

Next Economy Index

March 31, 2022

Green Alpha[®]

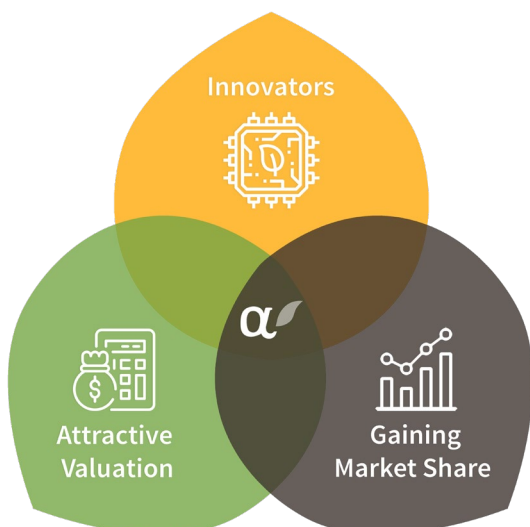
Contents

Investing Trends Watch.....	2
Performance and Year-to-Date Commentary.....	3
Largest Positions.....	5
Portfolio Characteristics.....	6
Sector, Geographic, and Market Cap Allocations.....	7
Disclosures.....	8

Investment Philosophy

We consider the greatest growth drivers of the twenty-first century to be high-functioning, inventive companies generating and accelerating solutions to system-level risks like the climate crisis, resource degradation, worsening inequality, and human disease burdens. Consequently, those companies are our chief opportunity for investments that preserve and grow clients' purchasing power.

Green Alpha's investment philosophy is straightforward: seek enterprises creating smart, scalable and rapidly evolving, economically-competitive solutions. Don't invest in companies causing global systemic risks.



Why Invest in the Next Economy Index?

- Active research and stock selection
- Passively managed through an annual rebalance
- Demonstrates the diversity, growth, breadth, and depth of the rapidly-developing Next Economy™
- ~139 global, market-leading companies developing solutions to core economic and environmental risks
- Fossil fuel free since inception

Inception Date: December 31, 2008

Style: All-Cap Global Equities

Vehicle: Separately Managed Accounts

Portfolio Construction

The Next Economy Index utilizes both active stock selection and passive portfolio construction to reflect the Next Economy – the innovation-driven, highly efficient, solutions-oriented sustainable economy that is unfolding. All companies that pass both our top-down and bottom-up research processes with sufficiently high proprietary scores are included in the portfolio. We seek companies:

- with products and/or services lowering the global economy's risk profile by creating solutions to our most pressing economic and environmental risks
- committing more capital to R&D and owning more intellectual property than their peers
- run by effective, diverse executive teams and boards of directors with consistent track records of increasing revenues and expanding margins, leading to earnings growth and potentially long-term compounding growth
- that trade at compelling valuations relative to proven and anticipated growth, within acceptable levels of risk

Like all Green Alpha portfolios, Next Economy Index investments seek to de-risk the global economy, thus reducing our clients' long-term portfolio risks.

