Harbor Energy Transition Strategy ETF

Quantix Commodities LP

Subadvisor Since 07/13/2022

Investment Philosophy

The Harbor Energy Transition Strategy ETF seeks to provide investment results that closely correspond, before fees and expenses, to the performance of the Quantix Energy Transition Index (the "index"). The Quantix Energy Transition Index ("QET") was designed with the objective of providing diversified exposure to the building blocks of the accelerating transition from carbon-intensive energy sources to less carbon-intensive sources of energy using commodity futures.

Commodity futures that provide exposure to the energy transition theme are considered component candidates for inclusion in the Index. Examples include copper, aluminum, nickel, zinc, lead, natural gas, silver, palladium, platinum, soybean oil, ethanol, emissions – European Union Allowances (EUA), and emissions – California Carbon Allowances (CCA).

The selection of commodities is subject to annual review by the Index Review Committee of Quantix Commodities Indices (the "Index Review Committee"). The Index Review Committee determines annually whether the commodity futures that meet certain criteria will be included in the index for the following year, and upon that determination will weight them by liquidity and open interest with a monthly rebalancing.

Portfolio Managers

Matthew Schwab

Ticker: RENW
CUSIP: 41151J802
Net Expense Ratio: 0.80%
Gross Expense Ratio: 0.80%
Total Net Assets: $26,348,309
Benchmark Name: Quantix Energy Transition Index

WEIGHTS & PERFORMANCE

As of 06/30/2023

Commodity Sector Weights

Commodity Sector	Commodity	Ticker	Facility	Daily Weight %
Emissions	EU Emission Allowance	MOZ23	ICE	15.45
Natural Gas	Dutch Natural Gas	TZTQ3	ICE	12.58
Industrial	Aluminum	LAX23	LME	11.19
Natural Gas	Natural Gas	NGX23	CME	9.82
Ethanol and Soybean Oil	Bean Oil	BOZ3	CME	8.35
Industrial	Comex Copper	HGZ3	CME	7.81
Industrial	Nickel	LNX3	LME	6.80
Natural Gas	UK Natural Gas	FNQ3	ICE	6.21
Precious	Silver	SIZ3	CME	6.18
Industrial	Zinc	LXX3	LME	4.49
Emissions	California Carbon Allowance	LUDZ23	ICE	2.40
Industrial	Lead	LLU3	LME	2.32
Ethanol and Soybean Oil	Ethanol	CUAQ3	CME	2.29
Precious	Platinum	PLV3	CME	2.06
Precious	Palladium	PAU3	CME	2.05

Average Annual Returns

	3 Months	YTD	1 Yr.	3 Yr.	5 Yr.	10 Yr.	Since Inception	Inception Date
Harbor Energy Transition Strategy ETF (NAV)	-8.07%	-16.93%	N/A	N/A	N/A	N/A	-21.97%	07/13/22
Harbor Energy Transition Strategy ETF (Market)	-7.41%	-18.90%	N/A	N/A	N/A	N/A	-22.04%	07/13/22
Quantix Energy Transition Total Return Index	-7.12%	-15.53%	N/A	N/A	N/A	N/A	-19.46%	07/13/22
Bloomberg Commodity Index Total Return(SM)	-2.56%	-7.79%	N/A	N/A	N/A	N/A	-6.98%	07/13/22

Performance data shown represents past performance and is no guarantee of future results. Past performance is net of management fees and expenses and reflects reinvested dividends and distributions. Past performance reflects the beneficial effect of any expense waivers or reimbursements, without which returns would have been lower. Investment returns and principal value will fluctuate and when redeemed may be worth more or less than their original cost. Returns for periods less than one year are not annualized. Current performance may be higher or lower and is available through the most recent month end at harborcapital.com or by calling 800-422-1050.

Shares are bought and sold at market price not net asset value (NAV). A fund's NAV is the sum of all its assets less any liabilities, divided by the number of shares outstanding. Market price returns are based upon the closing composite market price and do not represent the returns you would receive if you traded shares at other times.

