VIRTUS ETFs

Virtus Duff & Phelps Clean Energy ETF

NYSE ARCA | NAV Symbol VCLN | IOPV Symbol VCLN.IV | CUSIP 92790A702

MARKET REVIEW

The quarter began with excitement and momentum carried over from the prior quarter, which was marked by the passage of the Inflation Reduction Act (IRA) in the U.S. The fourth quarter offered the opportunity to learn more from companies about the impact of this legislation. While "game-changer" was still the most common phrase, one company called the IRA the most supportive piece of legislation "we've ever seen in the history of this company. Hands down…[it] is perfect for us."[1] From a more quantitative perspective, Bloomberg New Energy Finance estimated annual demand for renewables would be at least ~25% higher than previously forecast from 2026 through 2030 due to the IRA.[2] Notably, this acceleration to growth in the U.S. clean-energy market has yet to be factored into many companies' growth outlooks. As a result, we expect earnings growth outlooks to inflect higher due to the IRA.

An interesting dynamic has begun to unfold in the wake of the IRA's passage: the competition for capital. During the quarter, some non-U.S. companies began considering reallocating their capital to the U.S. to take advantage of the IRA. For example, some companies that were previously considering Europe for lithium-ion gigafactory projects are now looking to the U.S. instead. In our view, this dynamic raises the question of what Europe might do to retain capital investment in its countries. Could Europe initiate its own version of the IRA?

PORTFOLIO REVIEW

The primary contributor to performance was an overweight position in Vestas Wind Systems. Prior to the quarter, Vestas was weak due to supply chain constraints and margin concerns. However, Vestas indicated its margin recovery efforts were intact, pricing was beginning to show signs of improvement, and it would not require equity financing while the recovery efforts are underway. The company also highlighted that the European energy crisis was incentivizing a faster transition to an energy system built on renewables and that legislative efforts such as the IRA strengthened the underlying demand for wind energy solutions. An overweight position in Iberdrola was another top contributor. The stock performed well as management raised medium-term targets during its capital markets day (CMD) in early November. Dividend commitments and balance sheet strength were also key messages from the CMD.

The primary detractor was an overweight position in Plug Power Inc. The stock traded lower due to the risk of higher interest rates and news that a large green hydrogen project was awarded to a competitor. We believe the long-term value proposition for Plug Power remains intact and are attracted to the company's ability to offer its global customer base turnkey hydrogen solutions. Plug's primary segments include electrolyzers for green hydrogen production, hydrogen fuel cells for material-handling, backup power generation to help customers like datacenters transition away from diesel power, and mobility solutions.

An overweight position in Enphase Energy, Inc. also detracted due to profit-taking. Despite the underperformance, Enphase had a very strong year, and we remain constructive on the company due to its high-quality products, premium prices, closed-system architecture, and ease of use. Enphase is part of an inverter duopoly in the U.S. and rapidly taking share in Europe, where demand is high given energy security issues. Additionally, residential solar penetration is at low levels in U.S., which leaves plenty of room for growth.

INVESTMENT OUTLOOK

The IRA is a boost for clean energy that will drive renewable investment by traditional utility companies, developers, industrials, and residential consumers. The IRA provides visibility and longevity for clean energy, which is vital to long-term capital investment decisions.

Europe's efforts to move the energy transition forward have been slowed by crippling energy prices brought on by Russia's invasion of Ukraine and subsequent severing of energy supplies. Due to the EU's unique circumstances, policymakers are caught in a "trilemma" of keeping energy affordable, ensuring adequate supply, and continuing the transition to a clean-energy economy. Energy independence is paramount for Europe, and we believe this should drive policy, promoting clean energy, for many years to come.

The pace of the energy transition may vary, but pent-up demand could cause significant subsequent momentum. For example, hydrogen is a clean-energy source to watch in 2023, in part due to significant backing in the IRA. Combined with ITCs (investment tax credits), last year's Infrastructure Investment and Jobs Act, and the Department of Energy's 'hydrogen hubs' initiative, critical infrastructure for hydrogen could be available as early as 2025 in the U.S. We anticipate that nuclear power will play a leading role in the electrolysis process of green hydrogen. In the EU, countries and companies are moving forward with plans to utilize existing natural gas infrastructure for the transportation of hydrogen. The continent's main gas transmission companies are starting to prepare their networks to blend in hydrogen and interconnect with the individual EU countries that are more vulnerable to gas shortages. The EU recognizes hydrogen's role in helping to solve the "trilemma."

