

Wind and Solar Energy Are Becoming Major Sources in the Renewable Energy Space

Investors Can Gain Access to this Sector Through the Nasdaq's ISE Indexes

Wind and solar power within the renewable energy space is expanding significantly. It is interesting to learn the reasons for growth and where experts believe the industry is headed. The Nasdaq [ISE Clean Edge Global Wind Energy Total Return Index \(GWETR\)](#) is one way investors can gain access to this market, and we will review here the basic index methodology, eligibility requirements, and performance statistics.

Renewable Energy

Renewable energy sources, comprised primarily of wind and solar power, made up 55% of all new electric generation capacity additions globally in 2016, the most ever recorded, according to *Bloomberg New Energy Finance*. In the U.S., wind and solar power equaled nearly 17 gigawatts (GW) of new additions in 2016, representing 61% of all new electricity generating capacity installed in the U.S. for the second year in a row, based on Clean Edge analysis of U.S. Energy Information Administration data. In the U.S., three states (Iowa, South Dakota and Kansas) now generate 30% or more of their electrons from utility-scale wind, and in 2016 wind represented more than 5% of total U.S. electricity generation. Wind power capacity now exceeds 480 GW globally.

What's driving this significant shift to renewables?

- Declining costs are the primary driver fueling renewables' rise. Lazard's most recent *Levelized Cost of Energy (LCOE) Analysis* report (December 2016) finds that the levelized cost of new U.S. utility-scale onshore wind and solar power now beats new coal, nuclear, and, in most cases, combined-cycle natural gas.
- In an increasing number of countries, it has become more economical to install solar and wind capacity than coal capacity, according to World Economic Forum. They estimate that wind and solar have already reached grid parity without subsidies in more than 30 countries, and around two thirds of the world could reach grid parity in the next few years.

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- Historically, the installed costs of onshore wind power have declined by 7% every time global installed capacity has doubled, according to the International Renewable Energy Agency. By 2025, they project that total installed costs of onshore wind farms could decline by 12% and the LCOE could decline by 26%.
- Corporate buyers are playing a significant role in the growth of renewables. The commercial and industrial market is now one of the largest procurers of renewables in the U.S., with more than 7.5 GW of contracted wind and solar power. Commercial customers are intending to procure an additional 60 GW by 2025, according to the Renewable Energy Buyers Alliance (REBA).
- Eighty-nine global corporations have joined the RE100 campaign to get 100% of their electricity from renewables. Committed firms include Anheuser-Busch InBev, Apple, BMW Group, GM, Google, HP, Johnson & Johnson, Microsoft, Nike and Philips.
- National and subnational governments around the globe are committing to lowering their carbon footprint and increasing their use of renewables with supportive policies and regulations. From the Paris Climate Accord to renewable portfolio standards, the trend is generally upward.

ISE Clean Edge Global Wind Energy Index (GWE)

Market participants can take advantage of this expanding trend toward wind energy by gaining exposure to the [ISE Clean Edge Global Wind Energy Index](#). The Index was launched on December 16, 2005, and is designed to track public companies that are active in the wind energy industry based on analysis of the products and services offered by those companies. As of April 28, 2017, the index had 42 components. The ETF that tracks the index is the First Trust ISE Clean Edge Global Wind Energy Index Fund (FAN).

Methodology

The ISE Clean Edge Global Wind Energy Index has specific component requirements in order to be eligible for inclusion:

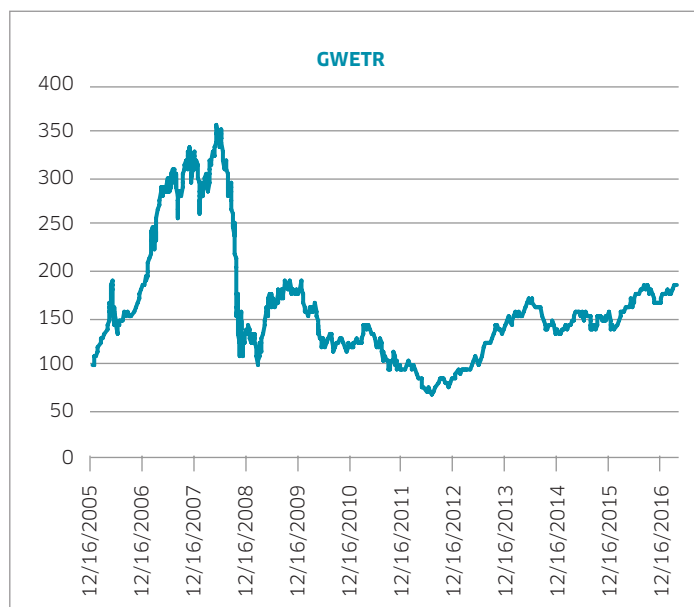
- The security must be common stock to be eligible. Security types not eligible include closed-end funds, exchange-traded funds, holding companies, investment vehicles or Real Estate Investment Trusts.
- Be actively engaged in some aspect of the wind energy industry such as the development or management of a wind farm, the production or distribution of electricity generated by wind power, involvement in the design, manufacture or distribution of machinery or materials designed specifically for the Industry
- Not be listed on an exchange in a country that employs restrictions on foreign capital investment such that those restrictions render the component effectively non-investible, as determined by Nasdaq
- A minimum market capitalization of \$100 million.

GWETR

Historical Performance

Below is a snap shot of the performance for the ISE Clean Edge Global Wind Energy Total Return Index (GWETR). The index reached its peak of 354.28 on June 5, 2008. As of April 28, 2017, the index closed at 191.00.

GWETR



Performance & Volatility Stats: (12/16/2005 - 4/28/2017)

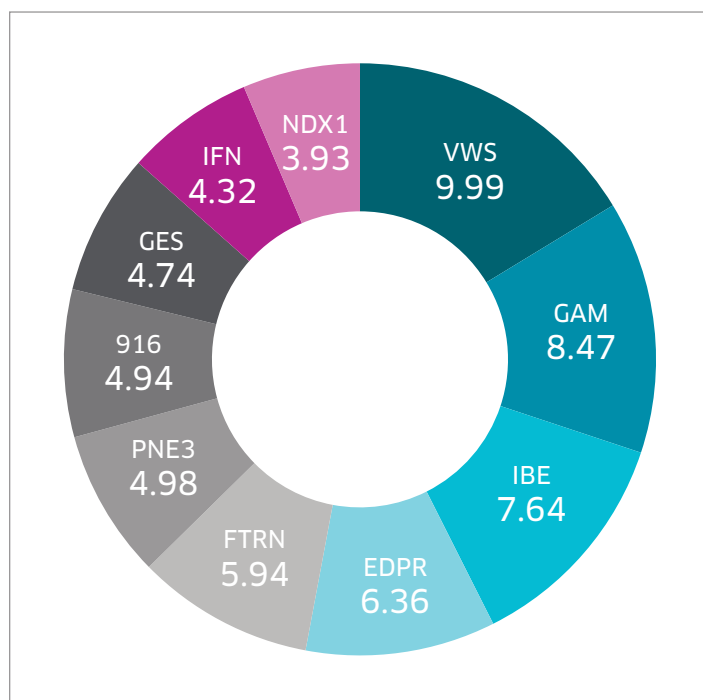
The table below lists performance and volatility statistics since inception through the most recent month end.

	GWETR
Cumulative %	91%
Annualized %	6%
Volatility (Annualized)	25%

Top 10 Holdings (as of 4/28/17)

The top ten holdings are listed below. The largest allocation within the top 10 is VWS, which has nearly a 10% position in the Index. NDX1 had an allocation of 3.93%. The remainder of the top 10 allocations can be seen below.

GWETR: Top 10 Allocations 4/28/17



Conclusion

Wind and solar energy are becoming major sources within the renewable energy space for a number of reasons, including declining costs, which have now made using solar power cheaper than other methods such as new coal, nuclear and combined cycle natural gas. The world economic forum is now estimating two thirds of the world could reach grid parity in the near future. Furthermore, the costs to install onshore wind power continue to decline, which is also appealing.

The [First Trust ISE Global Wind Energy Index Fund \(FAN\)](#) tracks the ISE Clean Edge Global Wind Energy Total Return Index.

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