Harness the Possibilities

Segment	Demand Outlook	Tailwinds	Headwinds
 <p>Zero-emission Transportation</p>	+	<ul style="list-style-type: none"> Scaling rapidly Competitive total cost of vehicle ownership Global gov't policies to limit or end ICE sales Lethality of ICE emissions increasingly well known Unbeatable user experience; ranges improving 	<ul style="list-style-type: none"> Incumbent ICE makers resistant to change Incumbent dealer network resistant to selling EVs due to low maintenance profile Non-universality of charging solutions Length of charging time
 <p>Biotechnology</p>	+	<ul style="list-style-type: none"> Disruptive & transformative in medicine – limitless addressable market One-and-done therapies less expensive than continuous legacy treatments of symptoms Removing disease burden will greatly increase the productivity of the global economy Also transforming materials & agriculture 	<ul style="list-style-type: none"> Still in preliminary stages Extensive R&D required Resistance from treatment providers Gov't regulations slow to adapt Progress is nonlinear & setbacks are inevitable
 <p>Renewable Energy</p>	+	<ul style="list-style-type: none"> Growing rapidly, gaining market share, represents large majority of new generation Cheapest sources of energy Key contributor to solving one of the greatest causes of the climate crisis 	<ul style="list-style-type: none"> Resistance from industry (e.g., fossil fuels & utilities) interests, including via gov't policies like no net metering, subsidies to fossil fuels companies, & red tape around renewable energy deployment
 <p>Technology & Data Infrastructure</p>	+	<ul style="list-style-type: none"> Wired, broadband, & satellite efficiency improving rapidly Quantity of data flow increasing exponentially in era of data proliferation <ul style="list-style-type: none"> Requires speed, accuracy, & security Key to digitalizing, decarbonizing, & dematerializing the economy 	<ul style="list-style-type: none"> Threats from bad actors Stock-specific valuations can get relatively high, as the productivity gain benefits & need for the most innovative solutions is relatively obvious, & no major legacy incumbency is resisting
 <p>Artificial Intelligence & Machine Learning</p>	+	<ul style="list-style-type: none"> AI advancements make economic segments more productive, from advanced materials to medicine Confluence between AI & ML is synergistic & transformative, enabling upstream advances AI allows positive-sum confluence of multiple areas of new tech, including energy, fintech, biotech, medicine, robotics, & automation 	<ul style="list-style-type: none"> Some industries have slower adoption; key is selecting companies prioritizing beneficial AI acquisition Adoption potentially slowed by workforce composition misperceptions Could pose security threats if improperly deployed; can accelerate threats
 <p>Financials</p>	+	<ul style="list-style-type: none"> Huge addressable market of underserved population; AI-enabled fintech makes serving them possible & profitable Best-in-class sustainable REITs are preferred homes to leading innovators, command premiums; sector includes renewable energy-powered data center REITs Providing renewable energy financing for utilities, etc. 	<ul style="list-style-type: none"> Largest banks & investment institutions still investing to accelerate the climate crisis; careful stock selection is imperative Greenwashing is pervasive in financial services; difficult for clients to disambiguate Industry suffering from lack of inclusive banking & insurance options
 <p>Agriculture & Food</p>	+	<ul style="list-style-type: none"> Biotech & AI are making possible the end of pesticides, herbicides, & chemical fertilizers; farmland could regenerate Consumers shifting to natural & organics Transparent chain of custody: food safety, ethical labeling 	<ul style="list-style-type: none"> Clean freshwater is under threat Distribution infrastructure often inadequate Enormous levels of food waste exists
 <p>Water</p>	+	<ul style="list-style-type: none"> Elemental requirement for life Opportunities to create more freshwater, track & measure where it is, & where it needs to be Tech to find leaks & quickly resolve them 	<ul style="list-style-type: none"> Investment in old & aging infrastructure woefully insufficient Regulations insufficient to protect supplies Degradation by harmful industries

Macroeconomic Commentary



The first quarter of 2022 was historic for the world, and dramatic for economies and markets. The dynamics involved are ongoing, so the geopolitical and economic story will continue to unfold, doubtless in surprising and unforeseen ways. Nevertheless, we can see new trajectories being established, and the picture thus far, though incomplete, provides some context.

First, the war in Ukraine. It is an unprovoked, needless, tragic, horribly destructive, ongoing series of war crimes, and must be condemned in the strongest terms. Geopolitically, it is a binary test for participatory democracy: will it stand up to and overcome authoritarianism, or will it, as it has so often before, dither and make excuses for why the dictator must be placated? The answer to this question will have severe and long-lasting impacts on civilization, scientific and cultural progress, and certainly on the world's economies. For example, will conflict erode social cohesion and trust, thereby reducing investment and trade, or will a resolute, unified response to the undisguised power grab foment trust and collaboration? These are medium and long-term questions; more proximally, the advent and continuation of the invasion has had several effects.

