

## Critical Materials Start 2023 With a Bang

Authored by Paul Wong, CFA – Market Strategist, Sprott Asset Management LP; and Jacob White – ETF Product Manager, Sprott Asset Management LP

*We are pleased to introduce Sprott Energy Transition Materials Monthly by Paul Wong, CFA, Market Strategist and Jacob White, ETF Product Manager. At Sprott, we believe the global clean energy transition will grow more urgent as energy markets continue reordering and energy security becomes synonymous with national security. Companies that are upstream in the supply chain may be well positioned to benefit from the increased investment in the critical minerals necessary for the clean energy transition.*

## Strong Demand-Supply Fundamentals for 2023

As 2022 ended, most of the main bearish risks for the U.S. (rising interest rates), EU (cold winter), and China (zero-COVID) faded suddenly and nearly simultaneously, setting the market for a more pro-cyclical outlook. The upward revision in global growth, the timing effect of the China credit impulse and the surprise ending of China's zero-COVID policy have provided a tailwind for the metals market. For energy transition metals, we see this as a cyclical boost on top of the robust secular demand that is in play. If 2022's pullback was the typical mid-cycle correction common in the commodity resource sector, then we believe 2023 will reaffirm the demand (strong) and supply (shortages) fundamentals.

The Russian invasion of Ukraine, the LME nickel short squeeze, systemic negative macroeconomic factors, etc., all affected energy transition materials in notable ways in 2022. Critical metals have attracted significant attention in the past few years despite plenty of short-term risks.

January, in particular, was a solid start to 2023. We believe we are in the early stages of an energy transition materials secular bull market and will likely have favorable supply-demand dynamics going forward.

## January Rebound for Energy Transition Materials

The Nasdaq Sprott Energy Transition Materials™ Index (NSETM™), a global equity index of selected energy transition materials industry equities, rebounded strongly by 17.51% for the month, outpacing most cyclical and resource sectors we track. NSETM™ and other mining and metals-related equities peaked around April 2022 as the Federal Reserve ("Fed") embarked on aggressive rate hikes and China devalued the yuan. Both events signaled and pulled forward slowdown and recession risks. Market depth/liquidity at that time also declined, amplifying trade flows and exacerbating price swings. NSETM™ bottomed in July before other metals miners, but by late September, the Index began rallying into year-end as market conditions inflected (U.S. dollar [USD peak], Fed rate hike peak).

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"The post-pandemic era marks the beginning of a new supercycle for commodities, especially for critical minerals driving the clean energy transition."

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January was a solid month for risk assets as investment funds were underexposed for a positive, right-tail<sup>1</sup> outcome. The significant left-tail risks of 2022 quickly faded or reversed as we headed toward the new year. In the U.S., fears of hyperinflation and more Federal Reserve (“Fed”) rate hikes abated as the Fed signaled it might slow its rate hikes just as inflation data finally moderated. (At this writing, the Fed indicated that it is likely to raise interest rates at least twice more, following much stronger-than-expected U.S. job growth in January.) In Europe, a far warmer-than-expected winter prevailed, allowing the EU to dodge the worst of an energy-spike-induced hard landing and associated stress events. After years of a strict zero-COVID policy, China quickly reversed to a full reopening, instantly giving the world an unexpected growth shock. With all three major economic regions experiencing a sudden reversal from left-tail (negative) to right-tail (positive) outcomes, massive forced buying was triggered.

Furthermore, with moderation in Fed rate hikes in sight, both the USD and interest rates declined sharply, easing financial conditions and paving the way in January for a rebound in many financial assets. Whether this rally is the beginning of the consensus-desired soft landing or yet another bear market rally remains to be seen. We expect that macro volatility will likely remain high in the months ahead. For the commodity resource sector, however, China’s reopening may help boost demand for commodities (and their related equities) so that they may experience a more substantial recovery relative to other cyclical sectors and industries.

**Figure 1. The Bullish Breakout for Nasdaq Sprott Energy Transition Materials™ Index (NSETM™) (2018-2023)**



Source: Bloomberg. Data as of 2/02/2023. The relative strength index (RSI) is a momentum indicator that measures the speed and magnitude of a security’s recent price changes to evaluate overvalued or undervalued conditions in the price of that security. Included for illustrative purposes only. **Past performance is no guarantee of future results.**

## Energy Transition Equities Outperformance Since January 2020

In our [2023 Top 10 Watch List](#), we compared a basket of energy transition commodity metals to the Bloomberg Commodity Index (a broad commodity index) and the Bloomberg Industrial Metals Subindex (base metals) as a reality check. The energy transition commodities basket showed clear outperformance relative to both indices, confirming our bullish narrative for these physical metals.

<sup>1</sup> Source: Investopedia. Tail risk is the chance of a gain/loss occurring due to a rare event, as predicted by a probability distribution. Right-tail risks are associated with substantial investment gains, while left-tail risks are associated with unexpected losses.

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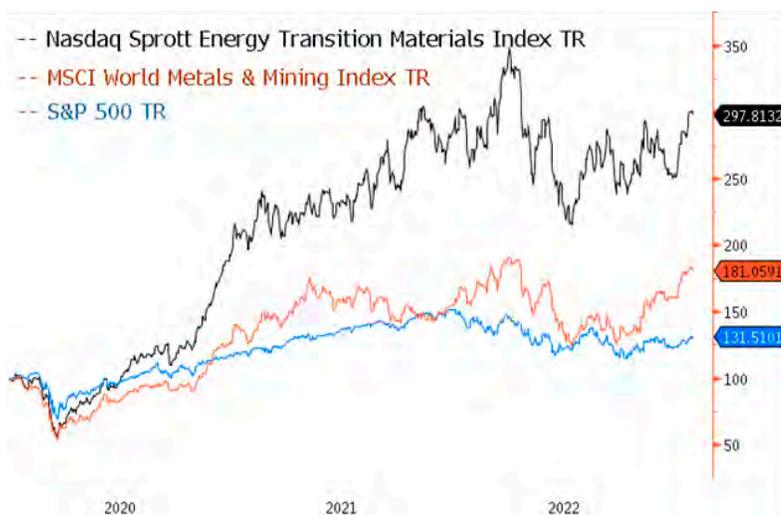
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In Figure 2, we compare the relative performance of the energy transition materials/mining equities (NSETM™) to the S&P 500 and the MSCI World Metals & Mining Index, with data normalized to a 100 index level starting January 2, 2020.

