Sierra Club Green Alpha

March 31, 2026

Green Alpha®

Why Sierra Club Green Alpha?

- Active research, stock selection, and portfolio mgmt
- Leverage Green Alpha's Next Economy™ insights alongside Sierra Club's renowned sustainability criteria
- Gain exposure to 30-50 market leaders solving critical economic and environmental challenges

Inception Date: December 31, 2010

Vehicle: Separately Managed Accounts

Investment Philosophy

The driving forces behind economic growth are:

- companies accelerating economic productivity gains, and
- businesses addressing risks of macro concern.

High-performing enterprises revolutionize efficiency while simultaneously developing solutions for critical issues like climate change, resource degradation, economic inequality, and human disease burdens. In doing so, they create economic expansion and actualize a more de-risked and equitable future. These innovative companies offer the most promising investment opportunities, providing security and growth potential for our clients' capital.

Since 2008 we have focused on identifying and investing in businesses that are developing brilliant, scalable, adaptable, and economically better solutions to global challenges.

Research

We select companies for our portfolios based on:

- *Impact*: Businesses offering innovative solutions to critical economic, environmental, and other global challenges.
- *Innovation Leadership*: Companies investing heavily in R&D, intellectual property, and capital expenditures.
- *Strong Management*: Diverse, effective teams aligned with long-term value creation, who are demonstrating revenue growth, expanding profit margins, and potential dividend increases.
- *Financial Health*: Businesses with robust balance sheets and coverage ratios, and smart capital allocation strategies.
- *Value*: Companies whose stock prices offer attractive entry points relative to proven performance and growth prospects.

These and other factors help us construct portfolios that aim for strong returns and build a more sustainable economy. We concentrate on long-term success in an evolving landscape.

