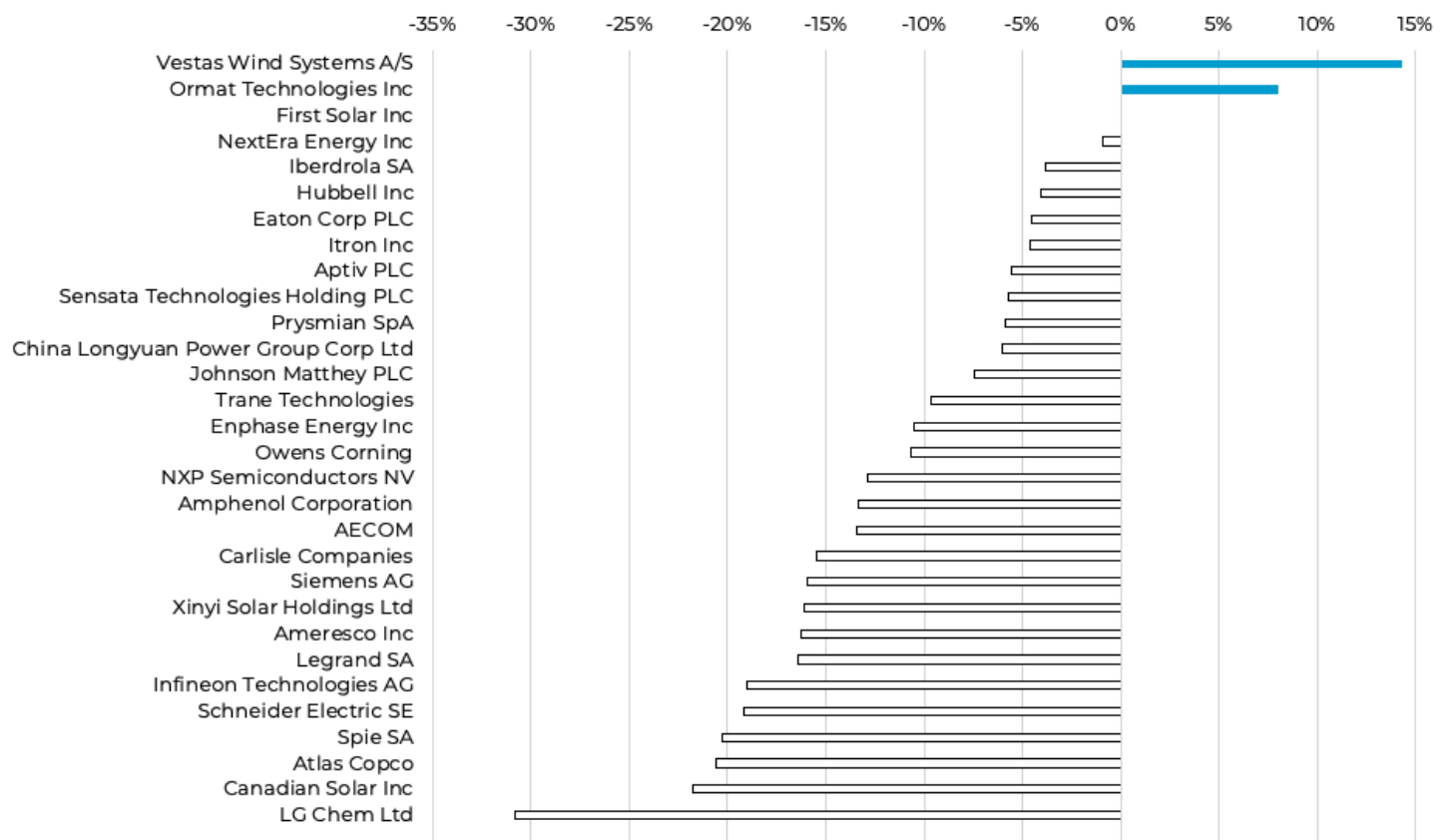


## Portfolio Performance

as of 03/31/2026

In March, SOLR was down -10.18% (NAV, -9.09% on a market price basis), while the MSCI World Index benchmark was down -6.37%.<sup>1</sup> Continued conflict in the Middle East has triggered a significant energy shock, disrupting global markets. While near-term headwinds are weighing on equities, we believe the conflict will ultimately accelerate the energy transition as governments place greater emphasis on energy security. In this month's report, we review Q1 2026 macro developments and fund contribution. Read on for more.

