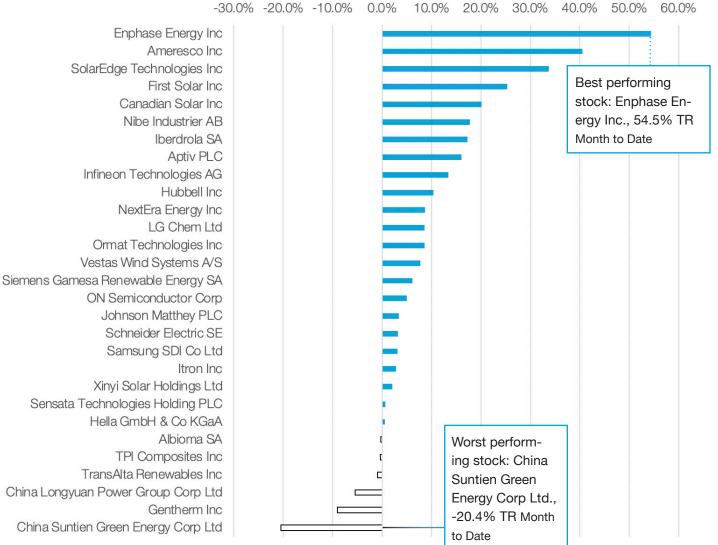


#### as of 10/31/2021

Sustainable energy equities outperformed global stock markets during October. Over the month, SULR delivered a return of 7.51% on (NAV basis), which was ahead of the MSCI World at 5.66%. Year to date, SULR has delivered a return of 17.24% (NAV basis) which was behind the MSCI World at 19.44%.

In the portfolio, the strongest performers were our US solar equipment manufacturers on the back of US President Joe Biden's infrastructure investment proposals supporting higher solar installation levels. EnPhase Energy delivered stronger results and guidance than expected while Ameresco announced a significant new 535MW battery storage project with Southern California Edison (SCE) as well as strong results. Weaker performers included China Longyuan and China Suntien; both companies gave us some recent gains as China enacted measures to solve the power crunch.



Holdings are subject to change.





Smart ETFs



### Portfolio Performance

As of 10/31/2021	1 Month	6 Months	YTD	Since Inception (11/11/20)
SULR at NAV	7.51%	14.25%	17.24%	38.78%
SULR at Market Price	8.59%	15.22%	17.85%	42.60%
MSCI World NR	5.66%	8.78%	19.44%	8.25%
As of 9/30/2021	1 Month	6 Months	YTD	Since Inception (11/11/20)
SULR at NAV	-3.55%	6.65%	9.05%	29.08%
SULR at Market Price	-3.67%	6.31%	8.53%	31.32%

Expense Ratio: 1.91% (gross) | 0.79% (net)

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, 2025.

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 SmartETFs. 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.

### **Interesting News**

Siemens Gamesa has shipped a prototype 14MW offshore wind turbine to its test site. With a weight of 500 tons, the new nacelle has a 14 MW capacity (for comparison, a typical onshore turbine would be around 6MW) and features a 222-meter diameter rotor, 108-meter blades, and a swept area of 39,000 square meters. Separately, in the UK, Iberdrola has committed \$8.24bn to the development of the 3.1GW East Anglia offshore wind farm, its biggest project investment worldwide.

The UK government has allocated £450mn over the next three years to subsidize the installation of 90,000 heat pumps in UK homes. The grant, at around £5,000, is designed to reduce the cost of installing a heat pump to a comparable price for a traditional natural gas boiler. The UK currently has around 25 million natural gas boilers in operation.

New Zealand has become the first country in the world to pass a law forcing financial institutions to disclose and act on climate-related risks and opportunities. The new rules will apply to large insurers, banks, publicly listed companies, listed issuers and investment managers and is designed to "encourage entities to become more sustainable by factoring the



### **Interesting News**

short, medium, and long-term effects of climate change into their business decisions."