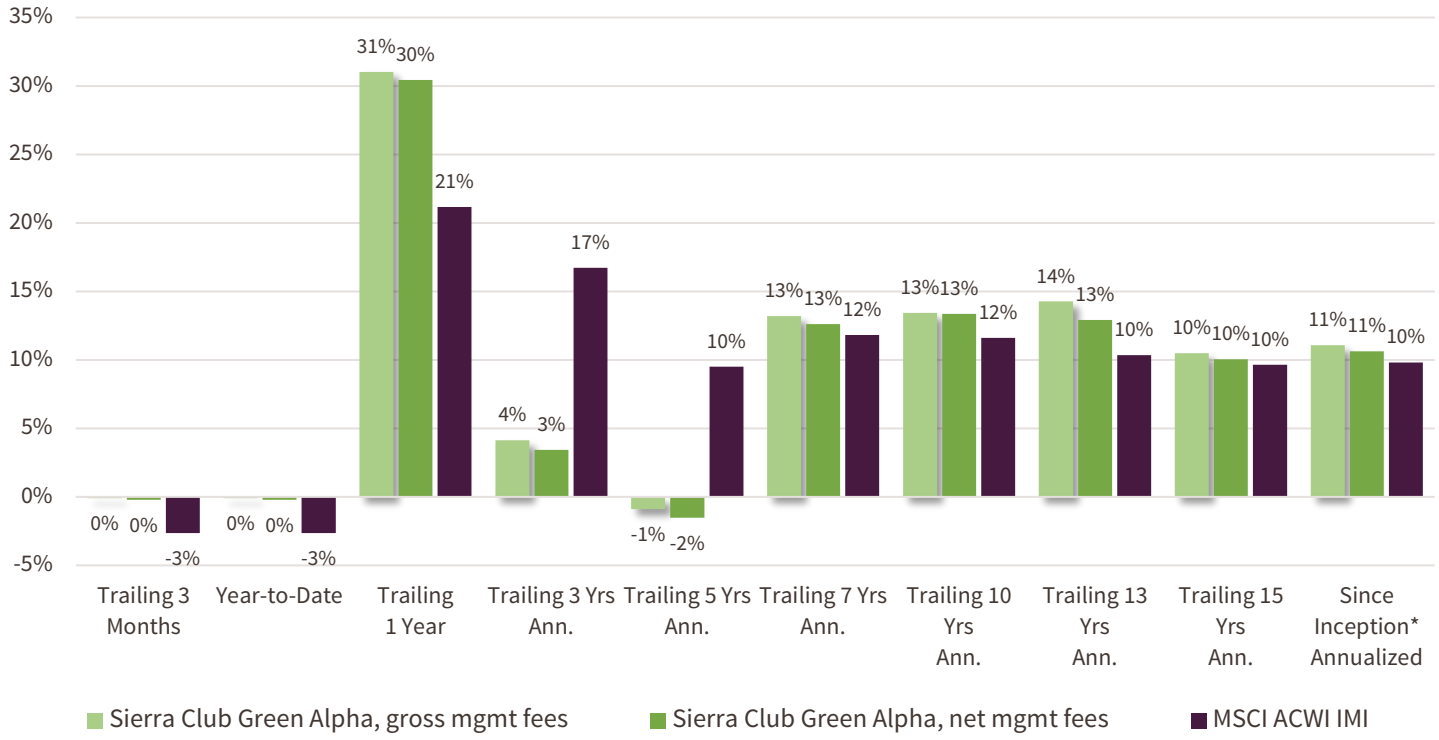
Portfolio Construction

Green Alpha has exclusive rights to utilize the Sierra Club's stringent environmental criteria, which we then apply to our Next Economy™ methodology. This unique collaboration ensures:

1. Forward-looking alignment with Sierra Club's vision
2. Historical compliance vs. rigorous guidelines
3. Selection of high-impact companies driving sustainability

Every holding represents a cutting-edge solution actively shaping the transition to a sustainable economy. Our portfolio not only anticipates future trends, but also upholds a proven track record of environmental and social responsibility, as validated by Sierra Club's exacting standards.

Portfolio Performance & Attribution



Year-to-Date Sector Attribution by Bloomberg Industry Classification Standard	Average Weight (%)		Total Return (%)			Contribution to Return (%)		
	Portfolio	MSCI ACWI IMI (SPGM)	Portfolio	MSCI ACWI IMI (SPGM)	+/-	Portfolio	MSCI ACWI IMI (SPGM)	+/-
Technology	**33.79**	**24.59**	**7.90**	**-6.32**	**14.22**	**2.35**	**-1.58**	**3.94**
Industrials	**5.17**	**12.20**	**54.18**	**4.80**	**49.38**	**2.02**	**0.50**	**1.49**
Utilities	**4.57**	**2.25**	**4.84**	**7.42**	**-2.58**	**0.20**	**0.16**	**0.04**
Cash	**5.70**	**0.41**	**0.00**	**1.67**	**-1.67**	**0.00**	**0.01**	**-0.01**
Real Estate	**8.17**	**1.81**	**-2.21**	**1.14**	**-3.35**	**-0.17**	**0.02**	**-0.19**
Materials	**2.94**	**4.86**	**-8.47**	**8.05**	**-16.51**	**-0.23**	**0.35**	**-0.59**
Financials	**1.34**	**17.41**	**-31.54**	**-5.91**	**-25.62**	**-0.45**	**-1.02**	**0.56**
Health Care	**8.59**	**8.84**	**-6.90**	**-3.98**	**-2.92**	**-0.60**	**-0.34**	**-0.25**
Energy	**17.54**	**4.10**	**-5.46**	**34.86**	**-40.32**	**-0.88**	**1.22**	**-2.09**
Consumer Discretionary	**5.35**	**9.22**	**-18.89**	**-8.60**	**-10.28**	**-1.04**	**-0.79**	**-0.24**
Consumer Staples	**6.84**	**5.47**	**-16.85**	**4.33**	**-21.19**	**-1.27**	**0.22**	**-1.47**
Communications		**9.05**		**-9.72**	**9.72**		**-0.90**	**0.90**
Government		**0.19**		**0.85**	**-0.85**		**0.00**	**0.00**

**Portfolio Inception: December 31, 2010. All returns presented above that are greater than 1 year in length have been annualized. Performance data quoted represents past performance. Past performance does not guarantee future results and current performance may be lower or higher than the data quoted. The sector attribution table is supplemental to the fully compliant composite returns presented at the top of the page. Please see the final page of this document for additional important disclosures.*

Macroeconomic Commentary

> The concatenation of tariff-driven stagflation risk with a war-driven energy shock is the kind of scenario that stress tests portfolio construction at a fundamental level. Portfolios built around legacy fossil fuel dependency and conventional supply chain assumptions are exposed to both vectors simultaneously. Portfolios built around the Next Economy thesis are exposed to neither.