The economic picture is already complicated: an ongoing pandemic, supply chain shocks, inflation, tightening monetary policy. The invasion has added to each, further complicating the totality. The world must now deal with greater uncertainty around energy supplies and prices. If Europe should make the hard, but arguably correct, decision to cut off Russian oil and gas immediately and completely, Russia's war machine may be starved, but Europe's GDP would surely decline, potentially serving as a contagion for global recession.

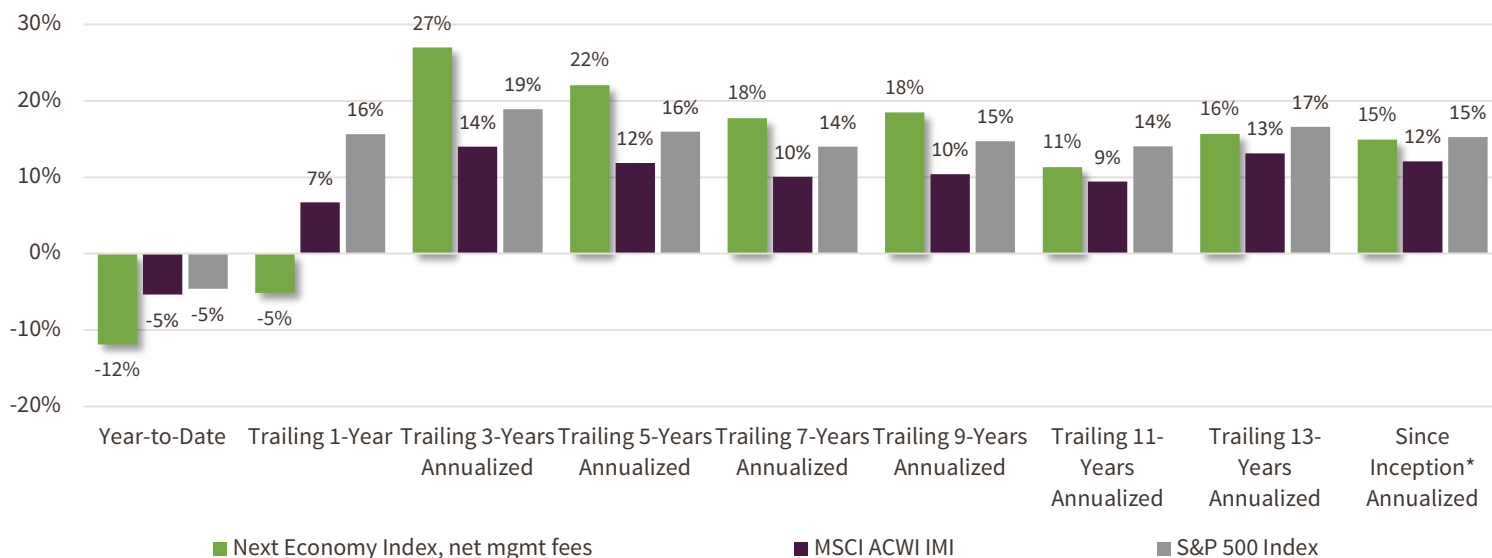
The other side of that coin, one that so far has been beneficial to Green Alpha portfolios, is a growing conviction that renewable energies—being locally sourced, inexpensive, and non-volatile in price once installed—make a fantastic fortification against the current global paradigm of energy-as-a-potential-weapon. Renewable energy stocks were generally in decline in the year preceding the invasion but has since made a significant recovery. It seems likely the conflict will continue to catalyze the trends away from investing in fossil fuels and toward acceleration of renewables (albeit paired in the shorter run by a search for new sources of gas). This shift is fortunate on the climate front as well, as the IPCC warned us early in Q2 that the world has been dangerously underfunding the transition to renewables, to the extent that the COP26 agreements will be difficult to meet. Despite all the national, corporate, and financial services hollow words to net-zero goals, emissions of CO₂, CH₄, N₂O, and so on, are still not decreasing—they're accelerating. And yes, that's the result of the world's investment activities.

