

# Social Index

December 31, 2023

## Green Alpha<sup>®</sup>

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### Investment Philosophy

Today's economy derives its most significant growth from innovative, high-performing businesses that actively develop and expedite solutions addressing critical systemic issues such as the climate crisis, resource degradation, inequality, and diseases. These companies represent the most promising investment opportunities for both safeguarding and increasing our clients' capital.

Green Alpha adheres to a straightforward philosophy: we actively seek out companies pioneering swiftly scalable and rapidly adaptable, economically competitive solutions.

Our investments seek to de-risk the global economy (which in turn reduces clients' long-term investment risks) by focusing on sectors and industries growing faster than underlying GDP.



### Why Invest in the Social Index?

- Active research and stock selection; passively managed through an annual rebalance
- Industry-leading rigorous gender and social inclusion criteria applied to the Next Economy™ thesis results in a uniquely powerful portfolio of innovative companies led by diverse, empowered teams
- ~114 global, market-leading companies

**Inception Date:** December 31, 2015

**Vehicle:** Separately Managed Accounts

### Research

We aim to identify companies meeting the following criteria:

- They offer products and/or services that mitigate the risk profile of the global economy by providing solutions to pressing economic and environmental challenges.
- Companies allocating a significant portion of revenue to R&D, CapEx, and possessing more IP than their peers.
- Those led by shareholder-aligned, effective, and diverse executive teams and BODs with a record of increasing revenues and expanding profit margins, which in turn drives earnings growth.
- Companies with prudent capital allocation priorities and strong balance sheets.
- Those with shares trading at attractive valuations relative to proven and anticipated growth prospects.

### Portfolio Construction

Construction of the Social Index is founded on the science that the collective cognitive power, execution skills, and risk management abilities of groups exceeds those of individuals or homogeneous groups. Generally, greater diversity within a group leads to superior long-term outcomes.

Weights are initially determined by market capitalization, then we assign additional weighting to companies where women hold significant decision-making authority, have especially strong representation, and/or those companies with policies that are eminently inclusive of all demographics.

# Largest Positions

How the Social Index portfolio is driving progress toward the Next Economy

## Honest Co. *(Sector: Consumer Staples, Industry: Household Products)*

- The Honest Co. sells safe, eco-friendly products for babies, personal care, and home cleaning. Founded in 2011 by actress Jessica Alba.
- Honest specializes in household essentials made from natural, sustainable ingredients, with a focus on transparency, safety, and affordable green products. They promote clean living and conscious consumption and aim to make natural products accessible to all consumers seeking trustworthy options free from harmful chemicals.
- The company climbed into the Social Index portfolio's largest holdings via its 200% stock price appreciation between November 1 and December 31, 2023. In our view, the market had been underestimating fundamentals and growth potential – the Q3 2023 earnings report exceeded expectations in terms of revenues and earnings. More crucially, the significant upward revisions in forecasts for 2024 altered the market narrative.
- Honest Co.'s executive leadership is 37% female, and includes the CEO, Founder and Chief Creative Officer, and the Chief Growth Officer. The board of directors is 57% female and includes chairs of the Compensation and Audit Committees.

## Sunrun *(Sector: Energy, Industry: Renewable Energy)*

- Sunrun is a leading U.S.-provider of residential solar panels and home batteries. Founded in 2007 and headquartered in San Francisco, they pioneered the solar lease power purchase agreement (“PPA”) model, allowing homeowners to go solar without the upfront costs of purchasing a system outright.
- They offer solar panel system design, installation, financing, monitoring, and maintenance for homeowners, and they provide options like solar leases and PPAs that require no upfront purchases.
- With over 900k customers, Sunrun aims to make solar energy more accessible and affordable through innovative financing models and grid integration. The company continues to advocate for renewable-friendly policies.
- Sunrun's executive leadership is 37% female, and includes the CEO, Co-Executive Chair, Chief Legal Officer, and Chief People Officer. The board of directors is 55% female, and includes the chairs of the Compensation, Nominating, Governance, and Sustainability Committees, as well as co-chair of the overall board. In addition, the management team has an impressive age spread of 38 years and the board's is above average at 32 years.