The Quarter in Which the Bill Came Due

The first quarter of 2026 will be remembered as the period in which several long-accumulating risks stopped being theoretical and started being priced. The S&P 500 finished Q1 in negative territory. Oil prices surged past $120 per barrel after Iran closed the Strait of Hormuz in early March. The Supreme Court struck down the administration's primary tariff authority in a 6–3 ruling. And the United States, in concert with Israel, launched a war against Iran that has now destabilized energy markets, disrupted roughly one-fifth of global seaborne oil trade, damaged critical LNG infrastructure in Qatar, and introduced the most severe supply disruption since the 1970s energy crisis.

Against this backdrop, the majority of our Next Economy strategies outperformed the benchmark in Q1, with final performance figures accompanying this commentary on our portfolio snapshots. The Next Economy Portfolio and AnthroIQ were exceptions, trailing the benchmark for the quarter. We consider the broader pattern of results not an anomaly but a structural outcome of doing what we have always said we do: owning the companies solving systemic risks rather than the companies creating or depending on them.

The question clients are asking—*how are you going to navigate this?*—deserves a direct answer: we have been navigating it. For seventeen years, we have positioned capital on the premise that a global economy built on extractive, carbon-intensive, and fragile supply chains would eventually generate exactly the kind of cascading disruption we witnessed this quarter. The mathematics of Next Economy portfolio construction—systematic avoidance of systemic risk exposure, combined with ownership of the firms building what comes next—are doing precisely what they were designed to do.

Self-Inflicted Wounds and the Geometry of Fragility

Let us be precise about the nature of the current crisis. It is substantially self-inflicted. The tariff regime that consumed much of 2025 was not merely disruptive; it was, as Eurasia Group's Ian Bremmer has described it, the product of a political revolution in which the United States itself became the single biggest driver of global risk. On February 20, the Supreme Court ruled in *Learning Resources, Inc. v. Trump* that the International Emergency Economic Powers Act does not authorize the president to impose tariffs—a decision Chief Justice Roberts grounded in the straightforward constitutional principle that tariff authority belongs to Congress. The administration responded within hours by imposing replacement tariffs under Section 122 of the Trade Act of 1974, capped at 15% and expiring after 150 days. The Tax Foundation estimates the tariff regime has amounted to an average tax increase of approximately $1,500 per U.S. household in 2026. This is not strategic trade policy. It is an own goal of historic proportions.

Then came the Iran war. On February 28, the United States and Israel launched strikes against Iran—a surprise attack initiated, remarkably, while Oman's foreign minister was reporting a diplomatic breakthrough in nuclear negotiations. Within days, Iran closed the Strait of Hormuz, through which roughly 20% of the world's oil and a significant share of global LNG transit. Brent crude prices surpassed $100 per barrel for the first time in four years and peaked near $126. QatarEnergy declared force majeure on LNG exports. neither. The International Energy Agency coordinated a release of 400 million barrels from strategic petroleum reserves—and it has proven insufficient. Analysts warn that if the strait remains closed through mid-April, the supply disruption doubles to roughly 10 million barrels per day. Forecasts of $150 to $200 oil are no longer alarmist; they are mainstream.

Macroeconomic Commentary *continued*

The concatenation of tariff-driven stagflation risk with a war-driven energy shock is the kind of scenario that stress tests portfolio construction at a fundamental level. Portfolios built around legacy fossil fuel dependency and conventional supply chain assumptions are exposed to both vectors simultaneously. Portfolios built around the Next Economy thesis are exposed to neither.

Energy Transition as Risk Management, Not Aspiration

The events of Q1 have done more to vindicate the energy transition investment thesis than any policy announcement or corporate commitment ever could. As Gregor Macdonald observed in *Cold Eye Earth* in the aftermath of the Iran strikes, wars and supply shocks cut deep grooves in the psyches of nations and kick off new policy regimes. The EU's 20% reduction in natural gas consumption following Russia's invasion of Ukraine was not a temporary adjustment; it became structural. The 2004–2008 oil price spike permanently halted decades of OECD demand growth. This war will produce analogous effects. Demand for renewables and battery energy storage will surge, particularly across Asia, where nations like Japan—dependent on the Strait of Hormuz for approximately 70% of its crude oil imports—confront an existential energy security question. Consider the broader trajectory. Since 2010, combined wind and solar have risen from 1.76% to approximately 17% of global power generation. The S&P Global Clean Energy Transition Index gained roughly 46% in 2025 versus 16% for the broader S&P 500. Global investment in renewable energy reached $2.2 trillion in 2025, representing approximately two-thirds of all global energy spending. Road fuel demand appears to be peaking globally, with the IEA forecasting zero gasoline demand growth in 2026 even as total oil demand rises modestly. These are not marginal developments; they are inflection points in the largest capital reallocation in economic history.