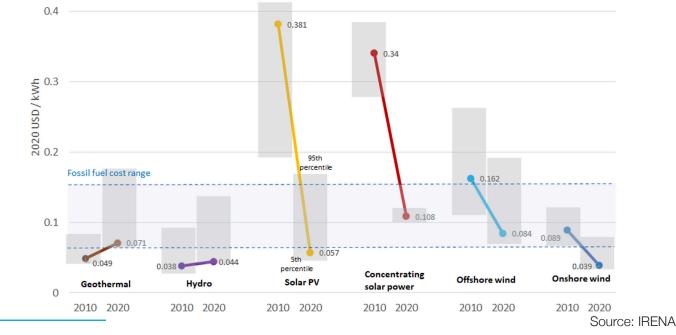
The Global CCS (carbon capture and storage) Institute has reported that the capacity of global planned CCS projects has increased to 111 million tons per annum (mtpa) as of end September 2021, up from 73mtpa at the end of 2020. The plans represent a significant increase on the current global operating CCS capacity of around 40mtpa.

#### Sold on Solar?

### Solar maintains competitiveness despite recent cost inflation

In the words of the IEA, in its World Energy Outlook 2020 "solar power is now the cheapest electricity in history" and this has been achieved via consistently declining solar module costs driven by increases in scale, technology improvements, lower raw material costs and industry concentration. The last twelve months have seen these cost declines reverse, yet solar installations have continued to grow and surprise to the upside. We assess the key factors behind the recent cost inflation and the near-term outlook, and we conclude that the solar industry has a very attractive long term growth outlook ahead of it.

In its "Renewable Power Generation Costs in 2020" study, the International Renewable Energy Agency (IRENA) showed further deflation in renewable power generation costs (in 2020) with all technologies being either in or below the cost range for fossil fuel generation. Solar power continues to show the sharpest decline in levelized cost of electricity (LCOE) supply over the period.



### Global LCOE of Utility-Scale Renewable Power Generation Technologies (2010–2020)



### **Interesting News**

The improved economics are driven by the fact that solar module prices have fallen from US\$1.6/Watt to US\$0.17/Watt over the ten years to the end of 2020, an average annual decline rate of around 20%pa, as a result of manufacturing scale, technology improvements, concentration of suppliers and lower raw material costs. However, module prices have recently been inflating, recording a 36% increase in price since their lows (June 2020) and a 17% increase since the start of 2021 as a result of rising raw material costs and tighter global solar supply and demand dynamics.

### Recent competitive forces on global solar module costs, supply, and demand

There are numerous competing factors, including cost of supply, that have been affecting the supply and demand outlook for solar modules over the last few months. Here, we review the major items and their impact on supply and demand:

#### Higher China electricity prices force raw material supply disruptions and cost inflation

China manufacturers nearly three quarters of all global solar modules. Solar module manufacturing is energy-intensive, and Chinese has used its advantage of low power prices to build a world leading manufacturing position over the last ten years. However, Chinese power prices have risen sharply in 2021, driven by coal and liquified natural gas prices that have more than tripled, and have caused supply shortages and raw material cost inflation as follows:

• The Chinese government has forced factories in a number of provinces (including Qinghai, Xinjiang, and Yunnan, where silicon metal and solar-grade polysilicon is made) to shut down in order to conserve power. China produces 70% of the world's metallurgical grade silicon and the disruption has caused some significant short-term issues in the solar supply chain.

• The price of metallurgical grade silicon rose from a long-term level of around \$2.40/kg in August 2021 to over \$10/kg at the end of September, predominantly following the Yunnan government's plan to reduce silicon metal production by 90% for the remainder of 2021 (Yunnan produces 20% of Chinese metallurgical silicon). The price of solar-grade polysilicon (which represents about 12% of the cost of a solar module) has tripled year to date 2021.

In our opinion, the power crunch is likely to be short-term in nature as China incentivizes new coal-fired power supply to balance the power market, thus allowing it to relieve restrictions on power consumptive industries such as polysilicon. We believe that the solar manufacturing industry is a strategic industry for China and that it will be among the first to return to normality once the short-term crunch is overcome. There are signs that this is already starting to happen.

#### US China relations around solar imports

The US represented around 13% of 2020 global solar module demand, with a large proportion being imported from Asian countries. On June 24, 2021, the US government enacted a "Withhold Release" order (WRO) that explicitly banned the import of "silica-based products" with ties to Hoshine Silicon (a company that represents 50% of the metal-lurgical grade silicon supply in China). This has since been followed up with the threat of an anti-circumvention order to ensure that Chinese polysilicon is not imported via finished solar products from a range of Asian countries, including Vietnam, Thailand, or Malaysia. The steps this year follow a number of prior steps taken by the US government, including a 30% tariff on imported solar cells and modules that was introduced in 2018.