All this is causing a surge in energy prices, which is exacerbating inflation and leaving the world's central banks scrambling to determine appropriate responses to perhaps slow inflation without strangling economies and companies, the more indebted of which can ill afford large rate hikes.

The invasion of Ukraine is revealing the interconnectedness of the commodity systems—sourcing, distribution, and pricing—that underpin the global economy, and the vulnerabilities those systems have always been subject to. Though we've been discussing energy, food is critical in this picture as well: estimates are that combined Russian and Ukrainian grain exports provided 12% of the world's calories in 2021, and Russia is a dominant supplier of agricultural fertilizer. Some metals and other goods are core Ukrainian and Russian products as well. Disruption in these commodity systems adds further inflation pressures, placing additional stressors on central banks, policy makers, and consumers alike.

Still, we can invest to mitigate these risks. The opposite of vulnerability is diversification: diversification of energy sources, food supplies, lithium, and other materials critical to accelerate the energy transition, and so forth. For us at Green Alpha, the key to navigating all these risks—climate, geopolitical, and economic—is what it has always been: secure our portfolios against the destructiveness of these shocks by investing in the solutions to the risks that fuel them. Invest in and channel capital to greater energy security and independence, to lessen global warming, to greater social cohesion and trust. By believing that only solutions to these systemic risks have long term value—and investing that way—we position ourselves to earn competitive returns on a long-term average annual basis. *continued...*

Portfolio Commentary & Performance



Predicated on this thesis, Green Alpha's portfolios consist of the most dynamic, innovative companies we can find, across all sectors, actively disrupting the destructive legacy economy and making the Next Economy safer and more economically productive. By selecting what we believe are the most fundamentally sound and well-managed exemplars, we are confident we've constructed portfolios positioned to resist the complicated risks of our economic future, and furthermore, to increase our clients' buying power into that future. We have conviction this will continue to be the case for our strategies, even during shorter-term periods of underperforming index benchmarks.

Rest assured: we won't revise our investment philosophy in response to short-term volatility, and you won't see style drift within our strategies. We're not here for that; we're here to build and benefit from the de-risked Next Economy.

For the first quarter of 2022, Green Alpha's Next Economy Index returned -11.87% net of management fees, compared to its benchmark, the MSCI All Country World Investible Market Index (MSCI ACWI IMI), which returned -5.37%.

The sectors detracting the most from returns were Technology and Health Care.

- Within Technology, declines came from the semiconductor industry, with geopolitical and supply chain concerns weighing on shares across the value chain, from upstream capital equipment providers to midstream designers, developers, and manufacturers, and downstream to end-users. Losses in the tech hardware and software industry also contributed to declines, particularly application software.
- Negative contributions from the Health Care sector were the result of declines in the biotech, and medical equipment & devices manufacturing industries. The biotech industry led the pullback, as traders shied away from growth names in a perceived flight to safety amid uncertainty. Stocks in the healthcare services industry also added to losses as telemedicine and contract research companies declined on a narrative of the pandemic slowing.

The top-contributing sectors for the quarter were Energy and Financials.

- Financials saw better relative performance than the Financials sector of the benchmark, primarily because the Next Economy Index has lower weight on Financials, particularly with respect to Green Alpha's lack of exposure to banking institutions.
- Energy added the most to portfolio returns, with a rally by renewable energy equipment manufacturers, particularly solar, driven by the war in Ukraine. This shed light on energy risks and the importance of locally-generated renewables, for both energy and geopolitical security, in addition to renewables' other established benefits.

**Portfolio Inception: December 31, 2008. 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. Please see the final page of this document for important disclosures about portfolio, benchmark, and characteristic information.*

Largest Positions

How The Next Economy Index is driving progress toward the Next Economy

NVIDIA (Sector: Technology)

- NVIDIA's processors are dominant in data centers, machine learning, and AI. Their processors are used by many of the most advanced companies. NVIDIA is critical for cloud computing companies AWS, Google Cloud, and Microsoft's Azure, because its processors are among the fastest and highest throughput – factors that are key as cloud companies offer more AI-based capabilities.
- Highlighting their continual drive for innovation, NVIDIA's CEO Jensen Huang recently coined the term "intelligence manufacturing:" "Accelerated computing, at data-center scale, and combined with machine learning, has sped up computing by a million-x. Accelerated computing has enabled revolutionary AI models like the transformer and made self-supervised learning possible. AI has fundamentally changed what software can make, and how you make software. Companies are processing and refining their data, making AI software, becoming intelligence manufacturers. Their data centers are becoming AI factories."

