

## **2023 Year End CIO Letter**

### ***Parabolic Growth at Early Pandemic Valuations***

If clean energy was ever out of favor, 2023 was certainly the year we experienced it. Despite our companies' attractive fundamentals, our strategies were not immune to a sharp reversal of sentiment. Our Climate Action Strategy returned 3.3% and our Climate Adaptation Strategy returned 16.1% net of fees in 2023, below MSCI World Index's 23.8%, but outperforming the Wilderhill Clean Energy Index's *negative* 22.0%. Climate Adaptation's stronger returns were supported by additional diversification within infrastructure, and both strategies materially outperformed their climate peers. After 2023, our annualized outperformance since inception versus MSCI World is 11.5% for Climate Action and 9.5% for Climate Adaptation net of fees.\*

To focus on Climate Action, our strategy's modestly positive return masked a sharp divergence between sectors, with sustainable building materials up significantly, while utilities, mining, clean technology, and industrials posted negative returns. On the positive side, many of our stock picks within those negative sectors defied those adverse sector trends. Within each sector, we are happy to report significant winners, including Tesla, onsemi, Owens-Corning, Eaton, Saint Gobain, Lennox International and Constellation Energy. These positive contributions, however, were partially offset by a few large decliners. In particular, several holdings disproportionately weighed on our performance (Nextera Partners, TPI Composites, Alstom and AES). Finally, timely additions and trims of stocks such as HASI, ABB, Enphase and BYD, consistent with our disciplined valuation methodology, helped minimize the impact of an unprecedented level of volatility.

#### **The Year in Context**

While we were disappointed by our underperformance relative to the MSCI World, it is worth pointing out that a disproportionate amount of the benchmark's returns were driven by a handful of stocks (the Magnificent Seven), which currently account for ~30% of the index. Such concentration has not been witnessed since early 2000, the peak of the dot com bubble.

In contrast with these cash-rich mega-cap behemoths, largely the beneficiaries of a flight to perceived quality, our capital-intensive companies suffered a sharp reversal of sentiment, accentuated by each hawkish message by the US Federal Reserve. Concerns about persistent inflation, culminating in calls for Fed fund rates to rise to 6-7%, took our strategy into negative territory from August through October. With 80% of equity flows estimated to originate from passive strategies, indiscriminate selling was visible across the entire asset class. This happened despite our holdings being industry leaders with ample access to capital, low-cost structures, large moats, and an ability to make up price declines with volume increases.

This adverse market environment stood in stark contrast with the strength of the demand for our companies' products and services. We view this weakness in climate oriented stocks as a massive sentiment-based over-reaction to concerns over higher interest rates and slower than expected deployment of IRA funds.

In short, our companies are not reliant on the Inflation Reduction Act ("IRA") funds to be successful. While an increase in rates from 5% to 7% is meaningful in an absolute sense, it is largely irrelevant relative to the parabolic demand growth trajectories for our companies' products and services. As the following charts demonstrate, there was no sign of slowing demand for these end-markets. Let's address them one by one.

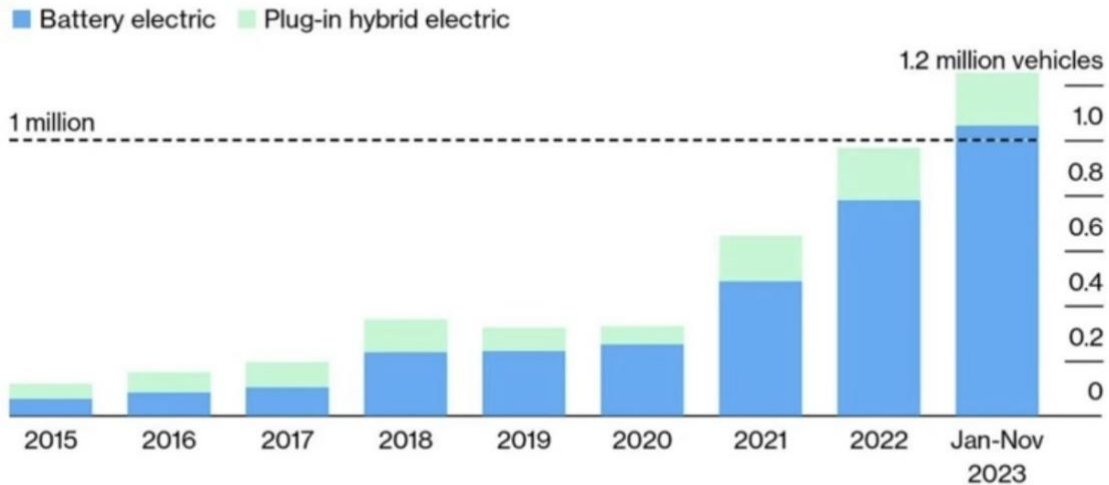
\*Inception dates for Veridien Climate Action Strategy is March 31, 2019 and Veridien Climate Adaptation is April 30, 2019

## EV Market

While media attention focused on GM, Ford and Stellantis' delayed EV transition, these companies are far from driving the transition. Their collective target "misses" barely made a dent in the EV industry growth rates. In the US, EV demand accelerated to reach 50% growth for January-November. In the European Union, where EV penetration of 17% is now double that of the US, EV sales grew at 40% over this period.