Holdings are subject to change. Go to [www.gafunds.com/our-funds/SOLR/](http://www.gafunds.com/our-funds/SOLR/) for current holdings.



**Top Performer: Vestas Wind Systems, 14.3% TR Month to Date** | Vestas continues to see strong order momentum, announcing a 505 MW (megawatt) US order which takes Q1 2026 orders to 3.7 GW (gigawatts) (vs. 3.1 GW in Q1 2025). Despite ongoing tariff uncertainty, US onshore orders have now reached 3.5 GW since 2H 2025. Elsewhere, increasingly

<sup>1</sup> Performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment in the Fund will fluctuate so that an investor's shares, when redeemed, may be worth more or less than their original cost. Current performance of the Fund may be lower or higher than the performance data quoted. Performance data current to the most recent month-end may be obtained by visiting [gafunds.com](http://gafunds.com), or calling (866) 307-5990. The returns shown are cumulative for the period, not annualized. Market prices return is based on the market price of Fund shares as of the close of trading on the exchange where the shares are listed.

# SOLR

## Guinness Atkinson Sustainable Energy ETF

April 2026 Update



supportive policy signals for Europe, including additional onshore tenders in Germany and the UK bring forward their AR8 auction suggest an improving medium-term outlook for the company, with margin expansion, offshore de-risking and volume growth to drive earnings.

**Bottom Performer: LG Chem Ltd., -30.8% TR Month to Date** | LG Chem shares underperformed over the month, reflecting renewed pressure on its petrochemical business following disruption in global energy markets. The company remains exposed to energy price volatility through its reliance on imported naphtha, with higher input costs weighing on margins. This was compounded by operational disruption at its Yeosu complex, where a temporary shutdown of one cracker due to feedstock constraints risks impacting near-term volumes.

As of 03/31/2026	1 Month	YTD	1 Year	3 Years	5 Years	Since Inception (11/11/20)
<i>SOLR at NAV</i>	-10.18%	-1.51%	31.04%	0.03%	1.03%	4.60%
<i>SOLR at Market Price</i>	-9.09%	-0.58%	32.05%	0.03%	1.07%	5.03%
<i>MSCI World Index NR</i>	-6.37%	-3.57%	18.90%	16.75%	10.26%	11.79%

Expense Ratio: 0.79% (net) | 3.12% (gross)

The Adviser has contractually agreed to reduce its fees and/or pay ETF expenses in order to limit the Fund's total annual operating expenses to 0.79% through June 30, 2028.

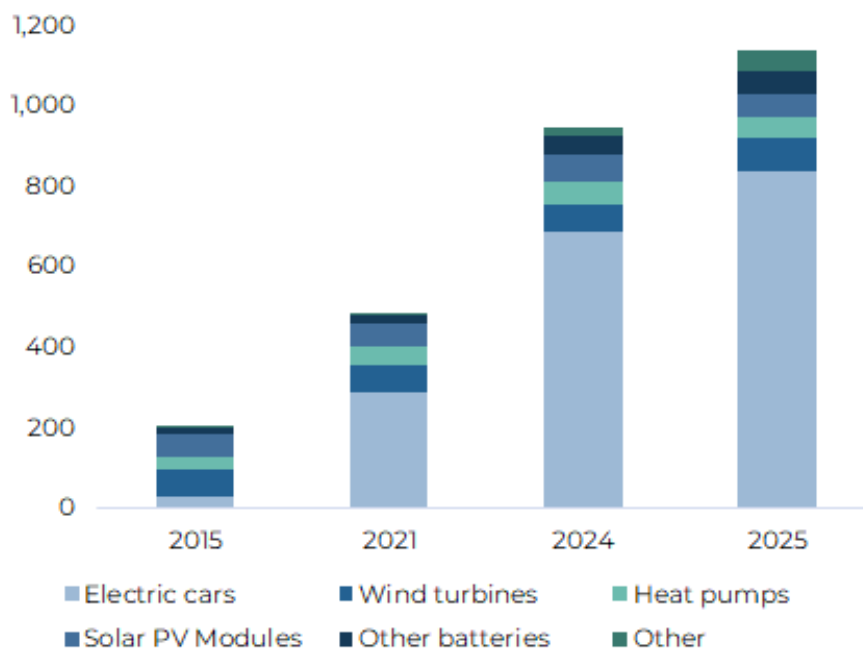
*Performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment in the Fund will fluctuate so that an investor's shares, when redeemed, may be worth more or less than their original cost. Current performance of the Fund may be lower or higher than the performance data quoted. Performance data current to the most recent month-end may be obtained by visiting [gafunds.com](http://gafunds.com), or calling (866) 307-5990. The returns shown are cumulative for the period, not annualized. Market prices return is based on the market price of Fund shares as of the close of trading on the exchange where the shares are listed.*