The golden rule of energy economics, as Macdonald has formulated it, bears repeating: fossil fuel price shocks are a wonderful gift to producers in the short term but are terrible for those producers in the long term. Every price spike accelerates the substitution curve. Every supply disruption strengthens the political case for energy independence through domestic clean power. The Iran war is shaping up to be a second major blow in less than five years to the economic logic of fossil fuel dependency in the power sector.

Navigating What Comes Next

The question of how Green Alpha navigates interest rates, inflation, wars, and what amounts to a self-inflicted recession is best answered structurally rather than tactically. We do not attempt to time geopolitical events or predict Federal Reserve decisions. We position capital on the right side of the most consequential economic transformation in modern history.

Our companies—in electrification, grid modernization, dematerialization, advanced materials, precision agriculture, water infrastructure, AI-enabling semiconductors, and clean power generation—are not ideological bets on sustainability. They are the firms building the productive infrastructure of the only economy that is not, by its own design, self-terminating. When the Strait of Hormuz closes and oil prices double, our portfolio companies are not casualties of the disruption. They are the beneficiaries, because they represent the alternative that the world is now scrambling to build faster.

Today's asset allocation is tomorrow's production function. That has always been the core insight of Next Economy portfolio theory, and Q1 2026 has illustrated its implications with unusual clarity. The conventional portfolio—indexed to the legacy economy, weighted toward fossil fuels and fragile supply chains, benchmarked against an index that rewards the perpetuation of systemic risk—is precisely the portfolio most exposed to the compound disruptions now underway. Our approach is the alternative. Not because it is virtuous, but because it is the only approach that is not, over any meaningful time horizon, self-terminating.

We remain constructive. The structural tailwinds behind the Next Economy—accelerating electricity demand driven by AI infrastructure and electrification, accelerating efficiency gains across compute, manufacturing, and energy conversion, improving clean energy economics, and the now-visceral energy security imperative—are stronger today than at any point in our firm's history. The disruptions of Q1 are painful, but they are not surprising to us. They are, in the precise language of risk management, the scenario our portfolios were constructed to withstand and to exploit.

Largest Positions

How the Sierra Club Green Alpha portfolio is driving progress toward the Next Economy

Company Name	Ticker	Weight
Taiwan Semiconductor Manufacturing	TSM	10.24%
Lam Research	LRCX	8.09%
Advanced Energy Ind.	AEIS	6.11%
Vestas Wind Systems	VWDRY	5.49%
ASML Holdings NV	ASML	5.00%
% of Portfolio		34.94%

Taiwan Semiconductor Manufacturing (TSM) *Sector: Technology | Industry: Semiconductors*

- TSMC has commenced mass production of 2nm chips using nanosheet Gate-All-Around transistors—the most significant architectural leap in a decade—with initial yields already reaching 70-80%, well ahead of any competitor. The N2 node delivers a 15% performance boost at the same power or a 25-30% reduction in power consumption versus 3nm, and TSMC expects to reach 100,000 wafers per month of 2nm capacity by year-end 2026. Apple, NVIDIA, AMD, and Google have all secured capacity, and 2nm revenue is projected to surpass 3nm and 5nm combined by Q3 2026.

- TSMC is effectively the world's sole manufacturer of bleeding-edge silicon at scale, with 38% of the $320 billion global foundry market and a technology lead that Samsung and Intel cannot close in the near term. With $56 billion in planned 2026 capex and pricing power to raise wafer prices 5-10% across all sub-5nm nodes, TSMC's competitive moat is widening, not narrowing. As AI workloads demand ever more advanced process nodes and advanced packaging (CoWoS capacity expanding 70%+ annually), TSMC sits at the center of the AI compute supply chain.