### US All-Electric Vehicle Sales Pass the 1 Million Mark

Passenger EV sales by drivetrain



Source: BloombergNEF, MarkLines

Note: 4Q 2023 sales include preliminary data for October and November 2023.

BloombergNEF

### Battery electric vehicle sales in the European Union

Cumulatively over the first 11 months (Jan to Nov)

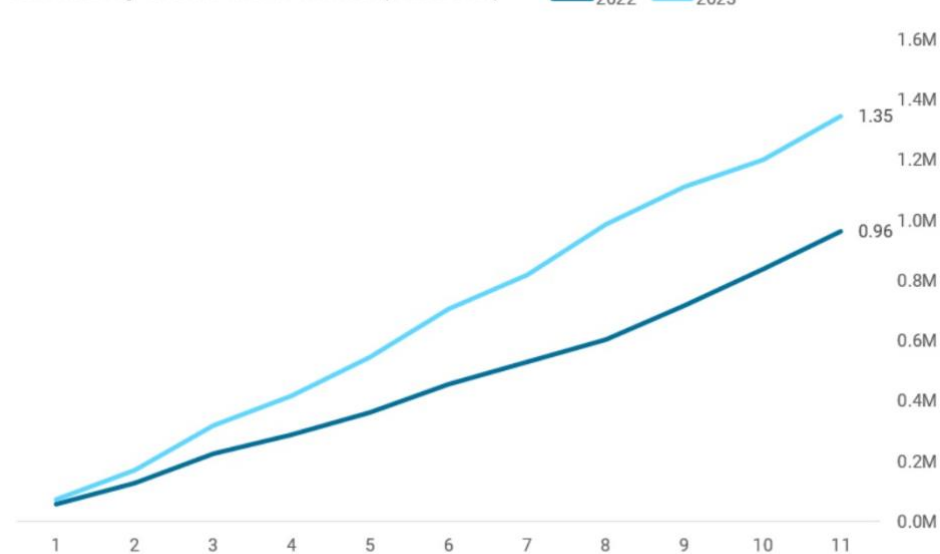


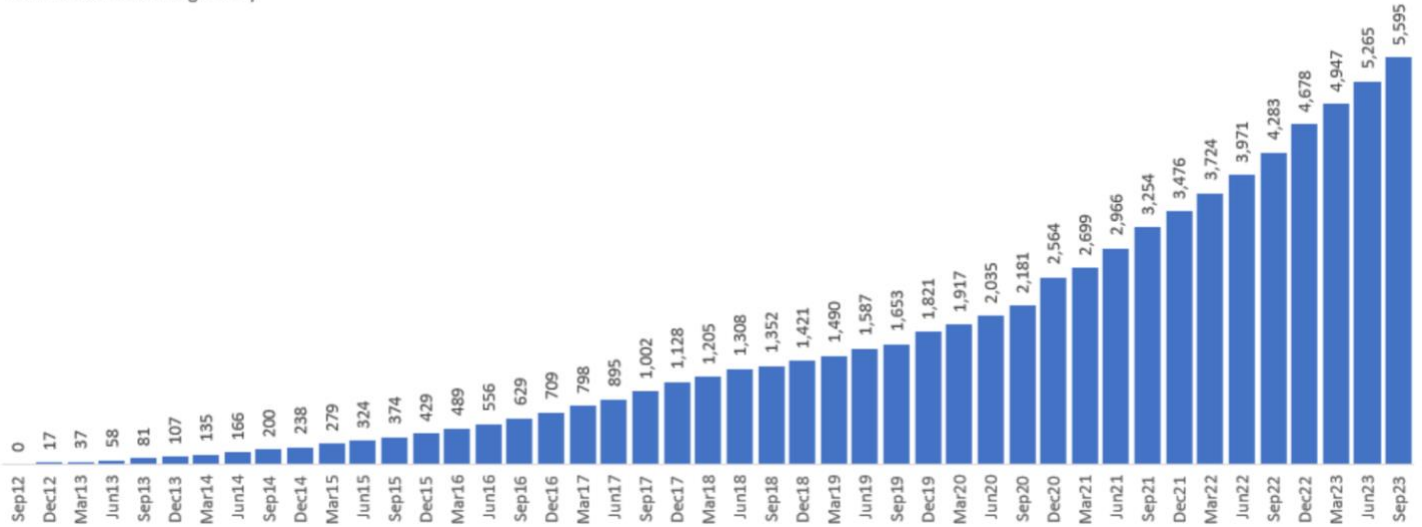
Chart: AJ @alojoh • Source: European Automobile Manufacturers' Association • 20-Dec-2023.