Apple (Sector: Technology)

- The hardware, software, content, experience, and marketplace provider continues to be one of the best and most sustainably run large companies globally. Evergreen and resilient demand for products and services was once again on display in 2021 as revenues accelerated, only partially slowed by supply chain issues. Apple's massive ecosystem of ~1.9 billion devices present large opportunities for the company to drive revenue growth and margin expansion with low marginal cost new services.
- Apple's commitment to net-zero everything (carbon, water, waste, and energy production) and their investments in cutting-edge technology like carbon removal and 100% recycled aluminum are key counter arguments to companies arguing they are too large or complex to operate sustainably.

Fortinet (Sector: Technology)

- Pure-play digital security firm providing both hardware and software to address security across the entire digital infrastructure including networked, application, multi-cloud, or edge environments. Fortinet owns a substantial intellectual property estate within security, with 1,255 patents granted as of March 2022.
- The company ranks #1 in the most security appliances shipped worldwide and 500,000+ customers trust Fortinet to protect their businesses. They are well positioned in a massive and growing market as cyberattacks are on the rise and more data is created and managed daily. They also provide broad cybersecurity training programs via the Fortinet Network Security Institute.

ASML Holding (Sector: Technology)

- ASML is the world's leading provider of advanced photolithography systems, which are proprietary platforms of high-tech hardware and software necessary in the manufacture of advanced integrated circuits. ASML is the only provider of the most advanced etching systems. Increased spending from leading foundries, as well as those hoping to become leaders, is likely to increase revenues. For example, TSM and Intel have announced large capital budgets for new machinery in the next three years.
- A headwind for ASML is the currently limited supply of neon gas, about half of which in 2021 was supplied to global markets by Ukrainian companies (neon is a required buffer gas in photolithography). Green Alpha is confident ASML will find new supply, and ultimately source from Ukraine again, but photolithography machine production may slow in the near-term.

Prologis (Sector: Real Estate)

- Prologis is a leader in logistics/warehouse for high-growth markets. In 2021, the REIT owned or co-owned global properties totaling ~1 billion square feet, which it leases as "modern logistics facilities to a diverse base of approximately 5,800 customers."
- In Q1, 2022, Susan Uthayakumar was appointed Chief Sustainability and Energy Officer, and granted the responsibility to advance the firm's sustainability goals. To date, Prologis has made significant progress minimizing the impact of global logistics, with accomplishments including being the third largest corporate installer of solar panels with over 200 MW installed, reducing total Scope 3 GHG emissions 37% (2016 baseline; this is a particular challenge in logistics; most competitors only mention Scope 1 & 2), a 2025 target of 100% carbon-neutral construction, and more.

Company Name	Ticker	Weight
NVIDIA	NVDA	2.47%
Apple	AAPL	1.58%
Fortinet	FTNT	1.55%
ASML Holding	ASML	1.51%
Prologis	PLD	1.46%
Palo Alto Networks	PANW	1.41%
BioNtech	BNTX	1.35%
Atlassian	TEAM	1.33%
Arista Networks	ANET	1.26%
Marvell Technology	MRVL	1.22%
% of Portfolio		15.14%

Please see the final page of this document for important disclosures about portfolio, benchmark, and characteristic information.