A fund's NAV is the sum of all its assets less any liabilities, divided by the number of shares outstanding. The market price is the most recent price at which the fund was traded.

## Interesting News

- The International Energy Agency reports that the combined market for key clean energy technologies has grown at an average rate of close to 20% per year for the last decade. It expects the market to have grown another 25% in 2025, taking the combined market value to almost \$1.2 trillion and overtaking the global coal market. Electric vehicles have been the main driver of this growth, with the market growing by more than 40% per year between 2015 and 2024.

Global Clean Energy Technologies Market (\$bn)



Source: International Energy Agency, February 2026

- China and the EU both set out updated policy frameworks to support the build-out and financing of clean energy. China's 15th Five-Year Plan (2026–2030) reinforces a strong push to scale renewables, electric vehicles and clean technology manufacturing, alongside targets for reducing carbon intensity and increasing the share of non-fossil energy. China's updated strategy reflects a pragmatic approach to energy investment, balancing decarbonization with energy security and economic stability. In the same month, the European Commission launched its Clean Energy Investment Strategy, aimed at accelerating deployment and mobilizing c.€600–700bn (approx. \$703-820bn USD) of annual investment to 2030, with a greater role for private capital in funding grids, generation and electrification.
- In Europe, governments are accelerating wind deployment as part of their efforts to improve energy security in response to the disruption in the Middle East. Germany plans an additional 12 GW of onshore wind tenders, building on the 3.4 GW awarded in its first 2026 auction round. In the UK, Allocation Round 8 (AR8) for offshore wind has been brought forward to July, following a stronger AR7

auction that signaled improved developer participation. Overall, both markets are pushing to scale renewables more quickly as a core pillar of their energy security policy.

- In the US, the rapid growth of AI-driven data center demand is increasingly exposing constraints around power availability and rising electricity costs. In March, major technology firms including Google, Microsoft and Amazon signed a White House-backed “Ratepayer Protection Pledge” committing to fund new power generation and grid infrastructure for their data centers, in part to address concerns that surging demand could drive up consumer electricity bills. At the same time, the scale and intensity of data center power use, often requiring dedicated supply and driving peak demand, are prompting new operating strategies, with companies such as Google striking utility agreements to reduce consumption during peak periods and ease pressure on the grid.
- Structurally rising power demand in the US continues to drive M&A activity across the sustainable energy and utility space. A consortium led by Global Infrastructure Partners and Swedish private equity firm EQT has agreed to acquire AES Corporation in a \$33.4bn transaction including debt. The deal follows a series of sizeable transactions in the sector, including Blackstone’s \$11.5bn acquisition of TXNM Energy and Constellation Energy’s \$16.4bn purchase of Calpine, demonstrating intensifying competition for generation and power infrastructure assets.
- In the US, biofuel demand is expected to increase after the Environmental Protection Agency released its finalized Renewable Fuel Standard (RFS) mandates. The Agency has set record high blending volumes, or how much renewable fuel must be blended into petrol and diesel, for 2026-2027. This should drive meaningful increases in demand for biofuels and biomass-based diesel as well as the associated feedstocks such as corn and soybean oil.