## Electric Charging

With increased talk of range anxiety, it is worth considering the speed of deployment of charging stations around the world by all participants including, but not limited to, Tesla. While the US has essentially entrusted Tesla with a de-facto standard (the North American Charging Standard, or NACS), the rest of the world is quickly catching up.

### Tesla Supercharger Network

Number of stations globally



## Solar

Solar remains the fastest growing source of electricity production, with record installations in 2023, as per the latest estimates by BNEF (Nov 29, 2023).

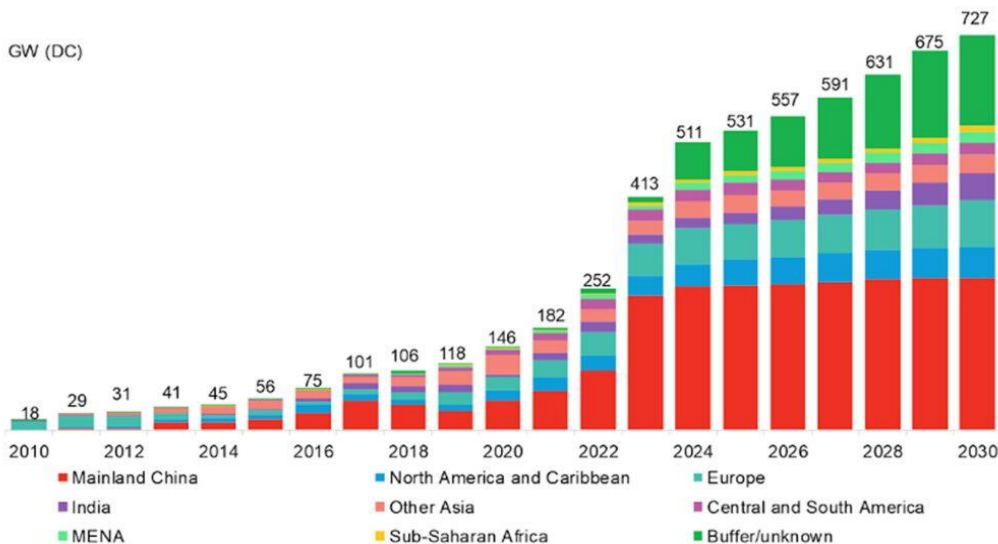


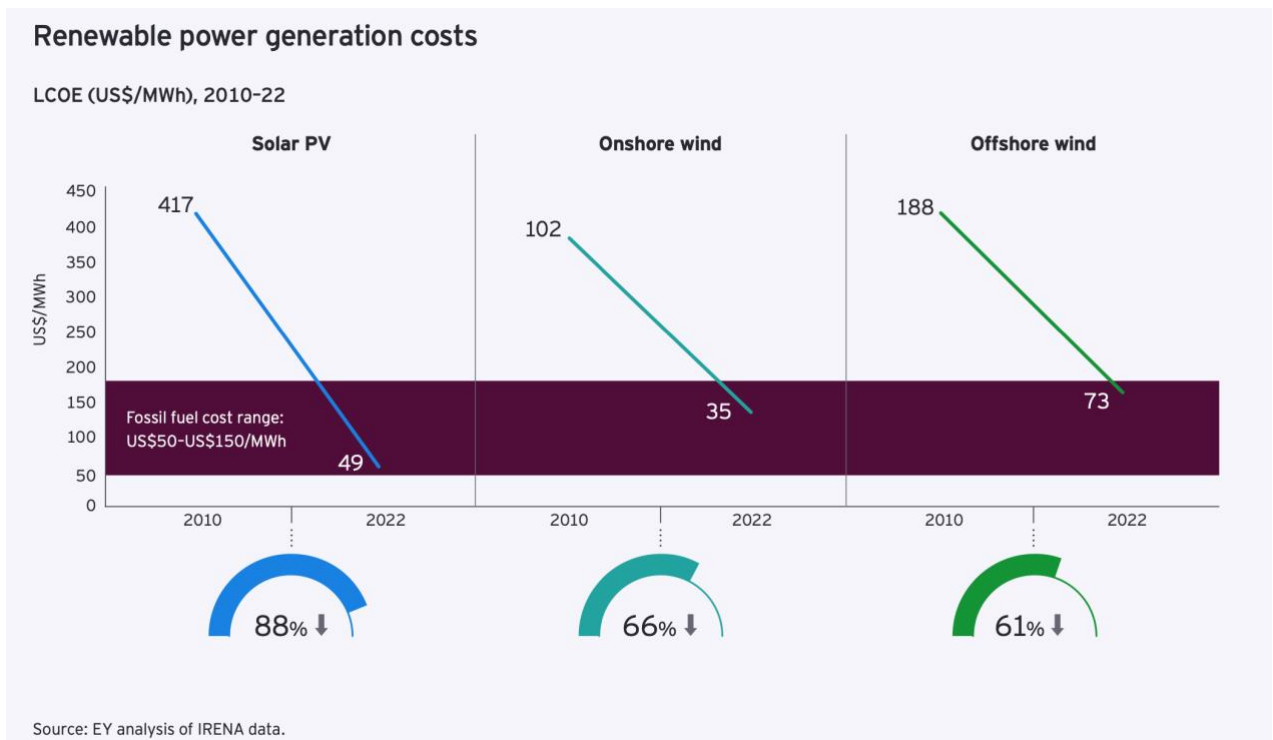
Image: BloombergNEF

If the above preliminary estimates for 2023 solar installations are accurate, global solar installations will have grown by 58% in 2023, up from their prior record growth of 42% in 2022. A clear win!