For the period from January 2, 2020, to February 13, 2023, NSETM™ (197.81%) outperformed the S&P 500 (31.52%) and the MSCI World Metals and Mining Index (81.06%) by considerable margins. In our view, the technical patterns support a continuation of this trend. Of note, NSETM™ and the MSCI World Metals and Mining Index have a high correlation (0.84 over the last five years) since they both represent metals mining equities, but NSETM™ has the added secular growth element of the energy transition.

## Figure 2. Recent Outperformance of Energy Transition Materials

NSETM Index vs. S&P 500 and MSCI Global Metals & Mining Index, Normalized from January 2, 2020



Source: Bloomberg. Data as of 2/06/2023. Included for illustrative purposes only. **Past performance is no guarantee of future results.**

## Revisiting the Last Major Commodity Cycle

In Figure 3, we highlight the performance of the S&P 1500 Metals & Mining Index<sup>2</sup> versus the S&P 500 Index back to 1995 (data limit) as a quick history review. For most of the 1990s, the metals and mining sector underperformed the broader equities market. In general terms, the metals group was still digesting the supply brought on by the past supercycle when additional supply arrived from the collapse of the Soviet Union in 1991. The technology group drove the broad market in the 1990s through the first tech growth boom, and valuation multiples expanded dramatically as interest rates fell in the first decade of the Great Moderation. The 2000s represented the most recent commodity supercycle, driven by the rise of China and its near-insatiable demand for commodities. Conversely, following the bursting of the dot-com bubble (2001), the technology group spent the decade losing value.

The 2010s saw China's rate of gross domestic product (GDP) growth peak and its demand for commodities moderate. However, unlike past cycles, capital spending to maintain productive capacity was significantly reduced as capital was redirected more to share buybacks and dividends. The technology group began its next growth boom, and its valuations exploded even higher as the post-GFC (global financial crisis) world of QE-ZIRP-NIRP<sup>3</sup> and low volatility fueled its startling rise in market capitalization.

<sup>2</sup> The MSCI World Metals and Mining Index is composed of large and mid cap stocks across 23 Developed Markets (DM) countries. All securities in the Index are classified in the Metals & Mining industry (within the Materials sector) according to the Global Industry Classification Standard (GICS®).

<sup>3</sup> QE-ZIRP-NIRP is Fed speak and refers to "quantitative easing", "zero interest rate policy" and "negative interest rate policy".

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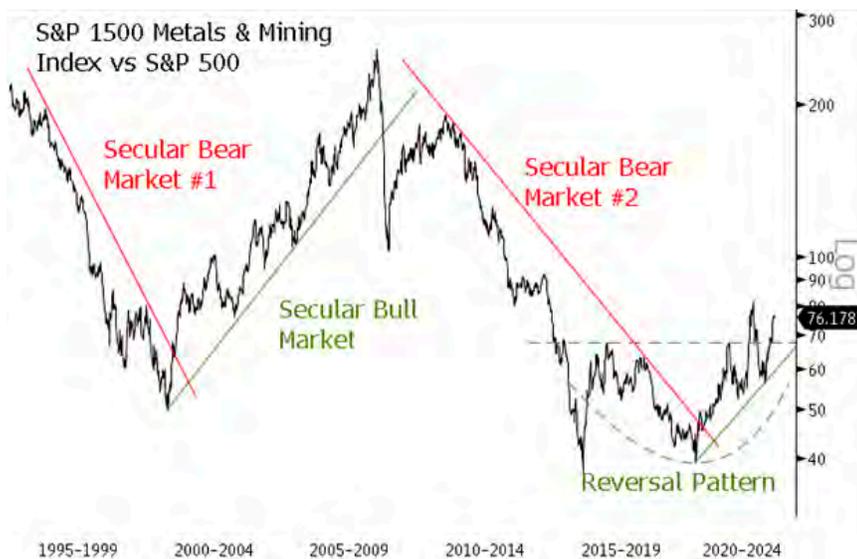
## Deglobalization and Geopolitical Tensions Have Accelerated the Energy Transition

The 2020s started with the COVID-19 pandemic, fiscal and monetary stimulus far outpacing the GFC response, the Russia-Ukraine war, and the resultant fracturing of global supply chains, geopolitical reordering, and global hyperinflation. The secular demand surge for critical minerals for energy transition was well underway due to the threat of climate change. But since the onset of the Russia-Ukraine war, deglobalization has accelerated and geopolitical tensions have risen. The need to quicken the global energy transition and secure critical minerals supplies has increased commensurately, and it comes on the heels of a decade that saw chronic underinvestment, which now magnifies the level of capital investment needed.

From an investment cycle perspective, we are likely in the early stages of this commodity supercycle. In the 2000s commodity supercycle, China joined the World Trade Organization in 2000, and commodity prices made their lows in the 2002 recession. Despite fantastic performance for the commodity complex in 2003 and 2004, it was not until 2005 that investment inflows began reaching the level that acknowledged that commodities were in a demand shock-driven market. We see a similar history being repeated now, and other resource sectors, such as energy, are demonstrating the same pattern. Investment consensus does not reflect that we are in a commodity supercycle based on the current level of absolute and relative fund flows.

## Figure 3. The Next Secular Commodity Bull Market Is Setting Up

S&P 1500 Metals & Mining Index vs. S&P 500 (1995-2023)



Source: Bloomberg. Data as of 2/06/2023. Included for illustrative purposes only. **Past performance is no guarantee of future results.**

## China Credit Impulse: A Closely Watched Leading Indicator for Metals Demand

China credit impulse refers to the change in the rate of growth of new credit in China created by banks and other financial institutions. Credit impulse is a leading indicator of economic activity, signaling potential economic changes in the future rather than current activity. An increasing credit impulse indicates that the rate of new credit growth is expanding, while a decreasing credit impulse indicates that the credit growth is slowing or contracting.

China's credit impulse is a closely watched leading indicator of economic activity, as credit growth is closely tied to investment and consumption, leading to higher demand for metals and other commodities. A falling credit impulse would warn of a slowdown, contraction, and lower demand for metals. Although the lead time for the credit impulse to affect the economy can vary, we use a 12-14 months rule of thumb for metals commodities. China accounts for roughly 50-60% of overall metals demand, and how it expands/slows credit creates a boom-bust effect.