## Manager’s Comments

*The outbreak of war in the Middle East, which has brought the effective closure of the Strait of Hormuz, has triggered a meaningful energy shock that is disrupting global markets. While the threat of weaker economic growth, inflation and higher interest rates is weighing on equities (including sustainable energy equities) in the short term, we believe that the war will accelerate the energy transition as governments come to regard energy security as even more critical. In this report, we discuss the likely impact of the war on the sustainable energy sector and review fund performance in Q1 2026. We conclude that current valuations reflect short-term war-related concerns such as interest rate increases and inflation, while discounting the structurally improving outlook for sustainable energy equities.*

### The US-Iran Conflict

At the end of February, the United States and Israel commenced military strikes on Iran with the stated aim of regime change. In response, Iran attacked a number of foreign oil tankers, effectively shutting the Strait of Hormuz and with it, a significant proportion of global energy supply. The Strait is a stretch of water 21 miles wide which separates Iran from the UAE and Oman. It is a vital corridor that represents a critical chokepoint in global energy logistics as it facilitates the transit of:

- Approximately 20m barrels per day (b/d) of crude oil, condensate, and oil products, equivalent to around 20% of global oil supply and 30% of seaborne oil trade.

- 20% of global liquefied natural gas (LNG) production.

The conflict has resulted in materially tighter energy markets. After allowing for pipeline re-routing and strategic inventory releases, we estimate that the closure of the Strait has removed 9-11 million b/day of physical oil supply, an unprecedented shock that took Brent spot prices as high as \$117/bl in March, a 95% increase year-to-date. Natural gas markets have also been severely disrupted, with the loss of c.11 billion cubic feet per day of LNG supply through the Strait, a disruption comparable to around 75% of the amount of Russian gas lost from Europe in 2022. More dramatic price spikes have been seen in oil products than in crude oil, with aviation fuel, diesel and naphtha prices experiencing particularly violent swings as those markets had lower inventories and tighter supply vs demand before the war.

While the outcome of the conflict remains uncertain, a prolonged disruption will see oil prices reach demand destruction levels around \$125-150/bl. Elevated energy prices weaken the economic outlook and cause higher inflation as they feed through to higher input costs (particularly across more energy-intensive industrial sectors) and complicate the path to lower interest rates for central banks, given renewed inflationary pressures. Equity markets have responded to these risks, with the MSCI World Index falling -6.4% in March in USD. Companies manufacturing equipment for the energy transition are not immune to these near-term issues, with raw material inflation impacting manufacturing profitability and interest rates impacting consumer buying habits and underlying project economics.

### The Iran war will accelerate the energy transition

Like the 2022 European energy crisis resulting from the Russian invasion of Ukraine, we believe that the Iran war will accelerate the energy transition. The conflict has exposed the vulnerabilities of energy systems reliant on imported fossil fuels and reinforced the advantages of a more electrified system which, once built, is far less dependent on volatile energy imports. With energy security solidly at the top of the policy agenda for governments, we expect to see an acceleration in investment across renewable generation, grid infrastructure, and energy efficiency as policy makers work to directly reduce their reliance on fossil fuels and build resilience in their power supply. The target now clearly becomes electrified sovereignty. The current situation exceeds the 2022 crisis in that it affects both power generation markets (via higher natural gas prices) and transportation markets (via higher oil, gasoline, diesel and jet fuel prices).

The oil, oil product and gas supply disruption has been significant. **Fatih Birol**, executive director of the International Energy Agency (IEA), described the energy crisis as "the greatest global energy security threat in history" which will kick renewables "into an extraordinary new phase of even faster growth as countries seek to capitalize on their energy security benefits". The crisis is being most keenly felt in energy-importing countries and regions (for example, the EU imported €336.7bn (approx. \$394.7bn USD) of fossil fuel-based energy products in 2025), with European Commission president Ursula von der Leyen saying "The answer is not new dependencies, but faster electrification, renewables and efficiency", while Japanese prime minister **Sanae Takaichi** has said "In light of the Iran situation, the strategic importance of resources and energy security is once again being recognized globally".

### Lessons from the European energy crisis

To get a sense of the longer-term implications of a severe energy disruption, we reflect on some of the outcomes of the European energy crisis of 2022. In this case, Europe cut its reliance on Russian natural gas in

response to the invasion of Ukraine, triggering a crisis and forcing the bloc to enact supportive policy that accelerated investment into renewables and storage, energy efficiency, and incentivized the electrification of end demand.