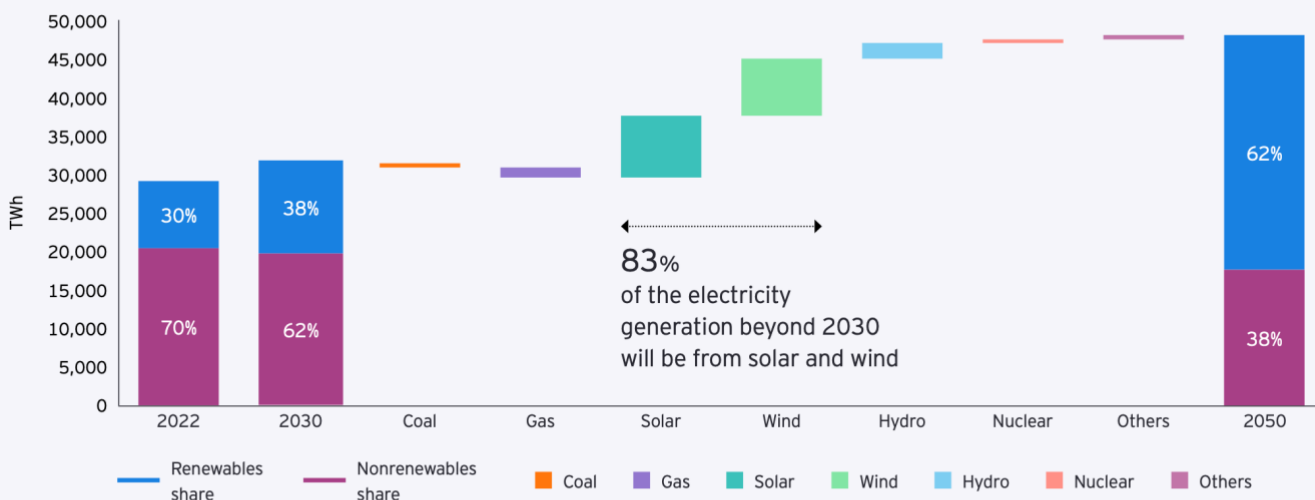
It is worth noting that the above graph projects a slower growth rate in 2024 and beyond, a pattern already observed in prior years when both BNEF and the IEA were forced to significantly revise up their estimates. What did they miss? China's stellar growth, driven by solar module prices moving closer to \$0.10/W. With polysilicon prices reaching a new low in December 2023, experts from Bernreuter Research predict global demand to reach 1.1 TW in 2027, double the level estimated by BNEF above.

## Wind

There was no shortage of bad news from the wind industry in 2023, mostly focused on offshore wind and Orsted and Siemens Energy (none of which were held in our strategy). Still, it's worth pointing out that onshore wind is still reporting solid growth for 2023 and beyond.