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China is the biggest consumer of virtually every commodity and has an outsized pricing effect due to its binary approach to stimulus. While China's impact may change in the future due to growing metals demand in the energy transition and further deglobalization, China will dominate in the short term. In Figure 4, we plotted the China credit impulse 12 months forward. We then overlaid the copper price and the MSCI Global Metals and Mining Index to illustrate this lead indicator's usefulness over the past decade.

**Figure 4. China Credit Impulse, Copper Price and MSCI Global Metals and Mining Index (2014-2023)**



Source: Bloomberg. Data as of 2/06/2023. Included for illustrative purposes only. **Past performance is no guarantee of future results.**

## The Early Stages of an Energy Transition Materials Bull Market

China's credit impulse is not the only factor that affects metals prices. Many other factors can impact the supply and demand for metals, such as the overall global economy and geopolitical events. Although the demand growth rate for critical metals essential for the energy transition is expected to be high, these metals have other uses beyond the energy transition that are impacted by the economic cycle. In other words, the secular growth trend of critical metals can be amplified during a global cyclical economic upswing.

In the most recent case, China's reopening after ending its zero-COVID policy can add further demand on top of the secular and cyclical forces. The demand growth rate for critical metals for the energy transition (EVs, solar, nuclear, wind, etc.) is expected to increase over the next decade. However, the demand growth rate can vary depending on factors such as government policies, technological advancements, and geopolitics.

## Update on Critical Materials

Here we discuss some of the primary metals driving the global energy transition.

### Lithium: Exponential Demand

As shown in Figure 5, the price of lithium had a meteoric rise in 2021 and 2022 making it the best performing commodity over the period. Lithium is essential for the lithium-ion batteries used in electric vehicles (EVs) and consumer goods, representing most of the demand for this critical mineral. Over recent years, the growth in the EV industry has been exponential and drove

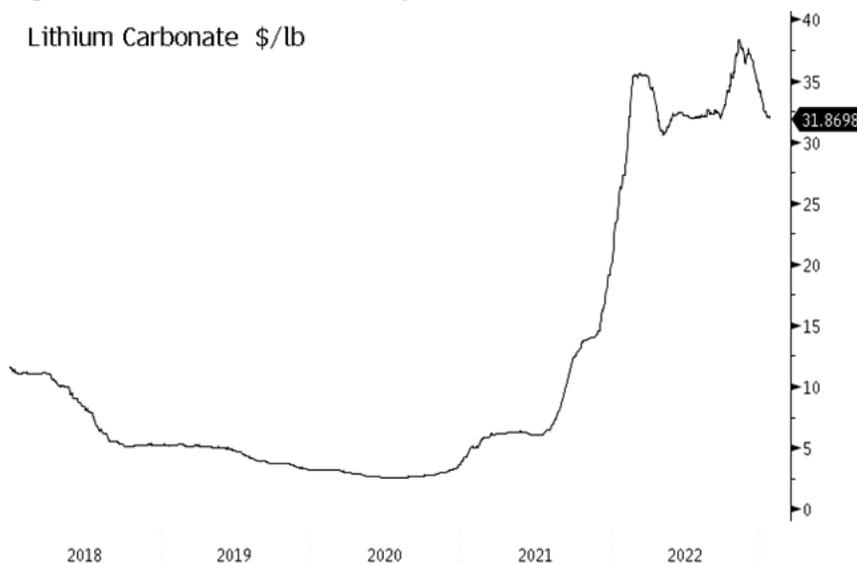
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the lithium market balance into a deficit. Lithium prices skyrocketed with no available substitutes, inadequate supply, and inelastic demand.

More recently, lithium prices have entered a consolidation range after nearly quintupling in price since mid-2021. Some softness in consumer spending has weighed on lithium demand in the short run. Forecasts for 2023 by investment banks and other price forecasters have also been mixed. Some estimate that the lithium market will be in surplus for 2023, while others cite supply challenges (i.e., longer lead times) that will result in a supply deficit. Nevertheless, lithium demand is expected to grow substantially in the long run to meet EV demand, and we believe supply is unlikely to keep up.

**Figure 5. Lithium Carbonate Spot Price (2018-2023)**



Source: Bloomberg. Data as of 1/31/2023. Included for illustrative purposes only. **Past performance is no guarantee of future results.**

## Uranium: New Bull Market in Development

As shown in Figure 6, the uranium bull market has continued its significant progression, excluding the volatility induced by the Russia-Ukraine war. This latest bull market has been defined by the global government's recognition of uranium's dual role in the energy transition and energy security. Renewable energy sources have seen considerable investments, but only recently has sentiment toward nuclear energy, and thereby uranium, significantly improved.

Nuclear energy has a very low full-cycle carbon footprint and is the most reliable baseload energy source. Renewable energy has much lower capacity factors than nuclear, and therefore nuclear energy has begun to see increased government attention with its ability to offset this intermittency. There has been an unprecedented number of announcements for nuclear power plant restarts, life extensions, and new builds, which are likely to create additional demand for uranium. Supply levels remain constrained given that western utilities are no longer contracting with Russian suppliers, inventory levels are reduced, and the current uranium price remains below incentive levels to restart tier 2 production.

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Figure 6. U3O8 Uranium Spot Price (2018-2023)



Source: Bloomberg. Data as of 1/31/2023. Included for illustrative purposes only. **Past performance is no guarantee of future results.**

## Copper: Positive Macro and Structural Demand

Copper has many uses in the global economy and is tied more closely to macroeconomic trends than other energy transition materials. Copper is cyclical and has benefitted from the reversal of the 2022 strong USD and the forecasted slowing of Fed interest rate hikes. China is by far the largest consumer of copper, and the reversal of its zero-COVID policy to full reopening has acted as a tailwind for the metal.

Looking ahead, increased demand for copper is expected to be fueled by the global energy transition. Copper is critical for conducting electricity in renewable energy sources, including wind and solar, but especially for electric vehicles and electricity grid investments. We believe that the additional demand expected from energy transition needs, a disruptable supply chain, low copper inventories, and declining ore grades may lead this market into a supply-demand deficit in the future.