Lam Research Corp (LRCX) *Sector: Technology | Industry: Semiconductors*

- Lam Research is the main supplier of the etch and deposition tools required to build AI's physical infrastructure. As chips go three-dimensional—through HBM memory stacking and Gate-All-Around transistor architectures—the number of manufacturing steps per wafer explodes, and Lam's share of those steps grows disproportionately. Revenue from HBM-related tools grew over 50% year-over-year, and the company's cryogenic etch technology won the 2025 SEMI Award for North America for enabling the 3D NAND density gains that underpin AI data storage.
- The structural beauty of Lam's business is that every node shrink makes customers more dependent on its equipment, not less. At 28nm, a wafer required ~500 process steps; at 3nm, it requires 1,500+, with Lam's etch and deposition steps growing from ~25% to nearly 50% of the total. With projected industry-wide wafer fab equipment spending of $135 billion in 2026 (up 23% YoY), and Lam now added to the S&P 100, the company has transformed from a cyclical equipment vendor into a structural tax on the physics of chip manufacturing

Advanced Energy Industries (AEIS) *Sector: Industrials | Industry: Electrical Equipment*

- Advanced Energy Industries provides the precision power conversion and control solutions that are indispensable for both AI data centers and next-generation semiconductor fabrication. Its Data Center Computing segment revenue more than doubled year-over-year in 2025, driven by insatiable demand from hyperscale customers for sophisticated power management as AI server racks consume 5-10x the energy of traditional infrastructure. The company's eVoS and eVerest plasma power platforms are simultaneously gaining share in conductor and dielectric etch applications at leading-edge logic and memory fabs.

- AEIS is building a new 500,000 sq ft manufacturing facility in Thailand capable of delivering up to $1 billion in annual revenue, positioning the company for the next phase of growth as both AI capex and semiconductor wafer fab equipment spending accelerate into 2026-2027. With a diversified revenue base spanning semiconductors, data centers, industrial, medical, and telecom, and with its new product platforms driving margin expansion, AEIS is undergoing a structural re-rating from cyclical industrial supplier to critical AI infrastructure provider.

Largest Positions *continued*

Vestas Wind Systems (VWDRY) *Sector: Energy | Industry: Renewable Energy*

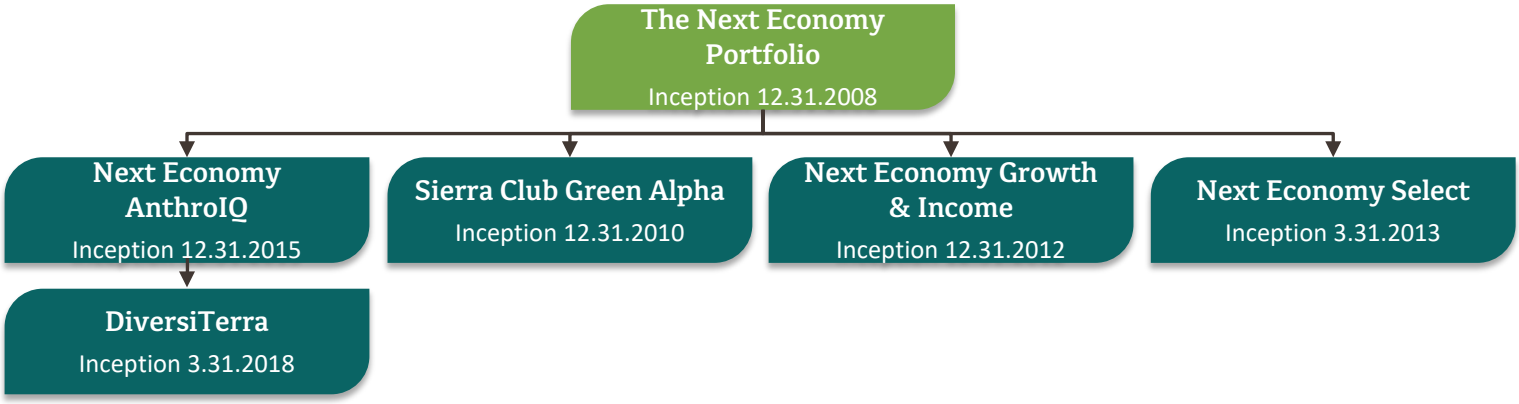
- Vestas's V236-15.0 MW offshore turbine is a marvel of industrial scale, with a single unit capable of generating enough energy to power 20,000 households per year. Its massive 115.5-meter blades and 60% capacity factor allow developers to maximize energy density while drastically reducing the capital expenditure required for foundations and subsea cabling. The onshore portfolio is equally formidable, with the company maintaining a ~30% global market share in wind installations outside of China.