Next Economy Index

How the portfolio compares to the MSCI All Country World Investible Market Index (MSCI ACWI IMI) and other Green Alpha portfolios

Characteristics

- **Largest Next Economy basket** – by definition, the Index is the most diversified Green Alpha portfolio by number of stocks; all stocks that pass Green Alpha’s top-down and bottom-up investment processes enter the Index
- **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, and Current Ratio
- **Fossil fuel free since inception:** we have never invested in companies that prospect, extract, refine, or transport fossil fuels, nor in fossil-fired utilities or internal combustion engine manufacturers
- **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; largest opportunity for impact

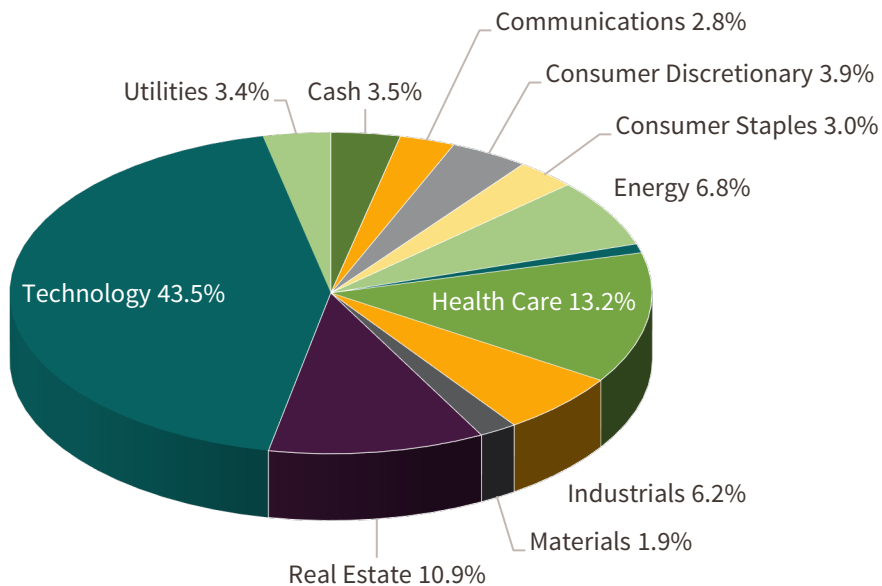
Characteristics	Green Alpha Next Economy Index	Benchmark: MSCI ACWI IMI (SPGM)	Green Alpha Next Economy Social Index	Green Alpha Next Economy Select	Green Alpha Growth & Income	Sierra Club Green Alpha
# of Securities	139	2,430	88	57	35	47
Active Share	93%	-	95%	96%	97%	96%
Sales Growth, Trailing 1-Yr	671%	39%	504%	4,261%	1,864%	2,640%
P/E, Current	21.82	17.26	24.64	17.79	16.16	19.86
P/E, 1-Year Forward [†]	21.09	15.71	23.88	20.10	18.28	22.99
Price/Sales	2.67	1.89	2.57	1.88	1.90	1.69
Price/Book	3.88	2.71	4.07	2.87	2.36	3.22
LT Debt/Equity	0.82	0.84	0.92	0.94	1.40	1.02
Current Ratio	2.87	1.90	2.71	3.12	1.77	2.80
Dividend Yield	1.85%	2.36%	1.89%	2.35%	3.50%	2.04%
Market Capitalization, Weighted Avg (US\$B)	\$121.92	\$381.33	\$119.24	\$149.09	\$69.79	\$134.94
Market Capitalization, Median (US\$B)	\$10.24	Not Available	\$11.87	\$8.59	\$32.19	\$17.77
Turnover, Trailing 2-Yr Avg Annual	20%	-	23%	6%	25%	20%
Beta, Trailing 2-Yrs	1.11	1.04	1.09	1.19	1.07	1.21

[†] Bloomberg consensus estimates. Please see the final page of this document for important disclosures about portfolio, benchmark, and characteristic information.