Figure 7. Copper Spot Price (2018-2023)



Source: Bloomberg. Data as of 1/31/2023. Included for illustrative purposes only. **Past performance is no guarantee of future results.**

## Nickel: Prices Returning to Fundamentals

As shown in Figure 8, nickel has been in a significant uptrend in the past couple of years, excluding the volatility induced by the historic short squeeze on the London Metal Exchange's nickel market in March 2022. Currently, nickel's demand primarily comes from stainless steel. However, batteries are the most significant demand growth driver, given that nickel is a critical mineral for NMC cathodes. NMC refers to Lithium-Nickel-Manganese-Cobalt-Oxide (LiNiMnCoO<sub>2</sub>), the preferred cathode powder for electric batteries.

NMC cathodes are used for power tools, e-bikes, and other electric powertrains and are considered a superior option for automotive batteries. NCM cathodes have a higher energy density than alternatives, allowing more energy to be stored and the EV car to have a greater range. Supply is divided into Class I, which is of higher nickel content and can be used for batteries, and Class II nickel, which is mainly used for stainless steel. In January, an additional supply of Class I nickel was announced by a major private company's idle copper plants, and this slightly weighed on the nickel price. In the long run, we believe it is likely that the Class 1 nickel market will be in a deficit due to the significant demand from batteries and the transition to higher nickel content chemistries.

**Figure 8. Nickel Spot Price** (2018-2023)



Source: Bloomberg. Data as of 1/31/2023. Included for illustrative purposes only. **Past performance is no guarantee of future results.**

## A New Supercycle for Commodities

We believe the post-pandemic era marks the beginning of a new supercycle for commodities, especially for critical minerals driving the clean energy transition. Investment opportunities presented by the clean energy transition will likely center around the critical minerals vital to powering the planet through low-carbon energy sources and revolutionizing the transportation sector through the electrification of the world's vehicle fleet.

Escalating geopolitical tension and the need for governments to re-shore supply chains and production to ensure industrial security have helped to accelerate the transition, which will be commodity- and capital-intensive. We foresee a demand shock for commodities, particularly critical materials.

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## Critical Materials: Performance as of January 31, 2023

Metric	1/31/2023	12/31/2022	Change	Mo % Chg	YTD % Chg	Analysis
<b>Miners</b>						
Nasdaq Sprott Energy Transition Materials™ Index <sup>4</sup>	1,097.37	933.88	163.49	17.51%	17.51%	Bullish breakout; see Figure 1
Nasdaq Sprott Lithium Miners™ <sup>5</sup>	1,168.25	922.32	245.93	26.66%	26.66%	Sharply recovered ~75% of 2022's drop
North Shore Global Uranium Mining Index <sup>6</sup>	2,782.73	2,426.89	355.84	14.66%	14.66%	Long consolidation range
Solactive Global Copper Miners Index <sup>7</sup>	150.90	130.30	20.60	15.81%	15.81%	Squeeze up, ~6.5% off highs
Nasdaq Sprott Nickel Miners™ Index <sup>8</sup>	980.48	910.04	70.44	7.74%	7.74%	Testing recent highs
Nasdaq Sprott Junior Copper Miners™ Index <sup>9</sup>	996.65	858.37	138.27	16.11%	16.11%	Sharp rebound from very oversold
Nasdaq Sprott Junior Uranium Miners™ Index <sup>10</sup>	1,191.26	1,026.38	164.88	16.06%	16.06%	Still consolidating with long-term gains
<b>Physical Materials</b>						
Lithium Carbonate Spot Price \$/lb <sup>11</sup>	31.86	34.16	-2.30	-6.72%	-6.72%	Sideways after exponential gains
U3O8 Uranium Spot Price \$/lb <sup>12</sup>	50.75	48.31	2.44	5.05%	5.05%	Bull market progresses, back above \$50
LME Copper Spot Price \$/lb <sup>13</sup>	4.17	3.79	0.38	9.98%	9.98%	Rally back to above \$4 resistance
LME Nickel Spot Price \$/lb <sup>14</sup>	13.68	13.56	0.12	0.89%	0.89%	Preparing to break above recent highs
<b>Benchmarks</b>						
S&P 500 Index <sup>15</sup>	4,076.60	3,839.50	237.10	6.18%	6.18%	Breaking out from year-long downtrend
DXY US Dollar Index <sup>16</sup>	102.10	103.52	-1.43	-1.38%	-1.38%	Largest 3 mo drop since 2009
BBG Commodity Index <sup>17</sup>	111.80	112.81	-1.01	-0.89%	-0.89%	Narrow consolidation range since Aug
S&P Metals & Mining Select Industry Index <sup>18</sup>	2,925.48	2,551.55	373.93	14.66%	14.66%	Bull flag consolidation breakout

Source: Bloomberg and Sprott Asset Management LP. Data as of January 31, 2023. **For the Fund's standardized performance please see pages 10-14.**

**Past performance is no guarantee of future results.**

\*Mo % Chg and YTD % Chg for this Index are calculated as the difference between the month end's yield and the previous period end's yield, instead of the percentage change.

<sup>4</sup> The Nasdaq Sprott Energy Transition Materials™ Index (NSETM™) is designed to track the performance of a selection of global securities in the energy transition materials industry, and was co-developed by Nasdaq® and Sprott Asset Management LP.

<sup>5</sup> The Nasdaq Sprott Lithium Miners™ Index (NSLITP™) is designed to track the performance of a selection of global securities in the lithium industry, including lithium producers, developers and explorers; the Index was co-developed by Nasdaq® and Sprott Asset Management LP.

<sup>6</sup> The North Shore Global Uranium Mining Index (URNMX) is designed to track the performance of companies that devote at least 50% of their assets to the uranium mining industry, which may include mining, exploration, development and production of uranium, or holding physical uranium, owning uranium royalties or engaging in other non-mining activities that support the uranium mining industry.

<sup>7</sup> The Solactive Global Copper Miners Index includes international companies active in exploration, mining and/or refining of copper. The index includes a minimum of 20 and a maximum of 40 members. The calculation is done in USD as a total return index. Index adjustments are carried out semi-annually.

<sup>8</sup> Nasdaq Sprott Nickel Miners™ Index (NSNIKL™) is designed to track the performance of a selection of global securities in the nickel industry.