- Vestas commands a competitive position with a combined order backlog exceeding €68 billion and a high-margin service division managing a record 159 GW fleet, providing deep recurring revenue that insulates the balance sheet from the cyclical nature of turbine manufacturing. As electrification demand surges from data centers and industrial reshoring, wind power's role as a firm, dispatchable clean energy source—especially when paired with storage—positions Vestas as essential infrastructure for the grid of the future.

ASML Holdings NV (ASML) *Sector: Technology | Industry: Semiconductors*

- ASML holds an absolute monopoly on the extreme ultraviolet lithography machines required to manufacture every advanced chip on earth at 3nm and below—there is no alternative supplier, anywhere. Its new High-NA EUV systems (EXE:5200B), priced at €370 million each, deliver 8nm single-exposure resolution with nearly 3x the transistor density of prior-generation tools, and have begun entering high-volume manufacturing at Intel and TSMC fabs in 2026. With 60+ orders booked and gross margins above 50%, High-NA will be the primary enabler of sub-2nm chips for the remainder of the decade.

- ASML's position is structurally unassailable: its technology sits behind a 20-year, 5,000-patent competitive advantage in optical physics, and the EUV ecosystem (light sources, mirror coatings, photoresists) has no second source. Every dollar of AI capex that flows to chip fabrication must pass through ASML's machines. The company has already announced development of Hyper-NA EUV at 0.75 NA for 1nm-class nodes post-2028, ensuring its roadmap extends well into the next decade. In the gold rush of artificial intelligence, ASML is the only company that makes the pickaxes.



- **Sierra Club® criteria** – the only portfolio available in the market that utilizes the Sierra Club's proprietary, rigorous social and environmental screening criteria
- **Fundamentals-driven:** the underlying quality of companies and the price paid for their shares are key drivers of LT returns
  - ✓ **High growth:** indicated by Sales Growth, and a decrease from Current P/E to Forward P/E as revenue and earnings grow
  - ✓ **Compelling valuation:** demonstrated by Price/Sales and Price/Book metrics relative to growth expectations
  - ✓ **Strong balance sheet and management execution:** conveyed by capital stewardship, LT Debt/Equity, Current Ratio
- **Diversified – we seek solutions wherever we can find them:** across the globe, in companies of all sizes, and every industry
- **Public equities, long-only:** most investors' largest asset class, so their largest opportunity for impact
- **Fossil fuel free since inception:** we never invest in companies that prospect, extract, refine, or transport fossil fuels, nor in fossil-fired utilities or internal combustion engine manufacturers

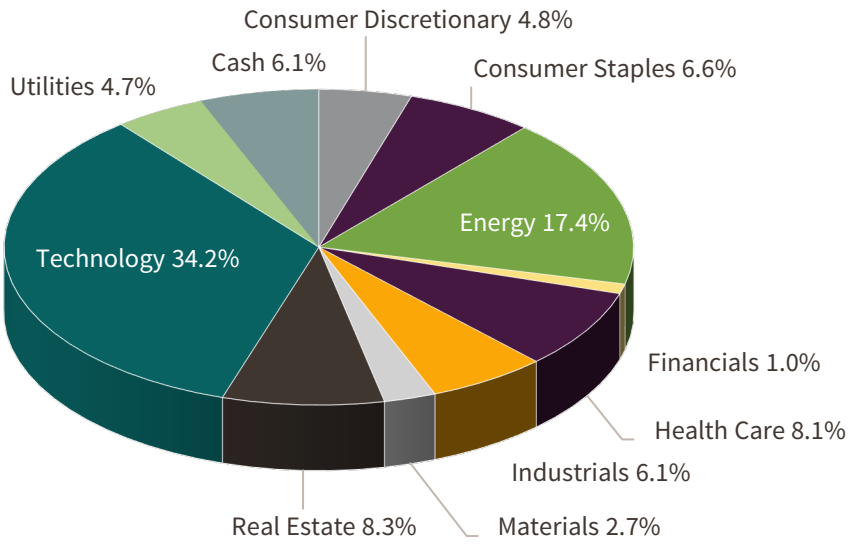
Characteristics	Sierra Club Green Alpha	Benchmark: MSCI ACWI IMI (SPGM)	The Next Economy Portfolio	Next Economy AnthroIQ	Next Economy Select	Next Economy Growth & Income	DiversiTerra
# of Securities	46	2,917	153	109	51	34	51
Active Share vs SPGM	98%	-	93%	93%	97%	95%	95%
Active Share vs The Next Economy	69%	-	-	37%	65%	71%	62%
Sales Growth, Trailing 3-Yr	9%	14%	9%	8%	9%	8%	7%
P/E, Current	28.9	21.3	26.9	24.1	26.9	27.2	27.2
P/E, 1-Year Forward	22.0	17.3	21.2	19.0	23.1	20.8	24.4
Price/Sales	1.0	2.2	2.5	3.1	1.6	1.5	3.0
Price/Book	2.3	3.1	2.6	3.2	2.6	2.0	2.9
LT Debt/Equity	29%	33%	32%	38%	33%	45%	36%
Current Ratio	2.4	1.9	3.1	2.6	2.7	1.9	2.7
Dividend Yield	1.57%	1.75%	1.11%	0.95%	1.58%	3.40%	1.31%
Market Cap, Wtd Avg ($B)	$264.27	$747.64	$137.38	$172.80	$306.68	$319.31	$214.03
Market Cap, Median ($B)	$6.99	$3.64	$6.77	$8.06	$4.96	$29.93	$7.92
Turnover, Trailing 2-Yr Avg	9%	Not Available	27%	7%	4%	8%	11%
Beta, Trailing 3-Yrs	1.60	1.00	1.56	1.66	1.72	1.34	1.60
U.S.-Domiciled Companies	70%	62%	83%	90%	58%	66%	82%
% Revenue Derived in U.S.	47%	43%	54%	56%	52%	46%	53%