## Twist Bioscience *(Sector: Health Care, Industry: Biotech & Pharma)*

- Twist Bioscience is a synthetic biology company specializing in manufacturing custom DNA and DNA-based products. Their key capabilities include:
  - DNA Synthesis Platform - Proprietary semiconductor-based technology for on-demand, high-throughput manufacturing of DNA at lower costs. Enables mass customization.
  - SynBio Applications - Design and produce synthetic DNA tools for next-gen sequencing, CRISPR gene editing, drug discovery research, data storage, agricultural biotech and more.
  - Antibody Libraries - Provide extensive antibody libraries to biopharma clients for optimizing drug discovery and enabling targeted therapeutics.
  - Genomics Tools - Offer synthetic controls, reference standards and bioinformatics solutions to support advances in genomics research such as disease detection and liquid biopsy work.
  - Foundry Business Model - Act as a manufacturing partner, leveraging DNA expertise and production platform to provide custom libraries, oligos, genes, vectors, pools and fragments to a global client base.

**Twist Bioscience, Steelcase, and Vital Farms' Next Economy attributes are described on the following page.**

Company Name	Ticker	Weight
Honest Company	HNST	3.41%
Sunrun	RUN	2.59%
Twist Bioscience	TWST	1.69%
Steelcase	SCS	1.67%
Vital Farms	VITL	1.64%
Seagate Technology	STX	1.49%
Autodesk	ADSK	1.46%
Cloudflare	NET	1.46%
Duolingo	DUOL	1.36%
NVIDIA	NVDA	1.36%
<b>% of Portfolio</b>		<b>18.13%</b>

# Largest Positions *continued*

## **Twist Bioscience** *continued*

- Synthetic biology is a highly disruptive next-generation science, and Twist sits at the center as a market leader in synthetic DNA manufacturing. Compared to traditional DNA synthesis methods, Twist's advanced silicon biofoundry enables mass customization with 10x decreased costs, rapidly accelerating utilization as new use cases emerge in pharmaceuticals, industrials, agriculture, and data storage.
- Twist's board is 43% female and includes the chairs of the Audit and Compensation Committees. Executive leadership is 38% female, and includes the CEO and Co-founder, the SVPs of Biopharma and R&D, and the Chief HR and ESG Officers.

## **Steelcase** (Sector: Consumer Discretionary, Industry: Home & Office Products)

- Steelcase is a leading furniture manufacturer founded in 1912, creating products for office, healthcare, and education.
- The company employs an integrated design process and uses sustainable materials like recycled plastics and renewable wood. Sustainability efforts include:
  - Actively working to reduce waste, water usage, and energy consumption in its manufacturing processes through efficiency programs.
  - Over 95% of their products are recyclable or recoverable at end-of-life and many include recycled inputs.
  - They partner with organizations like the Rainforest Alliance to source sustainable wood for furniture manufacturing from responsibly managed forests.
  - The company pursues certifications like BIFMA level®, Cradle-to-Cradle, and GREENGUARD for its products to validate their sustainability credentials.
  - They conduct life cycle assessments to minimize the environmental impact from design to end-of-use.
- Steelcase provides workplace consultancy services, utilizing research on workspace design trends and behaviors. It helps organizations optimize spaces via layout, furniture, and technology integration.
- The board is 58% female, including chairs of the Compensation and Corporate Business Development Committees. Executive leadership is 36% female and includes the President & CEO.

## **Vital Farms** (Sector: Consumer Staples, Industry: Food)

- Vital Farms is a food company focused on producing pasture-raised eggs, butter, and other dairy products according to ethical farming standards in the United States. Some defining aspects of their business model include:
  - Pasture-Raised Model - Their hens and cows are raised outdoors on small independent farms allow to roam and forage naturally rather than caged or confined methods
  - Humane Certifications – They follow stringent guidelines on animal welfare, environmental sustainability, and management practices.
  - Small Supplier Network – They source ingredients from a network of over 200 small family farms.
  - Value-Added Products – Vital Farms uses pasture-raised eggs and cream as key inputs into items like butter, hard-boiled eggs, egg bites and liquid whole eggs to enhance shelf-stable assortment.
  - Omnichannel Distribution – They sell products at major grocers like Whole Foods, Kroger, and Target alongside natural food chains and independent grocers to expansively reach customers.
- With less than 1% current household penetration in the U.S., there is significant room for expansion. Vital Farms is capitalizing via channel expansion from natural grocers into mass retail banners like Walmart, Publix, and Kroger. Distribution gains should continue fueling their current/historic 27% annual revenue growth.
- The board is 50% female, including chairs of the Audit, Compensation, and Nominating/Corporate Governance Committees. Executive leadership is 38% female and includes the General Counsel and Chief Marketing Officer.