<sup>9</sup> Nasdaq Sprott Junior Copper Miners Index

<sup>10</sup> Nasdaq Sprott Junior Uranium Miners Index

<sup>11</sup> The lithium carbonate spot price is measured by the China Lithium Carbonate 99.5% DEL. Source Bloomberg and Asian Metal Inc. Ticker L4CNMJGO AMTL Index. Data converted to pounds and to USD with Bloomberg FX Rates.

<sup>12</sup> The U3O8 uranium spot price is measured by a proprietary composite of U3O8 spot prices from UxC, S&P Platts and Numerco.

<sup>13</sup> The copper spot price is measured by the LME Copper Cash (\$). Source Bloomberg ticker LMCADY. Data converted to pounds.

<sup>14</sup> The nickel spot price is measured by the LME Nickel Cash (\$). Source Bloomberg ticker LMNIDY. Data converted to pounds.

<sup>15</sup> The S&P 500 or Standard & Poor's 500 Total Return Index is a market-capitalization-weighted index of the 500 largest U.S. publicly traded companies.

<sup>16</sup> The U.S. Dollar Index (USDY, DXY) is an index of the value of the U.S. dollar relative to a basket of foreign currencies.

<sup>17</sup> The Bloomberg Commodity Index (BCOM) is a broadly diversified commodity price index that tracks prices of futures contracts on physical commodities, and is designed to minimize concentration in any one commodity or sector. It currently has 23 commodity futures in six sectors.

<sup>18</sup> The S&P Metals & Mining Select Industry Index comprises stocks in the S&P Total Market Index that are classified in the GICS metals & mining sub-industry.



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## Sprott Energy Transition Materials ETF (Nasdaq: SETM)

**Sprott Energy Transition Materials ETF (Nasdaq: SETM)** is the only<sup>^</sup> ETF to provide pure-play<sup>^^</sup> exposure to a broad range of critical minerals and mining equities essential to the transition to cleaner energy. These critical minerals, metals and raw materials include uranium, copper, lithium, nickel, cobalt, graphite, manganese, rare earths and silver. SETM seeks to provide investment results that, before fees and expenses, correspond generally to the total return performance of the Nasdaq Sprott Energy Transition Materials™ Index (NSETM™). The Index is designed to track the performance of a selection of global securities in the energy transition materials industry.

<sup>^</sup> Based on Morningstar's universe of Natural Resources Sector Equity ETFs as of 02/01/2023.

<sup>^^</sup> The term "pure-play" relates directly to the exposure that the Fund has to the total universe of investable, publicly listed securities in the investment strategy.

### Key Points:

- 1. Pure-Play Critical Minerals ETF** – Provides pure-play access to a range of critical minerals necessary for the global clean energy transition
- 2. Increased Investment Driving Growth** – Government net-zero or reduced emissions mandates lead to increased investment. Globally, \$1.11T was invested in the energy transition sector in 2022<sup>†</sup>
- 3. Substantial Investment for the Foreseeable Future** – To meet net-zero targets, global investment may need to accelerate to a yearly average of \$3.9T from 2023 to 2030<sup>†</sup>
- 4. Well-Positioned Companies** – Companies that are upstream in the supply chain may be well-positioned to benefit from the increased investment in the critical minerals necessary for the clean energy transition

<sup>†</sup> Source: Energy Transition Investment Trends 2023, BloombergNEF.

### Performance: Average Annual Total Returns\* (%)

MONTH END – DATA NOT YET AVAILABLE	1 MO	S.I. <sup>1</sup>
Sprott Energy Transition Materials ETF (Net Asset Value)	–	–
Sprott Energy Transition Materials ETF (Market Price) <sup>2</sup>	–	–
Nasdaq Sprott Energy Transition Materials™ Index (Benchmark) <sup>3</sup>	–	–
QUARTER END – DATA NOT YET AVAILABLE	1 MO	S.I. <sup>1</sup>
Sprott Energy Transition Materials ETF (Net Asset Value)	–	–
Sprott Energy Transition Materials ETF (Market Price) <sup>2</sup>	–	–
Nasdaq Sprott Energy Transition Materials™ Index (Benchmark) <sup>3</sup>	–	–

### Fees and Expenses (%) as of the most recent prospectus<sup>4</sup>

Management Fee	0.65
Other Expenses	0.00
<b>Total Annual Fund Operating Expenses</b>	<b>0.65</b>

Performance data quoted represents past performance. Past performance does not guarantee future results. Current performance may be higher or lower than actual data quoted. Call 1.888.622.1813 or visit [www.sprottetsf.com](http://www.sprottetsf.com) for current month end performance. The investment return and principal value of an investment will fluctuate so that an investor's shares, when redeemed, may be worth more or less than their original cost.

\* Returns less than one year are not annualized.

<sup>1</sup> Inception Date: 2/1/2023.

<sup>2</sup> Market Price is based on the midpoint of the bid/ask spread at 4 p.m. ET and does not represent the returns an investor would receive if shares were traded at other times.

<sup>3</sup> The Nasdaq Sprott Energy Transition Materials™ Index (NSETM™) was co-developed by Nasdaq® (the "Index Provider") and Sprott Asset Management LP (the "Adviser"). The Index Provider and Adviser co-developed the methodology for determining the securities to be included in the Index and the Index Provider is responsible for the ongoing maintenance of the Index. The Adviser will provide certain services in connection with the Index including contributing inputs in connection with the eligibility and process to determine the initial selection and ongoing composition of the Index constituents.

<sup>4</sup> Reflects Total Annual Operating Expenses as outlined in the prospectus dated January 31, 2023. For the services the Adviser (Sprott Asset Management LP) provides to the Fund, the Adviser is entitled to receive an annual advisory fee from the Fund calculated daily and paid monthly at an annual rate of 0.65% on assets.



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## Sprott Lithium Miners ETF (Nasdaq: LITP)

**Sprott Lithium Miners ETF (Nasdaq: LITP)** is the only<sup>^</sup> ETF to provide pure-play<sup>^^</sup> exposure to the lithium miners that provide a critical mineral for the batteries that store clean energy and support the electric vehicle revolution. LITP seeks to provide investment results that, before fees and expenses, correspond generally to the total return performance of the Nasdaq Sprott Lithium Miners™ Index (NSLITP™). The Index is designed to track the performance of a selection of global securities in the lithium industry, including lithium producers, developers and explorers.