#### **Interesting News**

As of early November 2021, we understand that the WRO has affected solar modules exported to the US by some of the larger Chinese solar module exporters (including Jinko Solar, Trina Solar and LONGi). Lower module imports are starting to have an effect on US solar developers that are having to delay or cancel projects because of lack of solar modules. However, with the US representing only 13% of global solar installations, we do not believe that the WRO, or the threat of the further anti-circumvention measures, will have a significant effect on global solar installations in 2021 or 2022.

#### Cost inflation among competing forms of power generation

In isolation, we would assume that higher solar module prices (because of higher raw material prices and supply constraints) would cause lower solar module demand. However, as coal and natural gas prices have all increased during 2021, the cost of operating existing fossil power generation facilities has also increased and the economics of building new fossil power generation projects have also worsened. A likely outcome is that, despite higher costs, renewable sources such as solar could appear relatively more attractive as an investment opportunity for utilities than they had previously been.

We believe that this issue is relevant on a global basis. In Europe, electricity prices (baseload forward year 1) in Spain, Germany and France have increased 50-80% since June 2020 meaning that the payback for solar projects has become relatively much more attractive. In addition, China has increased its coal tariff (the amount that is paid for coal-fired power) in order to stimulate more supply, but this has indirectly benefitted the solar industry as solar project Feed-In-Tariffs are linked to coal tariffs.

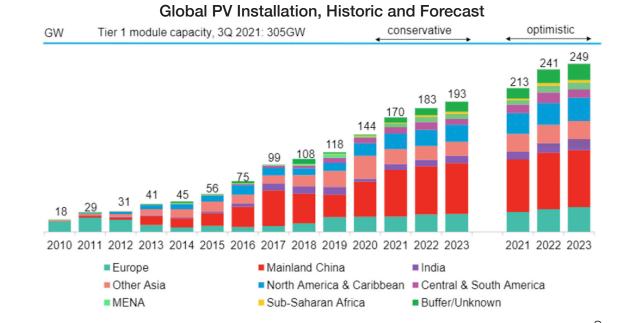
### Updated outlook for solar installations

Despite COVID, global solar installations have continued to surprise to the upside. In late 2019, Bloomberg New Energy Finance (BNEF) published a mid-point forecast of 143GW in 2021 but that has increased to a current estimate of 191GW, a 34% increase to the estimate made in late 2019. China has maintained its dominance in the market, representing nearly forty percent of the new demand forecast and around 45% of the demand estimate increase.

While we see some small downside risk for 2021 due to Chinese silicon supply and US solar import restrictions mentioned earlier, we believe that these issues will likely be short-term in nature and de-minimis in scale as the underlying economic benefits of solar continue to improve. Looking into 2022 and 2023, we reference the current BNEF mid-point forecast of 212GW and 221GW respectively.



#### **Interesting News**



Source: BNEF

Even if the current supply and import restrictions persist beyond the end of this year, we see room for these 2022 and 2023 forecasts to increase. Supporting our view, we note:

At the 15th meeting of the Conference of the Parties to the Convention on Biological Diversity (COP15) in October 2021, Chinese Premier Xi Jinping gave more clarity on how China would meet its climate targets over the coming years. We interpret his comments as implying Chinese annual solar installations in the range of 130-150GW, equivalent to total global PV installations in 2020 and a large 80-100GW increase on China's 2020 installations of 50GW.
With COP26 ongoing as we write this comment, we also highlight that our view, based on IPCC science, implies an even more substantial near-term increase in solar installations. Our estimates imply annual solar installations would need to be 325GW in 2023, rising to 450GW in 2025 and 650GW in 2027 with the annual growth rate being over 22%pa out to 2030.

Ultimately, we believe that the outlook for solar industry remains very robust, despite the near-term cost and supply issues that the market is currently facing. We believe that underlying economics will win, and that solar will gain increasing market share of global electricity generation (supported by storage technologies) with it becoming more dominant than coal fired power generation in around ten years' time.



### There's more where that came from!

Have you signed up for our FREE monthly newsletter? We send out great content (like this monthly update) that lots of people love. Sign up today and you could win a free subscription to our newsletter! Join us at <u>SmartETFs.co/newsletter</u>.

Tired of emails? Follow us on Twitter @SmartETFs! We've always got something to say.

#### Disclosure

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.

Investing involves risk, including possible loss of principal.

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 polices 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.SmartETFs.com. Read the prospectus or summary prospectus carefully before investing.

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