6	7	8
US government sales (DOE Proposed)*	3	2	2	1	0	0	0	0	0
Additional Russian secondary supply*	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0
Total Secondary Supply (MIb)	27	24	26	24	22	21	21	21	21
Secondary supply as % of global reactor demand	16%	14%	15%	13%	12%	12%	12%	11%	11%
Mobilization of Commercial Inventory	7	7	7	7	7	7	7	7	7
Total Supply	187	169	173	156	156	161	173	183	187
Total World Demand									
Total World Nuclear Generating Capacity (MWe) *	358,819	368,571	372.978	374,420	384,508	385,211	389,242	394,906	398,885
Uranium requirements per MWe	472	472	472	472	472	472	472	472	472
Uranium demand (mmlb)	169	174	176	177	181	182	184	186	188
First Core Requirement (2 year lead)	-	-	-	-	-	-	-	-	-
Total World Demand (MIb U3O8)	169	174	176	177	181	182	184	186	188
YoY % change	1.7%	2.7%	1.2%	0.4%	2.7%	0.2%	1.0%	1.5%	1.0%
Supply / Demand Balance (MIb)	18	-5	-3	-21	-25	-21	-11	-4	-2
Spot Uranium Price (US\$/lb U3O8)	\$22.12	\$24.82	\$25.94	\$29.52	\$35.24	\$50.00	\$55.00	\$55.00	\$55.00

^{*} Source: World Nuclear Association - Nuclear Fuel Report 2019-2040 Reference Case

Source: UxC, Bloomberg, World Nuclear Association, TD Securities Inc.

TD Securities Inc.

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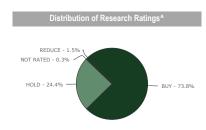
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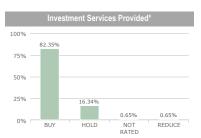
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