"Quantix believes that the long-term investment thesis for the energy transition remains intact. As of June 2023, over 92% of global GDP is committed to an energy transition that will include a massive expansion of renewables over the next 30 years."
Quantix Commodities

Market in Review

Much like the first quarter of 2023, the macroeconomic environment was challenging for commodity markets during the second quarter of 2023. The U.S. Federal Reserve ("Fed") continued to demonstrate concern about high inflation in the U.S., even as it appeared to moderate from its recent peak at the end of 2022. Continued rate hikes in the U.S. were mirrored by central banks around the world.

The uncertain monetary policy backdrop in the U.S. was compounded in May by the debate over whether U.S. politicians would raise the debt ceiling. This debate intensified throughout the month, causing large swings in fixed-income markets. While it was ultimately resolved before the U.S. Treasury had to take any extraordinary actions, this shook investor confidence.

Global events also affected commodity markets during the second quarter. Many market participants had been anticipating an increase in commodity demand in 2023, driven by China reopening its economy after years of COVID-19-related restrictions. However, this period has been more about a social reopening than true economic expansion, as services and transportation fuel demand has increased, but manufacturing has struggled. In response, China has recently announced pro-growth measures, such as infrastructure spending, in an attempt to stimulate the economy.

Another common view at the beginning of the year was for crude oil prices to rally as inventories drew down. This has also disappointed the commodity bulls, as prices have remained range-bound for most of the first half of 2023. This is partly due to timing; even the most vocal bulls were only expecting drawdowns to start in the second half of the year but had positioned for it earlier. This is also partly due to greater-than-anticipated Russian supply and sanctions that were expected to create supply shortages failing to materialize, as alternative supply routes were quick to emerge. For example, both Chinese and Indian refiners were quick to transition to Russian crude oil.

These global forces led investors to reduce positioning in commodity markets to historically low levels. Various bank estimates put managed money in commodity indexes at a new low going back to the early 2000s, and yet other estimates put commodity investment now nearly 25% less than at the same time in 2022.

Portfolio Performance

During the quarter, the Harbor Energy Transition Strategy ETF ("ETF") returned -8.07% (NAV), underperforming its benchmark, the Quantix Energy Transition Total Return Index return of -7.12%, and the Bloomberg Commodity Index return of -2.56%.

The two largest sector weights, Base Metals and Natural Gas, were the primary detractors from performance. Base Metals detracted based on global growth concerns and disappointment over China's economic growth. The Natural Gas sector also continued the declines from the first quarter, amid the globally warm winter. With no signs of production cuts, focus during the second quarter turned to oversupply and potentially not having enough storage in the summer months, rather than the previous focus on potentially running out of gas during the winter.

The Precious Metals and Emissions sectors modestly detracted from performance, while the Grains sector contributed positively during the quarter.

Contributors & Detractors

On a commodity sector basis, the Base Metals and Natural Gas sectors detracted from ETF performance.

On an individual basis, the biggest detractors in Base Metals were Aluminum, Nickel, and Zinc, as the whole sector was down on disappointment over China's economic growth. Prices for several of these metals have dipped to points in the cost curve that have traditionally provided strong support.

In the Natural Gas sector, European Natural Gas (TTF) and U.K. Natural Gas (NBP) were the biggest detractors amid concerns there may not be enough storage in the summer months. This is in sharp contrast to the fears just a few months ago about not having enough supply to meet demand — and also looking ahead to next winter, when a cold winter could potentially once again mean significant shortages of this commodity.

The largest individual contributor was Soybean Oil, followed by California Carbon Emissions (CCAs).

Buys & Sells

There were no positions added or sold during the quarter.

Outlook

Quantix believes that the long-term investment thesis for the energy transition remains intact. As of June 2023, over 92% of global GDP is committed to an energy transition that will include a massive expansion of renewables over the next 30 years, according to Net Zero Tracker. This will require commodities that the world simply will not have at current production levels, and the availability of those materials does not seem to have been factored into any commitments, including those enshrined in law.