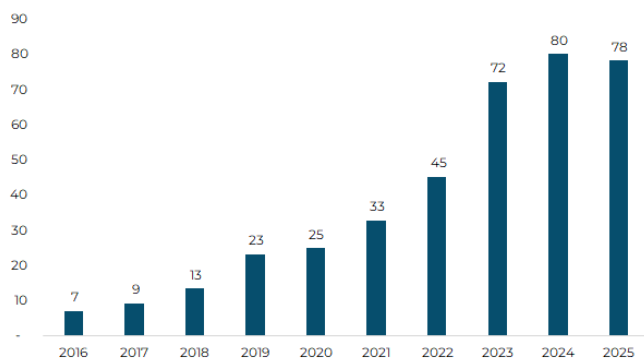
European (EU-27 and UK) energy transition investment (\$bn)



Source: BNEF, January 2026

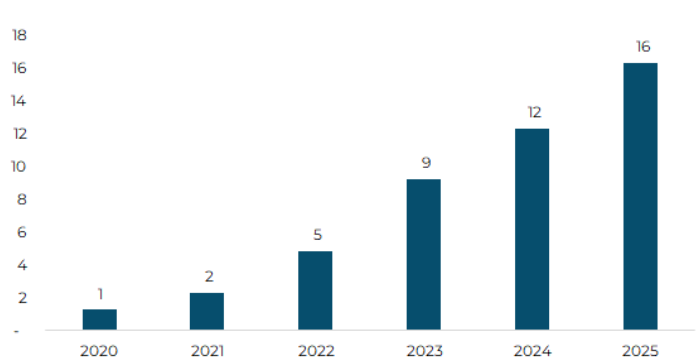
In response, Europe saw a major acceleration in solar deployment, with installations increasing from 33 GW in 2021 to 72 GW in 2023. The inflection in solar installations was followed by a similar surge in battery installations, which increased from 2 GW in 2021 to 9 GW in 2023.

Annual European solar installations (GW)



Source: BNEF, March 2026

Annual European energy storage build (GW)



Source: BNEF, March 2026

In certain European markets, the invasion also spurred major investment into both onshore and offshore wind generation. Germany, for example, reformed its permitting for onshore wind and has seen installations increase from 2 GW in 2021 to an expected 10 GW in 2026. As a result of these investments into renewable energy technologies, Europe has seen its share of power generation from wind and solar increase from 19% to 30% while gas has fallen from 19% to 17%.

## EU renewable power as a percentage of total power generation



Source: Jefferies, European Commission, April 2026

The 2022 crisis not only catalyzed a wave of new renewable generation but also highlighted the importance of investing in **energy efficiency** as a means of structurally reducing energy demand and fossil fuel imports. Elevated gas prices brought the cost of energy consumption sharply into focus, driving a step change in policy and capital allocation. IEA data shows that investments made in the aftermath of Russia's invasion led to global energy intensity improvements of around 2% in 2022, a meaningful acceleration compared to the c.0.5% seen in previous years. In the European Union alone, energy efficiency investments made in response to the energy crisis helped the bloc reduce its gas consumption in the residential sector by 18% between 2021-2024.

We expect the US-Iran war to support these trends, with countries either building upon the actions taken in previous years or implementing new frameworks to incentivize clean energy investment. Although it is difficult to assess the long-term impact of the Iran war at this stage, we are already starting to see some changes in government and consumer behavior towards energy efficiency, energy security and the electrification of demand:

- In **government policy**, Germany committed in March to a further 10GW of onshore wind tenders to 2030 (on top of the 10GW already included in the Renewable Energy Act to 2032) while the UK brought forward its AR8 renewable power capacity auction after the record awards in AR7.
- In **domestic power generation** and **energy efficiency**, Octopus Energy has seen the busiest three-week period in its history with a 41% rise in enquiries from UK homeowners about how to become "energy independent". Heat pump sales increased by 51% versus the prior month while solar sales increased 54% and EV charger sales grew by 20 per cent. In Germany, renewable energy firm Enpal BV saw enquiries for heat pumps and solar panels up 30% since the start of the war.
- In **transportation**, higher gasoline and diesel prices are showing signs of changing purchasing behavior. According to AutoTrader, advert views for new models from EV brand BYD in the UK have risen 77% year-on-year, while searches for used BYD vehicles were up more than 375%. Renault reported a 24% increase in EV model enquiries on its website since the end of February, while Kia saw requests for EV test drives increase 84% year-on-year.