<sup>^</sup> Based on Morningstar's universe of Natural Resources Sector Equity ETFs as of 02/01/2023.

<sup>^^</sup> The term "pure-play" relates directly to the exposure that the Fund has to the total universe of investable, publicly listed securities in the investment strategy.

### Key Points:

- 1. Pure-Play Lithium ETF** – The only pure-play U.S.-listed ETF focused on lithium mining companies that are providing a critical mineral necessary for the clean energy transition
- 2. Essential to Electric Vehicles** – Lithium is a vital component in the rechargeable batteries used for hybrid and electric vehicles (EVs) and clean energy storage
- 3. Growing Demand** – Electric vehicles are the largest consumer of lithium, and demand for this critical mineral may increase more than 40 times by 2040 relative to 2020<sup>†</sup>
- 4. Well-Positioned Companies** – Companies that are upstream in the supply chain may be well-positioned to benefit from the increased investment in lithium necessary for the clean energy transition

<sup>†</sup> Source: "The Role of Critical Minerals in Clean Energy Transitions," International Energy Agency (IEA), May 2021.

### Performance: Average Annual Total Returns\* (%)

MONTH END – DATA NOT YET AVAILABLE	1 MO	S.I. <sup>1</sup>
Sprott Lithium Miners ETF (Net Asset Value)	–	–
Sprott Lithium Miners ETF (Market Price) <sup>2</sup>	–	–
Nasdaq Sprott Lithium Miners™ Index (Benchmark) <sup>3</sup>	–	–
QUARTER END – DATA NOT YET AVAILABLE	1 MO	S.I. <sup>1</sup>
Sprott Lithium Miners ETF (Net Asset Value)	–	–
Sprott Lithium Miners ETF (Market Price) <sup>2</sup>	–	–
Nasdaq Sprott Lithium Miners™ Index (Benchmark) <sup>3</sup>	–	–

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Other Expenses	0.00
<b>Total Annual Fund Operating Expenses</b>	<b>0.65</b>

Performance data quoted represents past performance. Past performance does not guarantee future results. Current performance may be higher or lower than actual data quoted. Call 1.888.622.1813 or visit [www.sprottets.com](http://www.sprottets.com) for current month end performance. The investment return and principal value of an investment will fluctuate so that an investor's shares, when redeemed, may be worth more or less than their original cost.

\* Returns less than one year are not annualized.

<sup>1</sup> Inception Date: 2/1/2023.

<sup>2</sup> Market Price is based on the midpoint of the bid/ask spread at 4 p.m. ET and does not represent the returns an investor would receive if shares were traded at other times.

<sup>3</sup> The Nasdaq Sprott Lithium Miners™ Index (NSLITP™) was co-developed by Nasdaq® (the "Index Provider") and Sprott Asset Management LP (the "Adviser"). The Index Provider and Adviser co-developed the methodology for determining the securities to be included in the Index and the Index Provider is responsible for the ongoing maintenance of the Index. The Adviser will provide certain services in connection with the Index including contributing inputs in connection with the eligibility and process to determine the initial selection and ongoing composition of the Index constituents.

<sup>4</sup> Reflects Total Annual Operating Expenses as outlined in the prospectus dated January 31, 2023. For the services the Adviser (Sprott Asset Management LP) provides to the Fund, the Adviser is entitled to receive an annual advisory fee from the Fund calculated daily and paid monthly at an annual rate of 0.65% on assets.



# Energy Transition Materials Monthly

February 16, 2023

## Sprott Uranium Miners ETF (NYSE Arca: URNM)

**Sprott Uranium Miners ETF (NYSE Arca: URNM)** is the only<sup>^</sup> ETF to provide pure-play<sup>^^</sup> exposure to uranium miners and physical uranium essential to nuclear power. URNM seeks to invest at least 80% of its total assets in securities of the North Shore Global Uranium Mining Index (URNMX). The Index is designed to track the performance of companies that devote at least 50% of their assets to the uranium mining industry, which may include mining, exploration, development and production of uranium, or holding physical uranium, owning uranium royalties or engaging in other non-mining activities that support the uranium mining industry.

<sup>^</sup> Based on Morningstar's universe of Natural Resources Sector Equity ETFs as of 1/31/2023.

<sup>^^</sup> The term "pure-play" relates directly to the exposure that the Fund has to the total universe of investable, publicly listed securities in the investment strategy.

### Key Points:

- 1. Pure-Play Uranium ETF** – A U.S.-listed uranium ETF focused on uranium miners and physical uranium
- 2. Uranium Bull Market** – A new uranium bull market is likely underway, incentivizing miners and providing opportunities to investors
- 3. Critical Mineral in Clean Energy Transition** – Uranium and nuclear energy are critical to the clean energy transition
- 4. Supporting Energy Security** – Uranium and nuclear energy may help countries achieve a reliable and affordable source of electricity

### Performance: Average Annual Total Returns\* (%)

<b>MONTH END AS OF 1/31/2023</b>	<b>1 MO</b>	<b>3 MO</b>	<b>YTD</b>	<b>1 YR</b>	<b>3 YR</b>	<b>S.I.<sup>1</sup></b>
Sprott Uranium Miners ETF (Net Asset Value)	14.77	8.35	14.77	13.43	50.22	44.28
Sprott Uranium Miners ETF (Market Price) <sup>2</sup>	15.19	8.89	15.19	13.12	50.37	44.41
North Shore Global Uranium Mining Index (Benchmark) <sup>3</sup>	14.65	8.53	14.65	14.09	51.35	45.50
<b>QUARTER END AS OF 12/31/2022</b>	<b>1 MO</b>	<b>3 MO</b>	<b>YTD</b>	<b>1 YR</b>	<b>3 YR</b>	<b>S.I.<sup>1</sup></b>
Sprott Uranium Miners ETF (Net Asset Value)	-5.48	-2.46	-12.03	-12.03	38.64	39.36
Sprott Uranium Miners ETF (Market Price) <sup>2</sup>	-6.56	-2.59	-11.88	-11.88	38.40	39.34
North Shore Global Uranium Mining Index (Benchmark) <sup>3</sup>	-4.87	-2.44	-11.42	-11.42	39.85	40.62

### Fees and Expenses (%) as of the most recent prospectus<sup>4</sup>

Management Fee	0.85
Other Expenses	0.00
<b>Total Annual Fund Operating Expenses</b>	<b>0.85</b>

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\* Returns less than one year are not annualized.