Characteristics are sourced from FactSet, based on a representative account and include cash. Please see additional disclosures on last page.

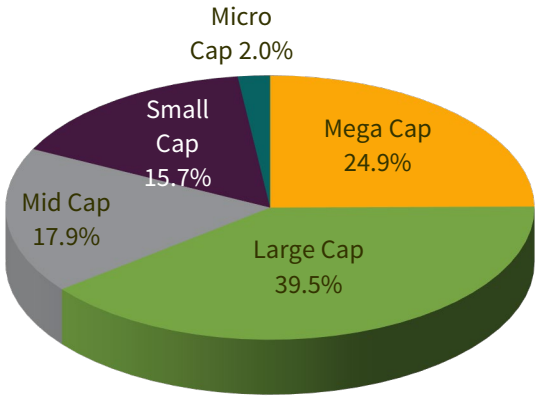
Portfolio Allocations

Our search for Next Economy companies is unconstrained. For the Sierra Club Green Alpha portfolio, we seek solutions to systemic risks wherever they exist – across sectors, market caps, and geographies.

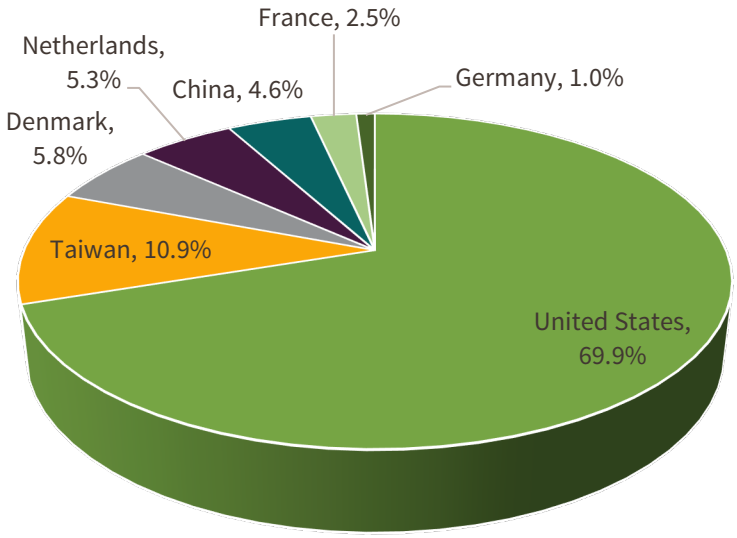
Sectors



Market Capitalizations



Companies' Main Headquarters



Allocation data is sourced from FactSet and is based on a representative account. The exception is the sector chart, which utilizes the Bloomberg Industry Classification Standard from Bloomberg. The market cap and headquarters charts are shown as percent of equity. Please see the final page of this document for additional important disclosures.