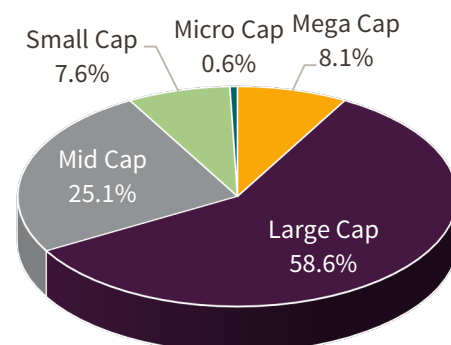
Portfolio Allocations

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

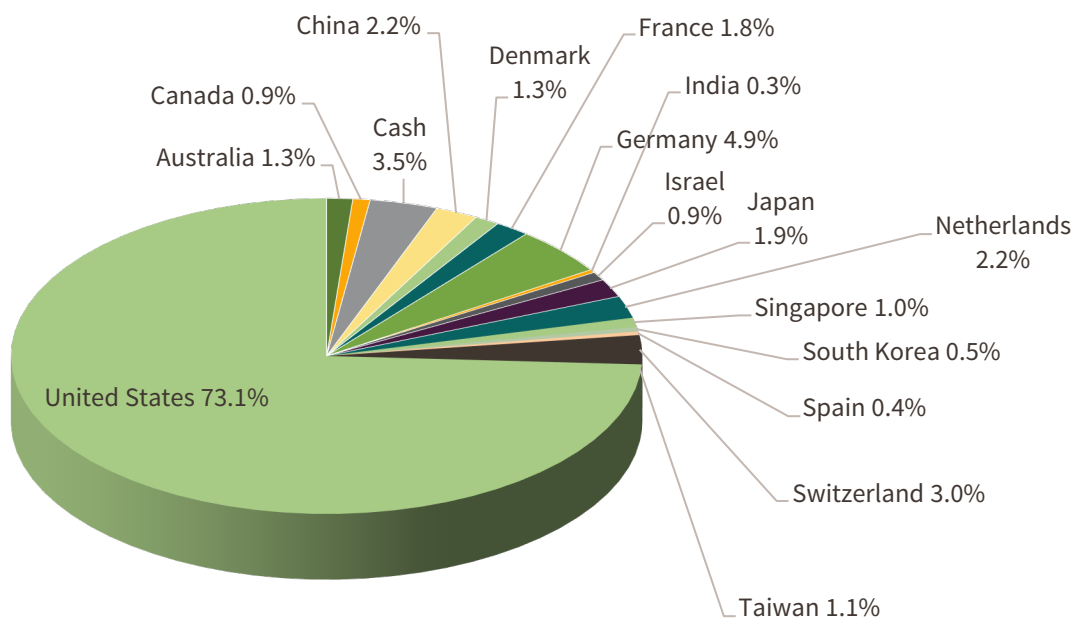
Economic Sectors ††



Market Capitalizations



Companies' Main Headquarters



†† Bloomberg Industry Classification Standard. Please see the final page of this document for important disclosures about portfolio, benchmark, and characteristic information.

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 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.”
- Performance quoted throughout this document represents 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 Next Economy Index 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 Advent APX. The Next Economy Index composite performance results reflect actual performance for a composite of discretionary client accounts, net of actual management fees and transaction costs. Some assets managed in the Next Economy Index 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 Advisors, LLC. The Next Economy Index 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, Next Economy Index performance results reflected the actual performance of a representative account, net of actual management fees and transaction costs. Assets managed in the Next Economy Index strategy representative account received a reduced fee from the standard fee schedule. Next Economy Index 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.
- Regardless of time frame, all characteristics data are sourced from Bloomberg Finance L.P. based on the representative Next Economy Index account, which may or may not be exactly what is delivered on each custodial or wrap account platform.
- 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) captures large, mid, and small cap representation across 23 developed markets and 27 emerging markets countries. With more than 8,750 constituents, the index is comprehensive, covering approximately 99% of the global equity investment opportunity set. 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.
- The S&P 500 Index is an unmanaged index of 500 common stocks chosen for market size, liquidity, and industry group representation. It is market-value weighted. The S&P 500 Index figures do not reflect any fees, expenses, or taxes. Investors cannot invest directly in this index.
- 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 Advisors and its investment strategies.