While there continues to be questions about the duration and outcome of the war, we believe the conflict represents another catalyst for the energy transition. While the threat of higher interest rates and inflation will cause some near-term headwinds for sustainable energy equities, we believe it will ultimately catalyze long-term investment into the energy transition, as it did following the European energy crisis. Importantly, the actions taken in the aftermath of that crisis have created a stronger foundation on which to build. Renewable technologies are increasingly cost-competitive, electrification is already underway, and policy frameworks are in place, suggesting that the response could be both faster and more sustained than in previous cycles

## SOLR: Review of Q1 2026

Against the backdrop of an ongoing conflict and global energy shock, the Guinness Sustainable Energy Fund delivered a return of -1.6% in the first quarter in USD, outperforming the MSCI World Index Net Return (-3.6%) by 2.0 percentage points. Within the portfolio our best-performing segments were power generation and electrical equipment manufacturers, while underperforming segments included clean energy equipment manufacturers and buildings & industry names.

Global equity markets have been volatile in the first quarter, with rotations driven by geopolitics, AI disruption concerns and rising commodity prices. Early in the year, fears around AI fueled the “HALO” trade, a preference for business models based on “Heavy Assets, Low Obsolescence” and hence seen as less exposed to disruption and leveraged to growing power demand. More recently, the escalation of conflict in the Middle East and disruption to energy markets have driven a broader correction and a rotation into conventional energy equities. Uncertainty has been further compounded by US trade policy developments, with tariffs increased to 15% following a Supreme Court ruling against earlier proposals.

The utilities & independent power producer subsector was the strongest performer in the quarter, with NextEra, Iberdrola, China Longyuan and Ormat all contributing positively. Performance has been supported by a rotation away from technology and the sector’s relative safe-haven status in the current macro environment. Prior to the recent conflict, the sector had been performing well, reflecting strengthening global electricity demand and rising renewable power prices. NextEra, the fund’s top contributor in the quarter, was particularly strong, with the company reaffirming its long-term earnings growth guidance of 8%+ per annum through at least 2032, underpinned by structurally increasing power demand in the US and a constructive regulatory backdrop.

Our electrical equipment and grid-exposed subsector was the second-best performer over the period, although this somewhat masked a wide dispersion in performance across the underlying holdings. Within the portfolio, our US names (Eaton, Hubbell, Onsemi, Sensata) generally performed better than our European holdings (Infineon, NXP, Schneider). While the sector as a whole is sensitive to global manufacturing and GDP growth expectations, the weaker performers were generally more exposed to softer industrial and automotive end markets. Despite short-term headwinds, we continue to see the sector as a key beneficiary of long-term structural trends, including data center build-out, grid modernization and rising electrification. This was evident in the strong performance of Eaton, Hubbell and Prysmian, which all provided solid guidance supported by improving visibility on demand from data centers and grid infrastructure.