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

# Macroeconomic Commentary

Our complete [2023, 2024, and the Road Ahead](#) review is available [here](#); the summary provided below aims to spark your curiosity to explore the comprehensive content and associated source materials.



In 2023, the dichotomy of our future became starker: a potential utopia or a daunting dystopia. Our path hinges on collective decisions, particularly in financial investments. Money, as a potent agent of change, directs economic growth. Where we choose to invest can either propel innovations that solve critical problems, fostering economic expansion and societal progress, or lead us toward detrimental outcomes. The key lies in aligning our financial resources with sustainable and innovative ventures that promise a brighter, richer, and more abundant, more equitable future. What were 2023's key milestones of hope and despair?

**First: Despair.** Key negative events in 2023 that affected and continue to pose economic and market risks

- **Climate Crisis:** Increased severity of climate events; high investment in fossil fuels both prolonging and causing further environmental damage; subsequent economic risks like insurance companies withdrawing from high-risk areas
- **Geopolitical Conflicts:** Escalation of global conflicts affecting economies and markets; significant wars include Israel-Hamas and Russia-Ukraine
- **American Political Landscape:** Potential impact of the 2024 U.S. Presidential election on environmental policies and global climate action
- **China's Economic Challenges:** China is facing a decline in foreign investments and economic growth due to high debt-to-GDP ratio, affecting global economic dynamics, but also incentivizing China to stabilize relations with the U.S.

## What IS Working?

- **Renewable Energy Growth:** Significant increase in renewable energy adoption and electric vehicle (EV) use; advancements in solar technology and reduction in costs
- **Biotechnological Advances:** Gene editing, particularly CRISPR-Cas9, is showing potentially unlimited promise in medicine and agriculture
- **AI Integration:** AI's growing role in the economy and its impact on productivity and solving major issues
- **Market Conditions:** Improving environment for innovation-driven companies; shifts in investment patterns and potential for growth in sustainable technology sectors; some growth stocks appear undervalued

**2024 Financial Outlook:** Continued expensive money, geopolitical economic reshaping, and rapid technological advancement impacting investment and growth strategies

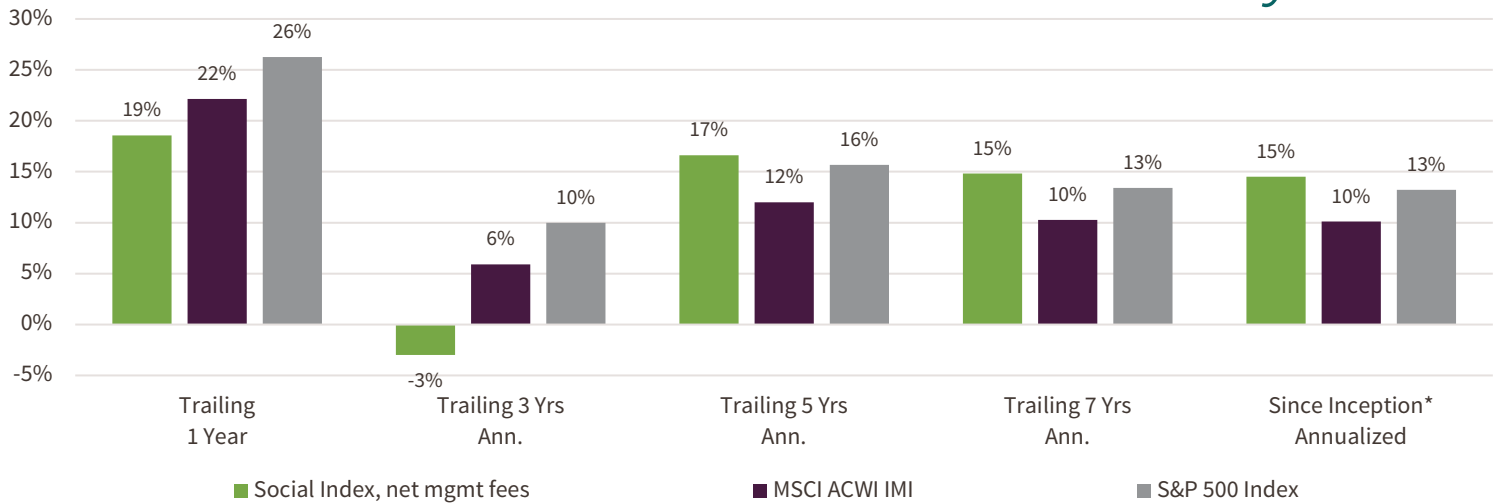
- The climate crisis is worsening—higher temperatures and more extreme weather are likely
- China taking a more collaborative stance with the West as its economy struggles