<sup>1</sup> Inception Date: 12/3/2019. URNM was reorganized from the North Shore Global Uranium Mining ETF into the Sprott Uranium Miners ETF on 4/22/2022. URNM is a continuation of the prior ETF and, therefore, the performance information shown includes the prior ETF's performance.

<sup>2</sup> Market Price is based on the midpoint of the bid/ask spread at 4 p.m. ET and does not represent the returns an investor would receive if shares were traded at other times.

<sup>3</sup> The North Shore Global Uranium Mining Index (URNMX) was created by North Shore Indices, Inc. (the "Index Provider"). The Index Provider developed the methodology for determining the securities to be included in the Index and is responsible for ongoing maintenance of the Index. The Index is calculated by Indxx, LLC, which is not affiliated with the North Shore Global Uranium Miners Fund ("Existing Fund"), ALPS Advisors, Inc. (the "Sub-Adviser") or Sprott Asset Management LP (the "Adviser").

<sup>4</sup> Reflects Total Annual Operating Expenses as outlined in the prospectus dated December 29, 2022. For the services the Adviser (Sprott Asset Management LP) provides to the Fund, the Adviser is entitled to receive an annual advisory fee from the Fund calculated daily and paid monthly at an annual rate of 0.85% on up to \$500 million in assets, 0.80% on the next \$500 million in assets, and 0.70% on assets greater than \$1 billion.



# Energy Transition Materials Monthly

February 16, 2023

## Sprott Junior Uranium Miners ETF (Nasdaq: URNJ)

**Sprott Junior Uranium Miners ETF (Nasdaq: URNJ)** is the only<sup>^</sup> ETF to provide pure-play<sup>^^</sup> exposure to small, exploration- and development-stage uranium miners with the potential for revenue and asset growth. URNJ seeks to provide investment results that, before fees and expenses, correspond generally to the total return performance of the Nasdaq Sprott Junior Uranium Miners™ Index (NSURNJ™), which is designed to track the performance of mid-, small- and micro-cap companies in uranium mining-related businesses.

<sup>^</sup> Based on Morningstar's universe of Natural Resources Sector Equity ETFs as of 02/01/2023.

<sup>^^</sup> The term "pure-play" relates directly to the exposure that the Fund has to the total universe of investable, publicly listed securities in the investment strategy.

### Key Points:

- 1. Pure-Play Junior Uranium ETF** – The only pure-play ETF focused on small uranium miners, selected for their potential for significant revenue and asset growth
- 2. Uranium Bull Market** – A new uranium bull market is likely underway, incentivizing miners to explore and develop new uranium mines
- 3. Critical Mineral in Clean Energy Transition** – Uranium and nuclear energy are critical to the clean-energy transition
- 4. Supporting Energy Security** – Uranium and nuclear energy provide reliable, affordable electricity that may help countries achieve energy security

### Performance: Average Annual Total Returns\* (%)

#### MONTH END – DATA NOT YET AVAILABLE

	1 MO	S.I. <sup>1</sup>
Sprott Junior Uranium Miners ETF (Net Asset Value)	–	–
Sprott Junior Uranium Miners ETF (Market Price) <sup>2</sup>	–	–
Nasdaq Sprott Junior Uranium Miners™ Index (Benchmark) <sup>3</sup>	–	–

#### QUARTER END – DATA NOT YET AVAILABLE

	1 MO	S.I. <sup>1</sup>
Sprott Junior Uranium Miners ETF (Net Asset Value)	–	–
Sprott Junior Uranium Miners ETF (Market Price) <sup>2</sup>	–	–
Nasdaq Sprott Junior Uranium Miners™ Index (Benchmark) <sup>3</sup>	–	–

### Fees and Expenses (%) as of the most recent prospectus<sup>4</sup>

Management Fee	0.80
Other Expenses	0.00
<b>Total Annual Fund Operating Expenses</b>	<b>0.80</b>

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\* Returns less than one year are not annualized.

<sup>1</sup> Inception Date: 2/1/2023.

<sup>2</sup> Market Price is based on the midpoint of the bid/ask spread at 4 p.m. ET and does not represent the returns an investor would receive if shares were traded at other times.

<sup>3</sup> The Nasdaq Sprott Junior Uranium Miners™ Index (NSURNJ™) was co-developed by Nasdaq® (the "Index Provider") and Sprott Asset Management LP (the "Adviser"). The Index Provider and Adviser co-developed the methodology for determining the securities to be included in the Index and the Index Provider is responsible for the ongoing maintenance of the Index. The Adviser will provide certain services in connection with the Index including contributing inputs in connection with the eligibility and process to determine the initial selection and ongoing composition of the Index constituents.

<sup>4</sup> Reflects Total Annual Operating Expenses as outlined in the prospectus dated January 31, 2023. For the services the Adviser (Sprott Asset Management LP) provides to the Fund, the Adviser is entitled to receive an annual advisory fee from the Fund calculated daily and paid monthly at an annual rate of 0.80% on assets.



# Energy Transition Materials Monthly

February 16, 2023

## Sprott Junior Copper Miners ETF (Nasdaq: COPJ)

**Sprott Junior Copper Miners ETF (Nasdaq: COPJ)** is the only<sup>^</sup> ETF to provide pure-play<sup>^^</sup> exposure to small, exploration- and development-stage copper miners with the potential for revenue and asset growth. COPJ seeks to provide investment results that, before fees and expenses, correspond generally to the total return performance of the Nasdaq Sprott Junior Copper Miners™ Index (NSCOPJ™), which is designed to track the performance of mid-, small- and micro-cap companies in copper mining-related businesses.

<sup>^</sup> Based on Morningstar's universe of Natural Resources Sector Equity ETFs as of 02/01/2023.

<sup>^^</sup> The term "pure-play" relates directly to the exposure that the Fund has to the total universe of investable, publicly listed securities in the investment strategy.