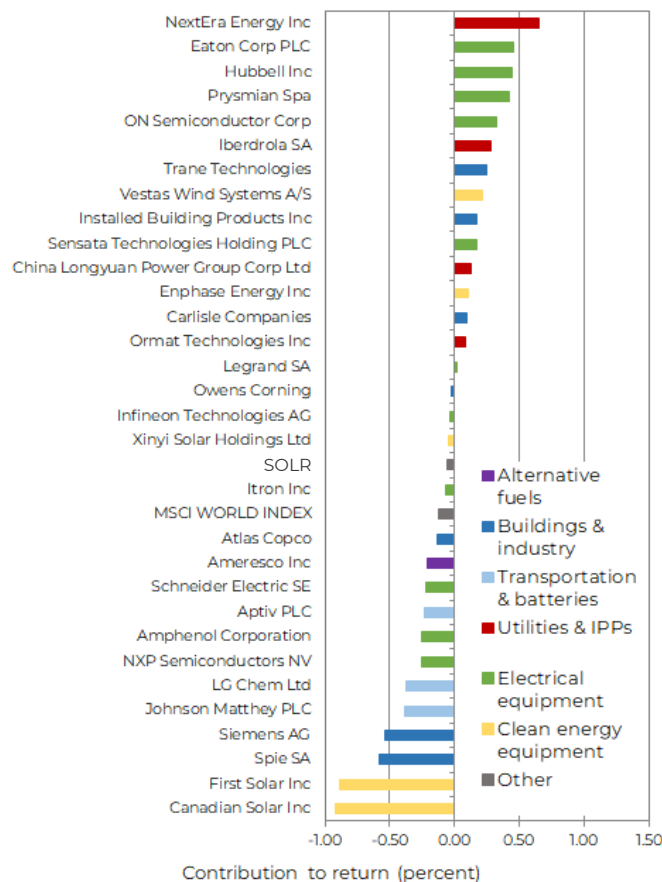
A number of our displacement names detracted from performance over the quarter, reflecting their greater sensitivity to GDP and interest rate expectations. Our European industrial names (Siemens, Atlas Copco, SPIE)

were the most impacted by the conflict, due to the region's greater reliance on energy imports and greater economic risk. More recently, some of our construction-exposed names, including Carlisle, Owens Corning and Trane, have also come under pressure as interest rate expectations have shifted from cuts to hikes in 2026. Siemens was one of our bottom performers due to concerns around a slowdown in short-cycle industrial demand, although the company's underlying results were more encouraging, with a clear beat on orders and margins, alongside an upgrade to earnings guidance.

All our transportation & batteries holdings delivered negative performance in the quarter as concerns of a soft auto market were compounded by the US-Iran war. Johnson Matthey performed weakly after the agreed sale of its Catalyst Technologies business to Honeywell was renegotiated due to regulatory delays and weak performance, pushing out the completion timeline and reducing the expected cash return to shareholders.

The clean energy equipment sector was the weakest performer over the quarter, with Canadian Solar and First Solar the two largest detractors in the fund. Both companies offered disappointing guidance, with First Solar impacted by ongoing policy uncertainty, and Canadian Solar facing a combination of project delays and cost pressures. Pleasingly, Vestas continues to perform well, supported by strong execution, solid order momentum and an ongoing recovery in its service division.