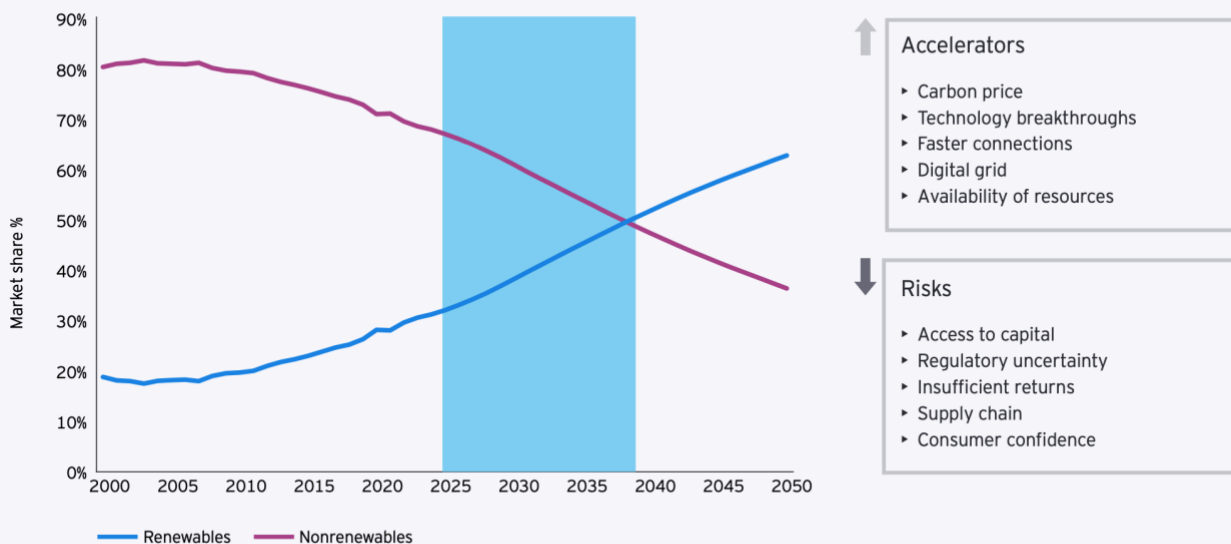
### Change in global electricity generation mix (TWh), 2022-50



Others: biomass, combustion turbine, hydrogen turbine and CCUS.

Source: EY analysis of ERTA model data.

### Share of nonrenewables and renewables in global power generation (%), 2000-50



Note: Fossil fuels include coal, gas and other fossil fuels.

Source: EY analysis of ERTA model data, data from IRENA Renewable Energy Capacity Statistics 2023, Ember Electricity Data Explorer 2023.

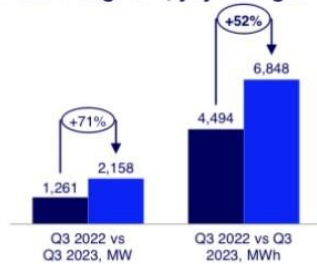
It is also helpful to reflect on the drivers behind the industry's growth. As the above charts illustrate, a tipping point has been reached in the respective cost curves of wind and solar vs. fossil fuels. This bodes well for future installations of renewables globally.

## Energy Storage

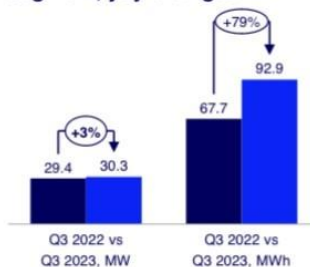
Despite doomsday predictions on the state of the US storage energy market, growth in utility-grade, commercial and industrial deployments (up 69.6%) more than made up for a flat residential market. As the following charts illustrate, the size of the residential storage is too small to impact the overall industry's significant growth, both in 2023 and beyond.

### Q3 2023 US energy storage deployments year-over-year scorecard

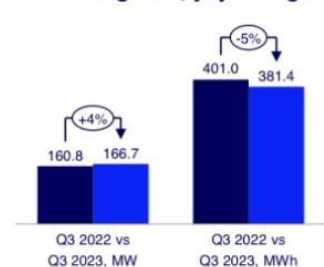
**Grid-scale segment, yoy changes**



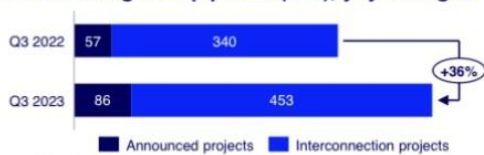
**CCI segment, yoy changes**



**Residential segment, yoy changes**



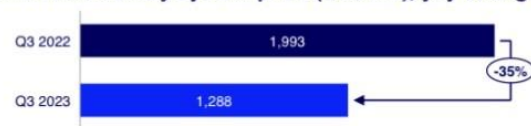
**Grid-scale segment pipeline (GW), yoy changes**