## Key Unknowns

- Whether geopolitical conflicts spread or cool down
- If \$6 trillion in money market funds flows to stocks and other risk assets, that could fuel appreciation in share prices of growth companies

In the context of escalating global challenges, technological innovation emerges as a pivotal force for stability and economic progression. For fiduciaries, it's prudent to direct investment portfolios towards companies demonstrating resilience and innovation in sustainable production functions that can support long-term global growth. These firms are not only transforming their industries, but also show a robust capacity to flourish amid complex global dynamics. A strategic emphasis on such sustainability-focused enterprises highlights the critical role of technology in driving meaningful global change, lowering economic and portfolio risks, and aligning financial returns with positive impact.

# Portfolio Performance & Commentary



For the full year 2023, Green Alpha's Social Index returned 18.56% net of management fees, versus its benchmark, the MSCI All Country World Investable Market Index (MSCI ACWI IMI), which returned 22.15%.

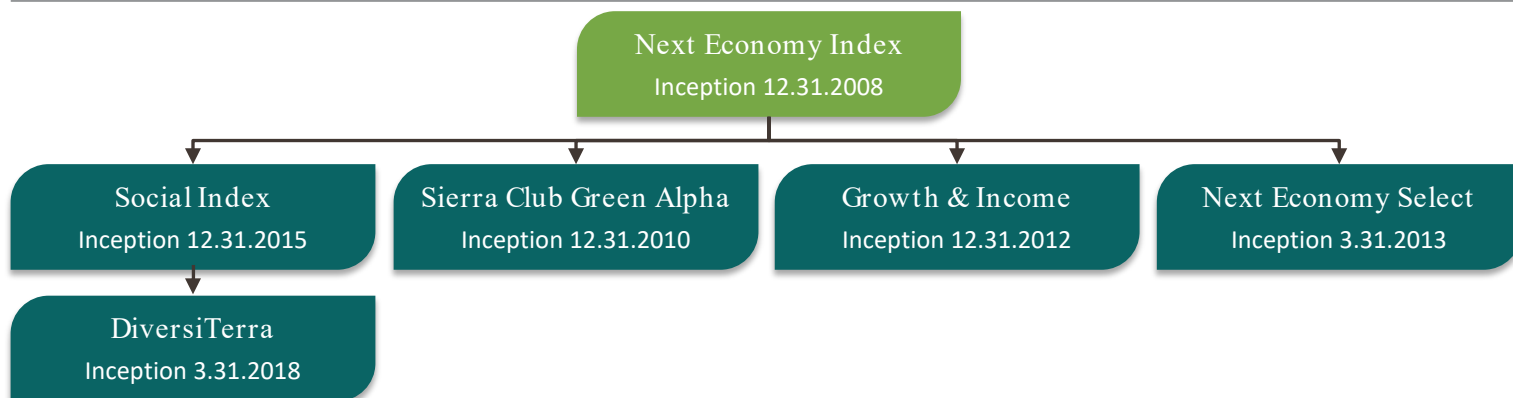
The sectors detracting the most from the strategy's returns were Energy and Health Care.

- Within Energy, solar was the most significant detractor due to industry headwinds and the portfolio's significant weighting. Losses in solar included panel and module makers and installers, power inverter makers, and energy storage. Headwinds included the exponential rise in interest rates making solar projects appear less financially attractive, temporary supply chain challenges, and a narrative-driven lowering of market appetite for growth-oriented equities for most of 2023. Despite these dynamics, Green Alpha continues to maintain its significant weighting to solar as it remains one of the world's fastest growing industries, is enjoying cost reductions leading to expanding margins, and continues to advance and the cheapest source of new electricity generation available in most of the world. Due to stock selection, our wind energy exposure resulted in essentially no impact to returns, even though the industry also faced tough headwinds in 2023.
- Health Care was the second most detracting sector in the strategy. The portfolio has significant exposure to health care since women are highly represented in positions of significant innovation and leadership within the industry and as a result of our stock curation process. Returns from our health care equities were mixed. The top gainers were makers of medical equipment and devices, followed by the leading providers of genomic therapeutics, and an AI drug discovery firm. The detractors included the world's two leading providers of mRNA vaccines and therapeutics, several genomics therapeutics firms, and a genetic sequencing company. Here we note that in the short term equity markets can fail to recognize the longer-term potential of a large pipeline of promising solutions and can show a disconnect between positive business results and share price.