While 2023 could see an extension of 2022 macroeconomic headwinds, we believe the long-term attraction of clean energy continues to strengthen. One of clean energy's main economic characteristics is relative cost, especially in an environment with rising commodity prices. Simply put, renewable energy is deflationary for consumers, and the higher energy commodity prices go, the greater the attraction of renewables. As we look to 2023 and beyond, we believe long-term investors will be rewarded by owning a basket of clean-energy market leaders at the vanguard of this transition.

[1] Darling Ingredients Inc., "Q3 2022 Earnings Call"

[2] AES Corporation, "Third Quarter 2022 Financial Review"

INVESTMENT ADVISER

Virtus ETF Advisers LLC

INVESTMENT SUBADVISER

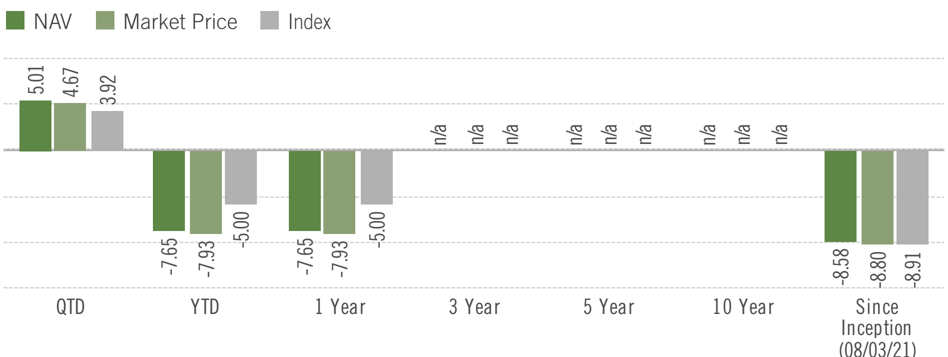
Duff & Phelps Investment Management Co.

INVESTMENT PROFESSIONALS

Benjamin Bielawski, CFA
Industry start date: 1995
Start date as Fund Portfolio Manager: 2021

Eric Fogarty, CFA
Industry start date: 1997
Start date as Fund Portfolio Manager: 2021

AVERAGE ANNUAL TOTAL RETURNS (%) as of 12/31/22



Returns for periods of less than one year are cumulative total returns.

Performance data quoted represents past performance. Past performance does not guarantee future results. Investment return and principal value will fluctuate so that shares, when redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than the performance data quoted. Please visit virtus.com for performance data current to the most recent month end.

The fund class gross expense ratio is 0.66% The net expense ratio is 0.59%, which reflects a contractual expense reimbursement in effect through 11/28/2023.

The Total Expense Ratio represents the Fund's Total Annual Fund Operating Expenses, which includes the management fee and other expenses where applicable, except for certain payments that are paid directly by the Fund, as described in the Prospectus. The Fund's investment adviser has entered into an expense limitation agreement to limit the Fund's total operating expenses (excluding certain expenses as described in the prospectus) so that such expenses do not exceed 0.59% of the Fund's average daily net assets through November 28, 2023.

The Fund is an exchange-traded fund ("ETF"). The "net asset value" (NAV) of the Fund is determined at the close of each business day, and represents the dollar value of one share of the Fund; it is calculated by taking the total assets of the Fund, subtracting total liabilities, and dividing by the total number of shares outstanding. The NAV of the Fund is not necessarily the same as its intraday trading value. Fund investors should not expect to buy or sell shares at NAV because shares of ETFs such as the Fund are bought and sold at market price (not NAV) and are not individually redeemed from the Fund. Thus, shares may trade at a premium or discount to their NAV in the secondary market. Brokerage commissions will reduce returns. NAV returns are calculated using the Fund's daily 4:00 pm NAV, and include the reinvestment of all dividends and other distributions (reinvested at the Fund's NAV on distribution ex-date). Market price returns are calculated using the 4:00 pm midpoint between the bid and offer, and include the reinvestment of all dividends and other distributions (reinvested at the 4:00 pm bid/offer midpoint on distribution ex-date). Market price returns do not represent the return you would receive if you traded at other times.