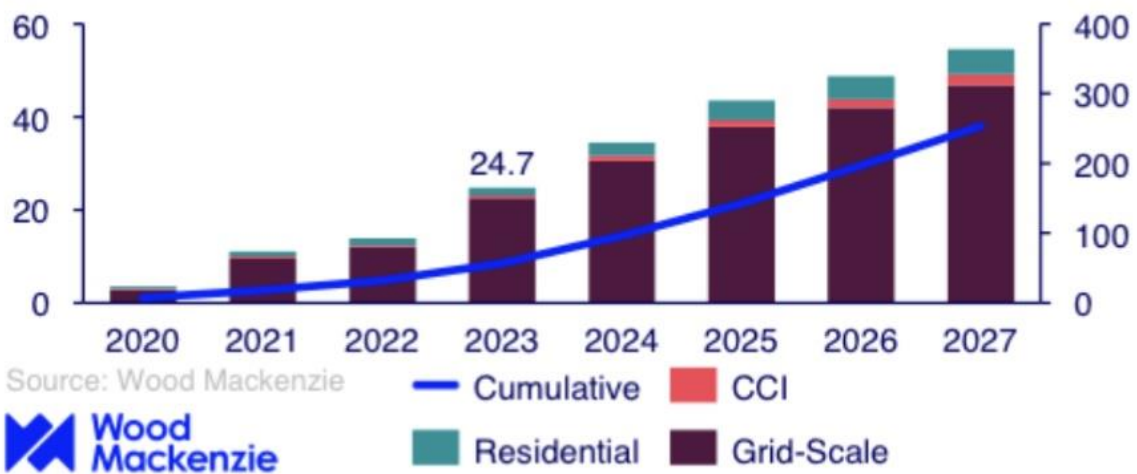
Source: Wood Mackenzie



**Grid-scale battery system price (US\$/kW), yoy changes**



### Annual and cumulative market outlook (GWh)



Source: Wood Mackenzie



— Cumulative  
 ■ CCI  
 ■ Residential  
 ■ Grid-Scale

## A Word on AI

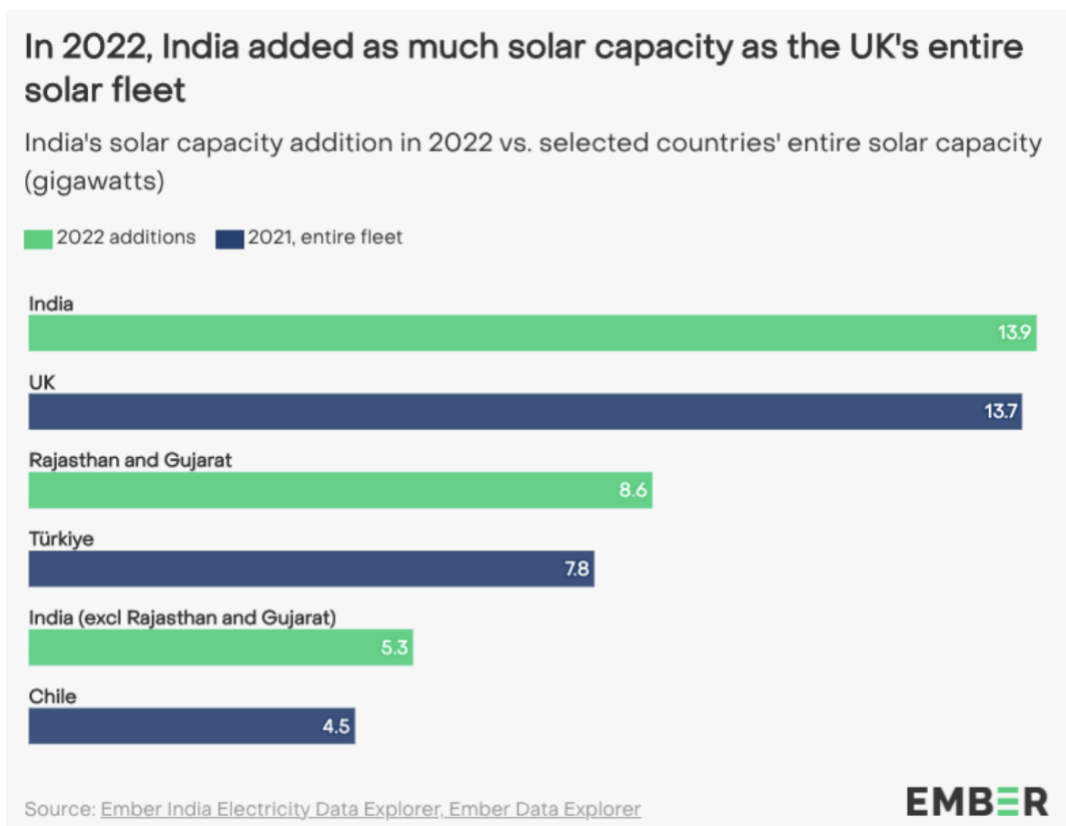
We owe it to our readers to mention one of the greatest developments of 2023: Generative AI. Why? Because yet again, our stocks do not reflect upside from its significant benefits. Yet the applications to climate mitigation seem infinite, whether applied to wind and solar patterns, grid resilience, robotics, smart agriculture and energy efficiency. Our companies also happen to be the largest suppliers of clean energy to data centers, a new hyper-growth market.