The strategy's best performing sectors were Technology and Consumer Staples.

- Technology contributed the most to returns, with chip designers leading, followed by manufacturers and upstream equipment providers. Thematically, interest in AI tended to favor the designers, although the essential practical work of foundries in making the actual chips was also recognized by markets. Closely following semiconductors, our exposure to security, cloud, engineering, education, automation and design, collaboration, and application software companies were the next most significant areas of contribution. Technology hardware companies also contributed, with most returns in that segment coming from communications, networking, and digital storage hardware firms, as well as electronic assembly and manufacturing. As a reminder, Green Alpha believes that technology presents a uniquely powerful solution set for addressing the world's top systemic risks, and in fact, tech addresses each of our [four pillars of the Next Economy](#).
- The Consumer Staples sector was the next most significant contributor. Leading areas from the sector were personal care products, food retailers, and food production. The leading contributor was a newcomer to the strategy that we added in late Q3, as we identified it as a natural and organic product provider that had gone largely unrecognized by markets and that we believed was undervalued. The portfolio's exposure to responsible, natural and organic food producers and retailers was also very meaningful as these firms consistently reported expectations-beating results during the year.

*\*Portfolio Inception: December 31, 2015. 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 additional important disclosures.*



- **Next Economy innovators, diversity leaders** – harnessing the performance enhancing and risk reducing potential offered by diverse teams, we apply rigorous gender and social inclusion criteria to our Next Economy universe
- **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

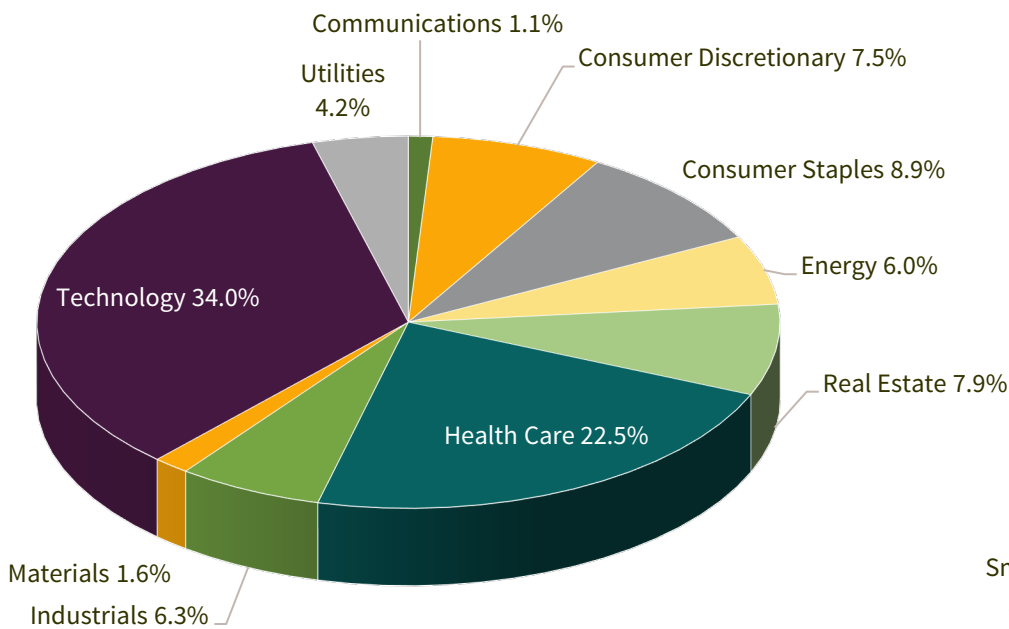
Characteristics	Social Index	Benchmark: MSCI ACWI IMI(SPGM)	Next Economy Index	Next Economy Select	Growth & Income	Sierra Club Green Alpha	DiversiTerra
# of Securities	114	2,639	150	66	36	46	58
Active Share vs MSCI ACWI IMI	94%	-	92%	96%	97%	96%	95%
Active Share vs Next Economy Index	29%	-	-	63%	71%	68%	61%
Sales Growth, Trailing 3-Yr	63%	15%	47%	35%	23%	39%	59%
P/E, Current	25.0	18.0	21.4	16.2	15.2	14.1	21.0
P/E, 1-Year Forward	27.1	17.1	23.9	18.6	15.2	16.0	25.4
Price/Sales	2.3	1.8	2.2	1.6	1.3	0.9	2.1
Price/Book	2.7	2.6	2.8	2.2	1.7	1.9	2.4
LT Debt/Equity	58%	156%	58%	47%	62%	60%	56%
Current Ratio	3.8	2.3	3.9	4.5	3.4	3.5	4.2
Dividend Yield	1.02%	2.11%	1.17%	1.90%	3.93%	1.97%	1.54%
Market Cap, Wtd Avg (\$B)	\$82.46	\$431.37	\$94.81	\$126.13	\$75.28	\$124.36	\$116.58
Market Cap, Median (\$B)	\$9.69	\$2.55	\$8.26	\$5.14	\$28.37	\$7.41	\$5.64
Turnover, Trailing 2-Yr Avg	39%	Not Available	25%	12%	16%	10%	28%
Beta, Trailing 3-Yrs	1.39	1.00	1.31	1.36	1.27	1.31	1.32
U.S.-Domiciled Companies	87%	59%	78%	68%	68%	72%	81%
% Revenue Derived in U.S.	57%	44%	49%	46%	46%	46%	55%