TOP TEN HOLDINGS

TOP TEN HOLDINGS	% Fund
Enphase Energy Inc.	8.57
Iberdrola S.A.	7.80
Vestas Wind Systems A/S	7.64
SolarEdge Technologies Inc.	6.51
First Solar Inc.	5.67
Orsted A/S	4.58
EDP - Energias de Portugal S.A.	3.85
Plug Power Inc.	3.72
Xinyi Solar Holdings Ltd.	2.77
NextEra Energy Inc.	2.67

Holdings are subject to change. To view the full list of holdings, please visit virtus.com.

TOP FIVE CONTRIBUTORS

TOP FIVE CONTRIBUTORS	% Contribution
Vestas Wind Systems A/S	2.60
Iberdrola SA	1.55
SolarEdge Technologies, Inc.	0.98
Orsted	0.61
First Solar, Inc.	0.57

TOP FIVE DETRACTORS

TOP FIVE DETRACTORS	% Contribution
Plug Power Inc.	-2.85
Enphase Energy, Inc.	-0.50
Chart Industries, Inc.	-0.46
JinkoSolar Holding Co., Ltd. Sponsored ADR	-0.45
Sunrun Inc.	-0.45

% Contribution: Absolute weighted contribution.

To obtain the top/bottom holdings calculation methodology, call 800-243-4361.

The Fund is an actively managed exchange-traded fund and does not seek to replicate the performance of a specified index. The Fund may have a higher portfolio turnover than funds that seek to replicate the performance of an index.

IOPV, or Indicative Optimized Portfolio Value, is a calculation disseminated by the stock exchange that approximates the Fund's NAV every fifteen seconds throughout the trading day.

Benchmark: The **S&P Global Clean Energy Index (net)** is designed to measure the performance of companies in global clean energy-related businesses from both developed and emerging markets, with a target constituent count of 100, calculated on a total return basis with net dividends reinvested. The index is unmanaged, its returns do not reflect any fees, expenses, or sales charges, and is not available for direct investment.

Notes on Risk: Exchange-Traded Funds (ETF): The value of an ETF may be more volatile than the underlying portfolio of securities it is designed to track. The costs to the fund of owning shares of an ETF may exceed the cost of investing directly in the underlying securities. **Equity Securities:** The market price of equity securities may be adversely affected by financial market, industry, or issuer-specific events. Focus on a particular style or on small or medium-sized companies may enhance that risk. **Clean Energy Industry:** Developments in the clean energy segment could adversely affect the price and valuations of portfolio holdings. These developments include swift price and supply fluctuations caused by events relating to international politics, the success of project development and tax and other governmental regulatory policies. There could also be weak demand for clean energy company products or services, the obsolescence of existing technology or short product cycles, and falling prices and profits due to the supply of, and demand for, oil and gas along with competition from new market entrants. **Limited Number of Investments:** Because the portfolio has a limited number of securities, it may be more susceptible to factors adversely affecting its securities than a portfolio with a greater number of securities. **Foreign & Emerging Markets:** Investing in foreign securities, especially in emerging markets, subjects the portfolio to additional risks such as increased volatility, currency fluctuations, less liquidity, and political, regulatory, economic, and market risk. **Non-Diversified:** The portfolio is not diversified and may be more susceptible to factors negatively impacting its holdings to the extent the fund invests more of its assets in the securities of fewer issuers than would a diversified portfolio. **Market Price/NAV:** At the time of purchase and/or sale, an investor's shares may have a market price that is above or below the fund's NAV, which may increase the investor's risk of loss. **Market Volatility:** The value of the securities in the portfolio may go up or down in response to the prospects of individual companies and/or general economic conditions. Price changes may be short- or long-term. Local, regional, or global events such as war (e.g., Russia's invasion of Ukraine), acts of terrorism, the spread of infectious illness (e.g., COVID-19 pandemic) or other public health issues, recessions, or other events could have a significant impact on the portfolio and its investments, including hampering the ability of the portfolio's manager(s) to invest the portfolio's assets as intended. **Prospectus:** For additional information on risks, please see the fund's prospectus.

Please consider a Fund's investment objectives, risks, charges, and expenses carefully before investing. For this and other information about any Virtus Fund, contact your financial professional, call 800-243-4361, or visit virtus.com for a prospectus or summary prospectus. Read it carefully before investing.

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