## 2024 and Beyond

Looking ahead, the above trends are expected to be sustained and even reinforced, with the conclusions COP-28, published Dec 5th. In particular:

1. Solar and wind installed capacity in the US and Europe is scheduled to triple by 2040
2. Nuclear capacity is also expected to triple by 2050
3. Countries are expected to transition away from fossil fuels, with oil and gas companies committing increasing amounts to renewables, hydrogen, and carbon capture.

As an illustration of the above, let's mention one of the fastest growing renewable energy markets in the world, India, whose installation of solar and wind energy alone already represented over 90% of all capacity additions in 2022:



With 2024 bringing heightened concerns about the US elections, it is worth reflecting on our strategy's exposure. This is the time to apply an old adage from the value investment community: "The best catalyst is no catalyst". To which we would add "except for capitulation". Indeed, much negativity seems to be priced in, while accelerating secular growth trends do not appear to get any attention. This is typically a great buy signal.

As in prior cycles, clean energy stocks have found themselves in the crossfire of political tensions. After much hope and excitement, the market appears to have given up on the \$369 billion IRA and the Department of Energy's \$500 billion Loan Program Office ("LPO"). While none of our holdings depend on government financing, most of our US-based companies qualify for IRA tax credits or DoE funding. Interestingly, very few have received any form of support so far (First Solar being the most notable exception).

While IRA guidelines and DoE due diligence continue to be delayed, and government spending comes under increased scrutiny, estimates for 2024 and beyond, with their associated multiples, remain depressed. As a result, valuation multiples have barely moved up from their October lows. These multiples were last seen in March 2020, a time of intense pandemic-induced stress, and during the Great Financial Crisis of October 2008–March 2009. We view these excessively low multiples as unjustified given our companies' leadership positions in their respective markets, access to financing and strength in their end-markets.

We expect the upcoming earnings season to bring our strategy back in focus. Our companies' have growing backlogs of orders, accelerating demand, multiple sources of financing, and confidence in long-term secular trends. These fundamentals are in stark contrast with their undemanding valuation multiples. We believe this mix will deliver sustainable and compelling returns for our investors.

Thank you for your support and interest in Veridien Global Investors. We wish you a happy, healthy, and prosperous 2024.

*Ariane Mahler*

Contact Information:  
Barney Walker, Principal:  
[bwalker@veridiencp.com](mailto:bwalker@veridiencp.com)

John Dewey, Principal:  
[jdewey@veridiencp.com](mailto:jdewey@veridiencp.com)



## GIPS COMPOSITE REPORT

Year End	Total Firm Assets (USD) (Thousands)	Composite Assets (USD) (Thousands)	Number of Portfolios	Composite Returns Pure Gross**	Composite Returns Net	MSCI ACWI Benchmark Returns	MSCI World Index Benchmark Returns	Composite Dispersion	Composite 3-Yr Std Dev	MSCI ACWI Benchmark 3-Yr Std Dev	MSCI World Index Benchmark 3-Yr Std Dev
2022	364.52	177.69	≤5	-6.95%	-7.73%	-18.41%	-18.15%	N/A <sup>1</sup>	30.20%	20.24%	20.43%
2021	N/A <sup>3</sup>	133.70	≤5	15.45%	14.47%	18.20%	21.81%	N/A <sup>1</sup>	N/A <sup>2</sup>	N/A <sup>2</sup>	N/A <sup>2</sup>
2020	N/A <sup>3</sup>	116.42	≤5	89.02%	87.42%	16.26%	15.90%	N/A <sup>1</sup>	N/A <sup>2</sup>	N/A <sup>2</sup>	N/A <sup>2</sup>
2019*	N/A <sup>3</sup>	62.12	≤5	27.22%	26.41%	12.52%	13.52%	N/A <sup>1</sup>	N/A <sup>2</sup>	N/A <sup>2</sup>	N/A <sup>2</sup>

NA<sup>1</sup> - Composite dispersion is not presented for periods with five or fewer portfolios in the composite for the entire year.