### Key Points:

- 1. Pure-Play Junior Copper ETF** – The only pure-play ETF focused on small copper miners, selected for their potential for significant revenue and asset growth
- 2. Essential to Electric Vehicles, Wind and Solar Plants** – Essential to energy transmission, copper is a critical mineral across clean energy generation sources and in electric vehicles
- 3. Growing Demand** – To meet net-zero carbon emissions targets, demand for this critical mineral may increase 58% by 2040, relative to 2022<sup>†</sup>
- 4. Well-Positioned Companies** – Companies that are upstream in the supply chain may be well-positioned to benefit from the increased investment in copper necessary for the clean energy transition

<sup>†</sup> Source: BloombergNEF Global Copper Outlook, 2022.

### Performance: Average Annual Total Returns\* (%)

MONTH END – DATA NOT YET AVAILABLE	1 MO	S.I. <sup>1</sup>
Sprott Junior Copper Miners ETF (Net Asset Value)	–	–
Sprott Junior Copper Miners ETF (Market Price) <sup>2</sup>	–	–
Nasdaq Sprott Junior Copper Miners™ Index (Benchmark) <sup>3</sup>	–	–
QUARTER END – DATA NOT YET AVAILABLE	1 MO	S.I. <sup>1</sup>
Sprott Junior Copper Miners ETF (Net Asset Value)	–	–
Sprott Junior Copper Miners ETF (Market Price) <sup>2</sup>	–	–
Nasdaq Sprott Junior Copper Miners™ Index (Benchmark) <sup>3</sup>	–	–

### Fees and Expenses (%) as of the most recent prospectus<sup>4</sup>

Management Fee	0.75
Other Expenses	0.00
<b>Total Annual Fund Operating Expenses</b>	<b>0.75</b>

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\* Returns less than one year are not annualized.

<sup>1</sup> Inception Date: 2/1/2023.

<sup>2</sup> Market Price is based on the midpoint of the bid/ask spread at 4 p.m. ET and does not represent the returns an investor would receive if shares were traded at other times.

<sup>3</sup> The Nasdaq Sprott Junior Copper Miners™ Index (NSCOPJ™) was co-developed by Nasdaq® (the "Index Provider") and Sprott Asset Management LP (the "Adviser"). The Index Provider and Adviser co-developed the methodology for determining the securities to be included in the Index and the Index Provider is responsible for the ongoing maintenance of the Index. The Adviser will provide certain services in connection with the Index including contributing inputs in connection with the eligibility and process to determine the initial selection and ongoing composition of the Index constituents.

<sup>4</sup> Reflects Total Annual Operating Expenses as outlined in the prospectus dated January 31, 2023. For the services the Adviser (Sprott Asset Management LP) provides to the Fund, the Adviser is entitled to receive an annual advisory fee from the Fund calculated daily and paid monthly at an annual rate of 0.75% on assets.

# Energy Transition Materials Monthly

February 16, 2023

**About Sprott** – Sprott is a global leader in precious metal and energy transition investments. We are specialists. Our in-depth knowledge, experience and relationships separate us from the generalists. Our investment strategies include Exchange Listed Products, Managed Equities and Private Strategies. Sprott has offices in Toronto, New York and London and the company's common shares are listed on the New York Stock Exchange and the Toronto Stock Exchange under the symbol "SII". For more information, please visit [www.sprott.com](http://www.sprott.com).

# Sprott

## IMPORTANT DISCLOSURES & DEFINITIONS

The Sprott Funds Trust is made up of the following ETFs ("Funds"): Sprott Gold Miners ETF (SGDM), Sprott Junior Gold Miners ETF (SGDJ), Sprott Energy Transition Materials ETF (SETM), Sprott Lithium Miners ETF (LITP), Sprott Uranium Miners ETF (URNM), Sprott Junior Uranium Miners ETF (URNJ) and Sprott Junior Copper Miners ETF (COPJ). Before investing, you should consider each Fund's investment objectives, risks, charges and expenses. Each Fund's prospectus contains this and other information about the Fund and should be read carefully before investing.

This material must be preceded or accompanied by a prospectus. A prospectus can be obtained by calling 888.622.1813 or by visiting: Sprott Gold Miners ETF Prospectus – <https://sprottetfs.com/media/2303/sprott-etfs-stat-prospectus.pdf>, Sprott Junior Gold Miners ETF Prospectus – <https://sprottetfs.com/media/2303/sprott-etfs-stat-prospectus.pdf>, Sprott Energy Transition Materials ETF Prospectus – <https://www.sprottetfs.com/media/5998/setm-prospectus.pdf>, Sprott Lithium Miners ETF Prospectus – <https://www.sprottetfs.com/media/5997/litp-prospectus.pdf>, Sprott Uranium Miners ETF Prospectus – <https://sprottetfs.com/media/5167/urnm-prospectus.pdf>, Sprott Junior Uranium Miners ETF Prospectus – <https://www.sprottetfs.com/media/5999/urnj-prospectus.pdf> and Sprott Junior Copper Miners ETF Prospectus – <https://www.sprottetfs.com/media/5996/copj-prospectus.pdf>.

The Funds are not suitable for all investors. There are risks involved with investing in ETFs, including the loss of money. The Funds are non-diversified and can invest a greater portion of assets in securities of individual issuers than a diversified fund. As a result, changes in the market value of a single investment could cause greater fluctuations in share price than would occur in a diversified fund.

Exchange Traded Funds (ETFs) are bought and sold through exchange trading at market price (not NAV) and are not individually redeemed from the Fund. Shares may trade at a premium or discount to their NAV in the secondary market. Brokerage commissions will reduce returns. "Authorized participants" may trade directly with the Fund, typically in blocks of 10,000 shares.

Funds that emphasize investments in small/mid-cap companies will generally experience greater price volatility. Diversification does not eliminate the risk of experiencing investment losses. ETFs are considered to have continuous liquidity because they allow for an individual to trade throughout the day. A higher portfolio turnover rate may indicate higher transaction costs and may result in higher taxes when Fund shares are held in a taxable account. These costs, which are not reflected in annual fund operating expenses, affect the Fund's performance.

ALPS Distributors, Inc. is the Distributor for the Sprott Funds Trust and is a registered broker-dealer and FINRA Member. Sprott Asset Management LP is the investment advisor to the Sprott ETFs.

ALPS Distributors, Inc. is not affiliated with Sprott Asset Management LP.

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