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

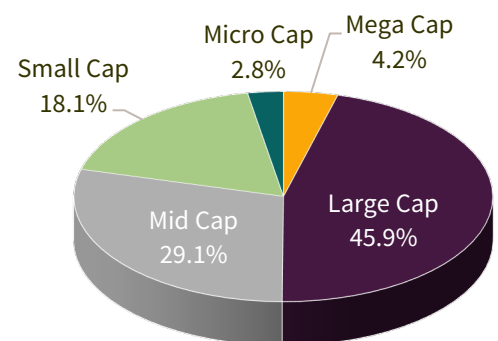
# Portfolio Allocations

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

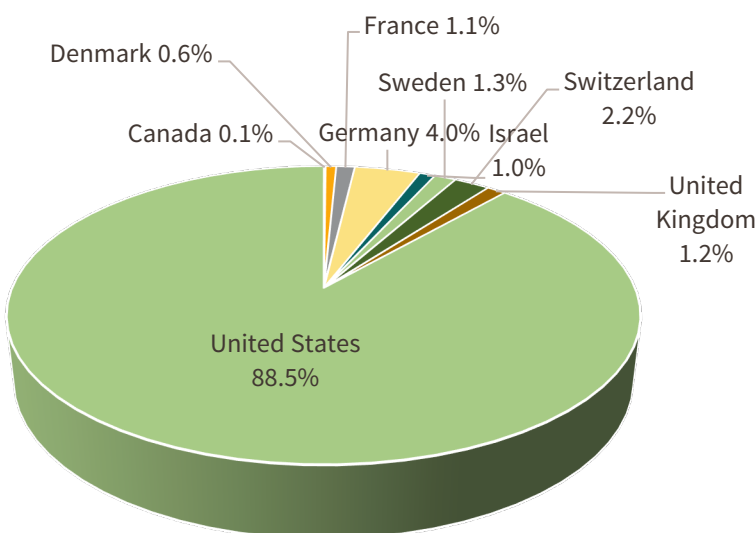
Sectors



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, and is based on a model portfolio. All charts on this page 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.”
- 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 July 31, 2021, the Social Index performance results are a composite of discretionary client accounts invested in the Social Index 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. Beginning May 31, 2023, composite membership also includes a minimum account size of \$50,000. The Social Index composite performance results reflect actual performance for a composite of discretionary client accounts meeting custodian and minimum account size requirements. Net-of-fee returns reflect the deduction of actual management fees and transaction costs. Some assets managed in the Social Index strategy within the composite receive a reduced fee from the standard management fee schedule. Actual client returns experienced will vary from the returns presented 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. Social Index composite performance results do not reflect the reinvestment of dividends and interest.
- Prior to July 31, 2021, the Social Index performance results represent a single account managed to the strategy. The performance results shown are not materially higher than if all related accounts were included prior to August 2021. Please contact Green Alpha for information about the representative account selection process.
- 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/>.
- The Social Index strategy contains stocks that are managed with a view towards capital appreciation. Extreme periods of underperformance or outperformance are due to the concentrated nature of the strategy, and the impact of specific security selection. Such results may not be repeatable.
- 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](mailto: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.
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