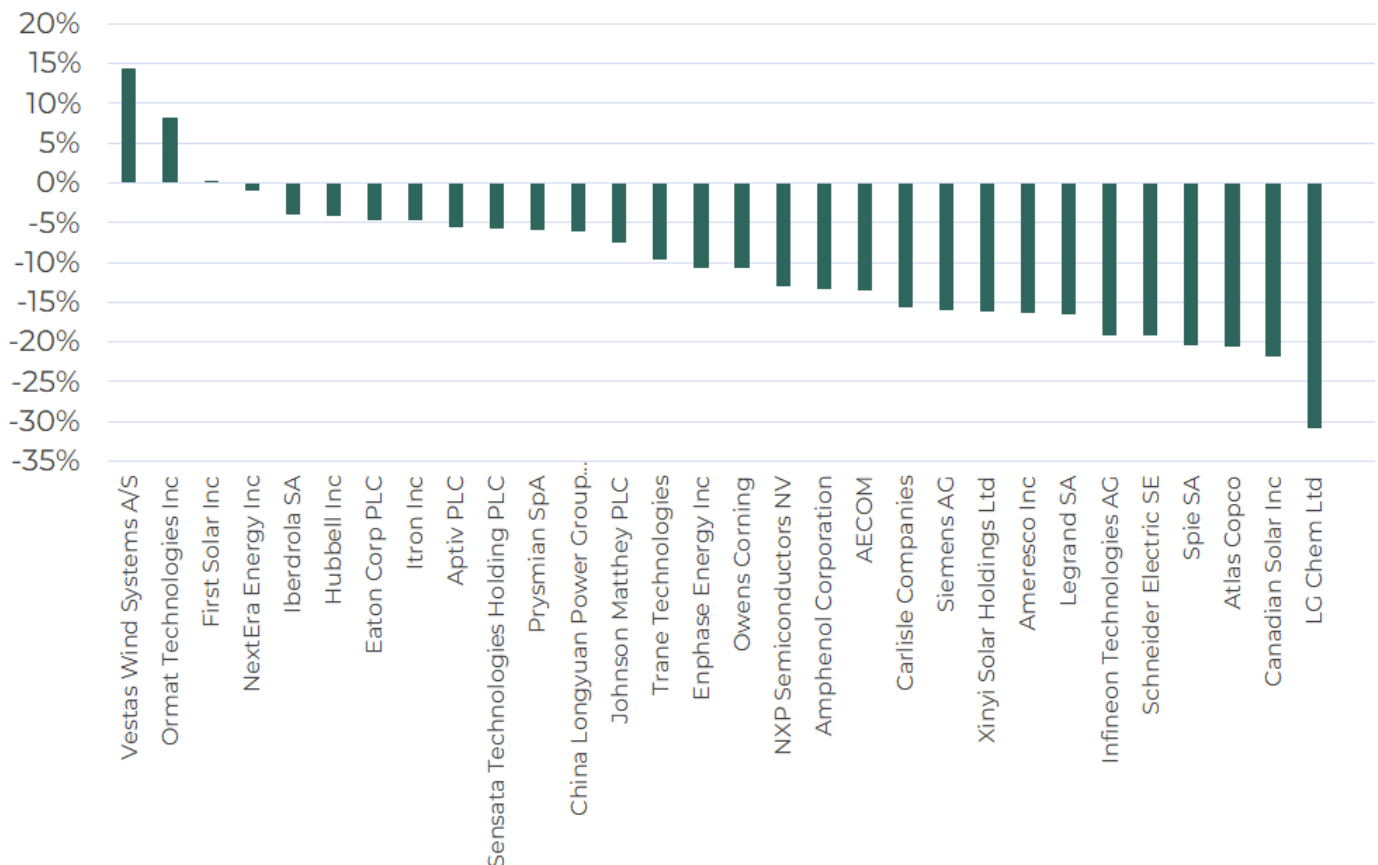
### Q1 2026 contribution for Guinness Atkinson Sustainable Energy ETF



Source: Bloomberg, Guinness Atkinson Funds estimates; data as of March 31, 2026

Within the Fund, the strongest performers were Vestas Wind Systems A/S, Ormat Technologies Inc, First Solar Inc, NextEra Energy Inc and Iberdrola SA, while the weakest performers were LG Chem Ltd, Canadian Solar Inc, Atlas Copco, Spie SA and Schneider Electric SE.

Stock by Stock performance over the month, in USD



Source: Bloomberg. As of March 31, 2026

### Important Information

**MSCI World Index** captures large and mid cap representation across 23 Developed Markets countries. With 1,583 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country.

**Earnings per Share** is a company's net profit divided by the number of common shares it has outstanding. It indicates how much money a company makes for each share of its stock and is a widely used metric for estimating corporate value.

Investing involves risk, including possible loss of principal.

# SOLR

Guinness Atkinson Sustainable Energy ETF

April 2026 Update

**GUINNESS**  
**ATKINSON**  
FUNDS

The Fund's focus on the energy sector exposes it to greater market risk than if its assets were diversified among various sectors. Sustainable energy businesses are subject to various industry risks such as rapid and evolving changes in technology, demand for energy and economic factors as well as governmental policies and regulations. The Fund may invest in multiple countries including emerging markets and international companies which involves different and additional political, social, legal and regulatory risks. The global interconnectivity of industries and companies can be negatively impacted by economic uncertainties, environmental conditions and global pandemics or crises. These events can contribute to volatility, valuation and liquidity issues which could cause the value of the Fund to decline.

***Consider the investment objectives, risks, charges and expenses of the Fund carefully before investing. For a prospectus or summary prospectus with this and other information, please call (866) 307-5990 or visit our website at [www.gafunds.com](http://www.gafunds.com). Read the prospectus or summary prospectus carefully before investing.***

Shares of the Fund are distributed by Foreside Fund Services, LLC.