Important Disclosures

- Green Alpha Advisors, LLC is a registered investment advisor. Registration as an investment advisor does not imply any certain level of skill or training.
- Green Alpha Investments is a trade name of Green Alpha Advisors, LLC. Green Alpha is a registered trademark of Green Alpha Advisors, LLC. Green Alpha Advisors also owns the trademarks to "Next Economy," "Next Economics," "Next Economy Portfolio Theory," "Investing in the Next Economy," and "Investing for the Next Economy."
- SIERRA CLUB, the Sierra Club logos, and "Explore, enjoy and protect the planet." are registered trademarks of the Sierra Club.
- Performance quoted throughout this document represent past performance. Past performance does not guarantee future results, and current performance may be lower or higher than the data quoted. Investment returns and principal will fluctuate with market and economic conditions, and investors may have a gain or loss when shares are sold.
- Beginning November 30, 2021, the Sierra Club Green Alpha strategy performance results are a composite of discretionary client accounts invested in the strategy on specific custodial platforms. Green Alpha's discretionary client accounts that are not included in the composite are those custodied at Folio Institutional due to operational limitations of Folio's data feeds to Green Alpha's portfolio accounting system INDATA (formerly Advent APX). Beginning May 31, 2023, composite membership also includes a minimum account size of $25,000. The Sierra Club Green Alpha composite performance results reflect actual performance for a composite of discretionary client accounts meeting custodian and minimum account size requirements. Net of actual management fees and transaction costs. Some assets managed in the Sierra Club Green Alpha strategy within the composite receive a reduced fee from the standard management fee schedule. Actual client returns experienced will vary from the composite returns based on a variety of factors, and we encourage you to ask about specific factors. Accounts are included in the composite for full-month periods under management with Green Alpha Investments. The Sierra Club Green Alpha performance results do not reflect the reinvestment of dividends and interest.
- Actual advisory fees may vary among clients with the same investment strategy. Green Alpha's standard fee schedules are available within Form ADV Part 2. For those details and additional legal information, please see information and files here: http://greenalphaadvisors.com/about-us/legal-disclaimers/.
- From the strategy's inception through November 30, 2021, Sierra Club Green Alpha performance results reflected the actual performance of a representative account, net of actual management fees and transaction costs. Assets managed in the Sierra Club Green Alpha strategy representative account received a reduced fee from the standard fee schedule. Sierra Club Green Alpha representative account performance results did not reflect the reinvestment of dividends and interest. Please contact Green Alpha for information about the representative account selection process.
- Green Alpha portfolios may invest in companies with small and medium market capitalizations, which may have more limited product lines, markets, and financial resources than larger companies. In addition, their securities may trade less frequently and in more limited volume than those of larger companies. Small or mid-cap stocks may be more volatile than those of larger companies and, where trading volume is thin, the ability to dispose of such securities may be more limited. Green Alpha portfolios may also invest in foreign domiciled companies. Investing in foreign securities may involve additional risks, including exchange-rate fluctuations, limited liquidity, high levels of volatility, social and political instability, and reduced regulation. Emerging markets are often more volatile than developed markets and investing in emerging markets involves greater risks. International investing may not be suitable for everyone. An investment in Green Alpha portfolios should be considered a long-term investment.
- The holdings identified throughout this document do not represent all the securities purchased, sold, or recommended for advisory clients. You may request a list of all recommendations made by Green Alpha in the past year by emailing a request to info@greenalphaadvisors.com. It should not be assumed that the recommendations made in the past or future were or will be profitable or will equal the performance of the securities cited as examples in this document.
- The MSCI All Country World Investable Market Index (ACWI IMI) is a free float-adjusted market capitalization-weighted index that is designed to measure the combined equity market performance of developed and emerging markets. The Index covers approximately 99% of the global equity investment opportunity set. The MSCI ACWI IMI figures do not reflect any fees, expenses, or taxes. Investors cannot invest directly in this index.
- The SPDR MSCI Global Stock Market ETF (ticker: SPGM) seeks to provide investment results that, before expenses, correspond generally to the price and yield performance of the MSCI ACWI IMI. Investors can invest directly in SPGM.
- This presentation is for informational purposes only, and should not be construed as legal, tax, investment, or other advice. This presentation does not constitute an offer to sell, or the solicitation of any offer to buy, any security. Any mention of an individual security is for illustrative purposes only and should not be considered a recommendation to buy or sell any security. The presentation does not purport to contain all the information that may be required to evaluate Green Alpha Investments and its investment strategies. A portion of the content provided herein have been created and edited with the assistance of artificial intelligence (AI) tools. All final content has been reviewed by the author(s) to ensure accuracy and compliance with applicable regulatory and internal policies.