NA<sup>2</sup> - The three-year annualized standard deviation is not presented for periods before 36 consecutive months of data is available.

NA<sup>3</sup> - Performance achieved prior to inception of the firm.

\* Performance is for a partial period from April 1, 2019 to December 31, 2019.

\*\* "Pure" gross-of-fees returns do not reflect the deduction of any expenses, including trading costs and are presented as supplemental information.

Period - As of 12/31/2022	Pure Gross Returns**	Net Returns	MSCI World Index Returns	MSCI ACWI Returns
1-Year	-6.95%	-7.64%	-18.15%	-18.41%
Since-Inception	28.80%	27.84%	7.51%	6.39%

\*Since-inception performance is calculated for the period beginning April 1, 2019.

\*Performance is annualized for periods greater than 1 year.

\*\* "Pure" gross-of-fees returns do not reflect the deduction of any expenses, including trading costs and are presented as supplemental information.

***Climate Action Equity Strategy Composite: The Climate Action Equity Strategy is focused on investing in companies that contribute to and benefit from the decarbonization megatrend. This strategy takes a diversified global approach though clearly defined themes using a rotation of the portfolio managers best ideas identified through our market price versus derived Risk-Adjusted Target Price (RATP) process. Key risks of this strategy include the possibility of underperforming the strategy's benchmark. The Climate Action Equity Strategy composite is compared against the MSCI World Index and the MSCI ACWI. The Climate Action Equity Strategy composite has a minimum of \$10,000. The Climate Action Equity Strategy composite was created in July 2022 and incepted on April 1, 2019.***

Veridien Global Investors LLC ("Veridien") is a registered investment adviser with the United States Securities and Exchange Commission in accordance with the Investment Advisers Act of 1940. The Veridien Global Investors LLC entity was created in August 2022 with proprietary assets that incepted in March 2019 for the purpose of creating a track record for the Climate Action Equity strategy. The firm's full list of composite descriptions is available upon request.

Veridien claims compliance with the Global Investment Performance Standards (GIPS<sup>®</sup>) and has prepared and presented this report in compliance with the GIPS standards. Veridien has been independently verified for the periods April 1, 2019 through June 30, 2022.

A firm that claims compliance with the GIPS standards must establish policies and procedures for complying with all the applicable requirements of the GIPS standards. Verification provides assurance on whether the firm's policies and procedures related to composite and pooled fund maintenance, as well as the calculation, presentation, and distribution of performance, have been designed in compliance with the GIPS standards and have been implemented on a firm-wide basis. The Climate Action Equity Strategy has had a performance examination for the periods April 1, 2019 through June 30, 2022. The verification and performance examination reports are available upon request.

Results are based on fully discretionary accounts under management, including those accounts no longer with the firm. Composite and benchmark performance is presented net of foreign withholding taxes on dividends, interest income, and capital gains. Bundled fees include Commonwealth charges of 0.75% for their services which includes transaction fees together with other administrative expenses. Returns presented gross of this fee are considered "Pure Gross" and are presented as supplemental information. Past performance is not indicative of future results. Returns include the reinvestment of all income.

## GIPS COMPOSITE REPORT

The currency used to express performance is USD. Pure gross-of-fee returns are not reduced by any trading costs or management fees. Net-of-fee returns are reduced by a model management fee and bundled fee of 85 bps. The annual model management fee is applied on a monthly basis, by deducting 1/12th of the model fee from the monthly gross returns. This composite is comprised of 100% non-fee-paying portfolios for all portfolios presented. Composite dispersion is measured by the asset-weighted standard deviation of annual pure gross returns of those portfolios included in the composite for the full year. The 3-year annualized standard deviation measures the variability of the composite pure gross returns and benchmark returns over the preceding 36-month period. Policies for valuing investments, calculating performance, and preparing GIPS Reports are available upon request.

The investment management fee schedule for the composite is tiered at: Up to \$50mm: 85bps, next \$50mm: 75bps, greater than \$100mm: 65bps.

The Climate Action Equity Strategy composite is 100% bundled fee paying for all periods presented.

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In May 2023, it was identified that 2022 total firm assets were understated. The 2022 total firm assets have been updated to reflect the corrected amount.

### **Benchmarks:**

**MSCI World Index** - The MSCI World Index is a broad global equity index that represents large and mid-cap equity performance across all 23 developed markets countries. It covers approximately 85% of the free float-adjusted market capitalization in each country.

**MSCI ACWI IMI** - The MSCI ACWI Investable Market Index (IMI) captures large, mid, and small cap representation across 23 Developed Markets (DM) and 24 Emerging Markets (EM) countries\*. With 9,144 constituents, the index is comprehensive, covering approximately 99% of the global equity investment opportunity set.