

Firsthand Alternative Energy Fund

Investment Strategy

The Fund invests in alternative energy and energy technology companies, both U.S. and international. Alternative energy includes solar, hydrogen, wind, geothermal, hydroelectric, tidal, biofuel, and biomass. Because there are no market capitalization restrictions on the Fund's investments, the Fund may purchase stocks of any capitalization.

Total Returns as of 12/31/19

	Firsthand Alternative Energy Fund	WilderHill Clean Energy Index	S&P 500 Index
Since inception (10/29/07)	-2.11%	-9.67%	8.55%
10-Year	-0.38%	-3.78%	13.54%
5-Year	3.61%	5.81%	11.68%
3-Year	13.39%	23.85%	15.25%
1-Year	40.59%	59.22%	31.48%
Q4 '19	6.07%	17.14%	9.06%

The performance data quoted represent past performance. Past performance cannot guarantee future results, and current performance may be lower or higher than the performance quoted. Performance information does not reflect the impact of taxes. Both the return from and the principal value of an investment in the Funds will fluctuate so that an investor's shares, when redeemed, may be worth more or less than their original cost. To obtain performance as of the most recent month-end, please contact Firsthand Funds by calling 1.888.884.2675 or go to www.firsthandfunds.com.

Fund Facts as of 12/31/19

Portfolio Manager	Kevin Landis	2018 Gross Expense Ratio	2.15%
Manager Tenure	Since inception	2018 Net Expense Ratio	1.98%
Inception	10/29/07	Redemption Fee	None
Ticker	ALTEX	Number of Companies	36
Cusip	337941827	Sales Load	None
Net Assets	\$6.2M	2019 Portfolio Turnover	0%

The Fund's total gross operating expenses are 2.15%. The Fund's total net operating expenses are 1.98%. Under the Investment Advisory Agreement, the Investment Adviser has agreed to reduce its fees and/or make expense reimbursements so that the Fund's total annual operating expenses (excluding independent trustees' compensation, brokerage and commission expenses, short sale expenses, litigation costs and any extraordinary and non-recurring expenses) are limited to 1.98% of the Fund's average daily net assets up to \$200 million, 1.93% of such assets from \$200 million to \$500 million, 1.88% of such assets from \$500 million to \$1 billion, and 1.83% of such assets in excess of \$1 billion. The current expense waiver is in effect until 8/31/20.

Holdings as of 12/31/19

Top 10

SolarEdge Technologies, Inc.	10.8%
Power Integrations, Inc.	9.3%
Itron, Inc.	7.6%
Cree, Inc.	6.0%
Vestas Wind Systems A.S.	4.9%
Philips Electronics	4.6%
First Solar, Inc.	4.5%
Honeywell Int'l, Inc.	4.5%
Aspen Aerogels, Inc.	4.4%
Iberdrola S.A.	3.8%
% of Net Assets	60.4%

By Industry

Renewable Energy	37.1%
Energy Efficiency	12.2%
Other Electronics	11.2%
Semiconductors	9.3%
Materials	7.5%
Industrials	6.5%
Engineering Service	3.3%
Advanced Materials	3.1%
Electrical Equipment	2.8%
Biotech	2.7%
Waste & Environment Service	2.4%
Environmental Service	1.2%
Net Cash	0.7%

The top 10 holdings are current as of December 31, 2019, and may not be representative of current or future investments. Portfolio assets such as cash, treasuries, options, and warrants are not presented in the top 10 list. The holdings by industry are presented to illustrate examples of the industries in which the Fund has bought securities and may not be representative of the Fund's current or future industry investments.



Portfolio Commentary Q4 '19

Contributors

Firsthand Alternative Energy Fund underperformed its primary benchmarks in the second quarter, gaining 6.07%, compared with gains of 17.14% and 9.06% for the WilderHill Clean Energy Index and the S&P 500 Index, respectively.

The top contributor to the Fund's performance in the fourth quarter of 2019 was SolarEdge (SEDG). The solar inverter company posted record results for the quarter ended September 30, 2019, including revenue growth of 26% over the year ago period.

Wind turbine manufacturer Vestas Wind Systems (VWSYF) was another top contributor during Q3. After a mid-year slump, the company's stock posted a gain of nearly 30% for the quarter.

A third major contributor to the Fund's performance in Q4 was Aspen Aerogels (ASPN). The company's stock finished the quarter up 31%.

Detractors

SunPower (SPWR) stock slid in the fourth quarter and was the largest detractor from fund performance during the quarter. The company's stock peaked in late September and sold off sharply with other solar stocks. Later in the quarter, the company announced a secondary offering of its common stock, which further depressed the price.

Another detractor from the performance of the Fund during Q4 was Advanced Emissions Solutions (ADES). The company's stock was punished in November after its Q3 revenue came in 14% below analysts' expectations and earnings missed by 74%.

Covanta Holding Corporation (CVA) was a third major detractor from fund performance during the quarter. The company's stock declined ahead of its third quarter earnings report, which generally met or exceeded analysts' expectations.

Firsthand Alternative Energy Fund is subject to greater risk than more diversified funds because of its investments in fewer securities and because of its concentration of investments in the alternative energy and energy technology sectors. Specific risks associated with these investments could cause the Fund's share price to fluctuate dramatically. The Fund's investments in small-cap companies present greater risk than investments in larger companies. The Fund invests in several industries within the alternative energy and energy technology sectors and the relative weightings of these industries in the Fund's portfolio may change at any time. The Fund's performance information assumes reinvestment of all dividends and includes all Fund expenses, but does not reflect the impact of taxes

Equity investing involves risks, including the potential loss of the principal amount invested. Firsthand Funds are subject to greater risk than more diversified funds.

As of 12/31/19: SEDG(10.81% of TEFQX), VWSYF (4.91% of TEFQX), ASPN (4.41% of TEFQX), SPWR (2.52% of TEFQX), ADES (1.16% of TEFQX), CVA (2.41% of TEFQX). A complete list of portfolio holdings for Firsthand Funds is available on www.firsthandfunds.com and is updated 45 days after the end of the every calendar quarter. The portfolio holdings discussed are subject to change. Please visit www.firsthandfunds.com for a complete list of holdings.

The Standard & Poor's 500 Index (S&P 500) represents an unmanaged, broad-based basket of stocks and is typically used as a benchmarks for overall market performance. The WilderHill Clean Energy Index is a market-weighted index of 53 companies in the cleaner fuel, energy conversion, energy storage, greener utilities, power delivery and conservation, and renewable energy harvesting sectors. The indices' performance figures assume the reinvestment of all dividends (except where noted), but do not reflect the impact of taxes. Additionally, because an investor cannot invest in an index directly, indices' performance figures do not reflect the expenses associated with the management of an actual mutual fund portfolio.

The information provided should not be considered a recommendation to purchase or sell a particular security and there is no assurance that, as of the date of publication, the securities purchased remain in a Fund's portfolio or that securities sold have not been repurchased. Also, you should note that the securities discussed, even if they have been purchased by a Fund, do not represent a Fund's entire portfolio and, in the aggregate, may represent only a small percentage of that Fund's holdings. There can be no assurance that any Firsthand Funds will buy, sell, or hold any particular security after the date referred to in the discussion.

An investor should consider investment objectives, risks, charges, and expenses of the Funds carefully before investing. To obtain a prospectus, which contains this and other information, please call 1.888.884.2675 or visit www.firsthandfunds.com. Read the prospectus carefully before investing or sending money.