Many market participants have been disappointed by the performance of commodity markets during the first half of 2023. Along with the tightening monetary policy from the Fed and disappointing economic growth in China, anticipated fundamental tightness in the crude oil market has not yet materialized. Together, these catalysts have produced a lackluster market performance with commodity market participants reducing their overall positioning.

However, as we enter the second half of the year, prices are lower, and positioning is lighter. Some bank estimates put commodity investment nearly 25% lower than at this point in 2022, and yet others point to the lowest level of investment in commodity indexes since the early 2000s.

The combination of this light positioning and fundamental catalysts means that there are several reasons to believe that prices may go higher in several key commodities.

For example, in the Base Metals complex, prices have dipped to points in the cost curve that have traditionally provided strong support. And in Natural Gas, storage and transportation infrastructure has failed to keep pace with the growing natural gas supply/demand and, as a result, seasonal dislocations can and will be severe. This is particularly true in Europe, where supply risks are still very real for the upcoming winter.

3006750-20230720

Risks

Investing involves risk, principal loss is possible. Unlike mutual funds, ETFs may trade at a premium or discount to their net asset value. Harbor ETFs are new and have limited operating history to judge.

Commodity and Commodity Linked Derivative Risk: The Fund has exposure to commodities through its and/or the Subsidiary's investments in commodity-linked derivative instruments. The Fund's investments in commodity-linked derivative instruments (either directly or through the Subsidiary) and the tracking of an Index comprised of commodity futures may subject the Fund to significantly greater volatility than investments in traditional securities.

The Fund is non-diversified and may invest a greater concentrate of its assets in a particular sector of the commodities market (such as metal, gas or emissions products). As a result, the Fund may be more susceptible to risks associated with those sectors.

Authorized Participant Concentration/Trading Risk: Only authorized participants ("APs") may engage in creation or redemption transactions directly with the Fund.

Energy Transition Risk: The commodities included in the Index may become less representative of energy transition trends over time and the Fund's investments may be significantly impacted by government and corporate policies.

Foreign Currency Risk: Because the Index may include futures contracts denominated in foreign currencies, the Fund could be subject to currency risk.

Benchmarks

The Quantix Energy Transition Index ("QET") is a dynamic commodity index with the objective of providing diversified exposure to the building blocks of the accelerating transition from carbon-intensive energy sources to less carbon intensive sources of energy using commodity futures. This index is unmanaged and does not reflect fees and expenses and is not available for direct investment.

The Bloomberg Commodity Index measures the performance of future contracts on physical commodities which traded on US exchanges and London Metal Exchange. The commodity weightings are based on production and liquidity, subject to weighting restrictions applied annually. This unmanaged index does not reflect fees and expenses and is not available for direct investment.

Disclosures

Expense ratio information is as of the Fund's current prospectus, as supplemented. Gross expenses are the Fund's total annual operating expense.

This information should not be considered as a recommendation to purchase or sell a particular security. The weightings, holdings, industries, sectors, countries, and returns mentioned may change at any time and may not represent current or future investments.

As a result of changing market conditions, total net asset levels, expenses and other statistics may change at any time and may differ from those shown.

The total amount shown for sector, industries, or country holdings may be greater than 100% because of the inclusion of derivatives and the collateral securities supporting those instruments.

Views expressed herein are drawn from commentary provided to Harbor by the subadvisor and may not be reflective of their current opinions or future actions, are subject to change without prior notice, and should not be considered investment advice.

Investors should carefully consider the investment objectives, risks, charges and expenses of a fund before investing. To obtain a summary prospectus or prospectus for this and other information, visit harborcapital.com or call 800-422-1050. Read it carefully before investing.

Quantix Commodities LP ("Quantix") is a third-party subadvisor to the Harbor Energy Transition Strategy ETF.

Foreside Fund Services, LLC is the Distributor of the Harbor ETFs.