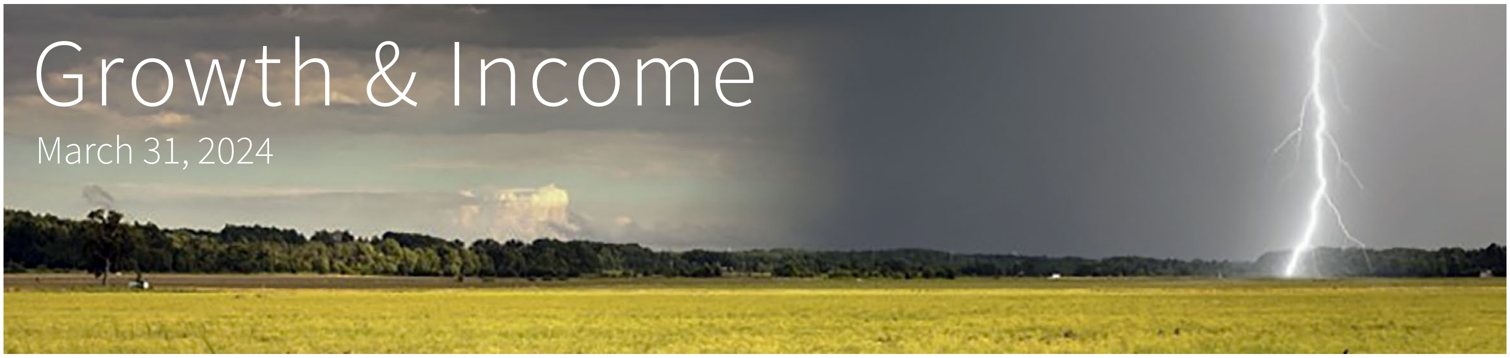
Growth & Income

March 31, 2024



Green Alpha

Why Invest in Growth & Income?

- Active research, stock selection, and portfolio management
- Portfolio producing above-market dividend income, while seeking long-term capital preservation and growth
- 25-45 global, market-leading companies developing solutions to core economic and environmental risks

Inception Date: December 31, 2012

Vehicle: Separately Managed Accounts

Investment Philosophy

Today's economy derives its most significant growth from innovative, high-performing businesses actively developing and expediting economic productivity gains, and those expanding 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.

Research

Across portfolios, 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 and potential dividend 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

The Growth & Income portfolio is designed to harness the powerful combination of growth and current income within one portfolio. Portfolio holdings are selected for current dividend yield and expectations of yield growth, coupled with share price appreciation potential.

The strategy typically exhibits lower short-term volatility than broad market indices and other Green Alpha portfolios, while providing an above-average dividend yield.

Largest Positions

How the Growth & Income portfolio is driving progress toward the Next Economy

Company Name	Ticker	Weight
Taiwan Semiconductor Manuf.	TSM	7.50%
Horizon Tech. Finance	HRZN	6.69%
IBM	IBM	5.19%
Iron Mountain	IRM	4.69%
SL Green Realty Corp.	SLG	4.54%
% of Portfolio		28.61%

Taiwan Semiconductor Manufacturing Co. *(Sector: Technology, Industry: Semiconductors)*

- Taiwan Semiconductor Manufacturing Co ("TSMC") is the world's largest semiconductor foundry, providing advanced chip manufacturing and fabrication services to companies on a made-to-order basis. TSMC maintains a clear dominance where their specialized factories manufacture advanced custom chips for companies like Apple, NVIDIA, and Qualcomm.
- TSMC stands alone as the one foundry already operating at the 2nm node, the most advanced chip manufacturing process available anywhere in the world currently. No other competing fab comes close in leading-edge capability and capacity. Early adoption of pioneering techniques like extreme ultraviolet lithography (EUV) underpins this leadership.
- We believe that TSMC stands as the most important company in all of technology due to their vital role as an enabler to virtually every semiconductor innovator pushing the performance envelope—those firms critically depend on TSMC to transform their chip visions into scaled reality.
- Key to Innovation: Many of the world's biggest tech companies rely on TSMC to turn their cutting-edge chip designs into reality. This makes TSMC an integral part of global technological innovation.
- With over 90% of advanced global foundry market share, an unparalleled focus on sustaining the most capable fab infrastructure, and customers heavily reliant on their new node introduction cadence, TSMC's name goes nearly synonymous with "state of the art" among computing architects. Their operational prowess dominates the leading edge of possibility, and their work arguably underpins the entire modern economy.

Horizon Technology Finance *(Sector: Financials, Industry: Specialty Finance)*

- Dedicated Venture Debt Provider with Impact: Horizon is focused on lending to and investing in venture-backed companies across technology, life science, healthcare IT, sustainability, and other high-growth sectors. They deliver tailored financing solutions to fuel innovation, with a notable beneficial impact supporting cleantech and healthcare advancements.
- Robust, Conservatively Managed Portfolio: HRZN boasts a diversified portfolio, with a strong debt investment yield (16.6% in 2023) and transactions typically well below their maximum of $35 million. Loans are secured on a "first lien" or "first lien behind a bank revolver" basis and are often structured in partnership with other institutions to reduce risk.
- Commitment to Shareholder Value & Growth: Net investment income consistently exceeds distributions, offering regular payouts to investors (shares have a dividend yield of 11.70%) while also reinvesting in growth.
- Proven Track Record in Impactful Sectors: Horizon has directed over $250 million to fund innovative cleantech and healthcare companies in recent years. This financing, paired with specialized industry experience, accelerates solutions confronting key societal challenges.

IBM *(Sector: Technology, Industry: Software & Tech Services)*

- IBM is a global technology leader driving innovation to tackle the world's most pressing challenges. After its strategic divestiture, the company focuses on areas with significant future growth potential:
  - Hybrid Cloud: IBM offers advanced hybrid cloud solutions, including hardware, software, and services, empowering businesses to manage their complex IT environments across public, private, and on-premises clouds.

***IBM**, **Iron Mountain**, and **SL Green Realty's** Next Economy attributes are described on the following page.*

Largest Positions *continued*

IBM *continued*

  - AI & Automation: A pioneer in artificial intelligence, IBM's Watson platform and other AI solutions optimize decision-making, improve customer experiences, and enhance operations across industries.
  - Cybersecurity & Blockchain: IBM prioritizes data protection with leading-edge cybersecurity offerings. It also explores the transformative potential of blockchain technology for secure and transparent transactions.
  - Quantum Computing: IBM is at the forefront of quantum innovation. The IBM Quantum platform and Qiskit open-source SDK democratize access to quantum computing, driving exploration and discovery for researchers and businesses.
- Commitment to Progress: IBM believes its technologies will "exponentially alter the speed and scale" of problem-solving, aligning with its mission of accelerated discovery.

Iron Mountain *(Sector: Technology, Industry: Tech Services)*

- Iron Mountain Incorporated is a global leader in storage and information management solutions. The company offers a wide range of services, including: Physical records storage and document management, Secure data center solutions, Data protection and recovery, Secure destruction services, Digital transformation solutions
- Strong Market Position: Iron Mountain boasts a massive global footprint, operating in over 60 countries with a substantial customer base across various industries. The company's business model generates a high proportion of recurring revenue due to long-term storage contracts, providing stability. Iron Mountain actively pursues strategic acquisitions and investments in areas like data centers and digital services for continuous expansion.
- Emissions Reduction Goal: Iron Mountain has committed to achieving net-zero greenhouse gas (GHG) emissions by 2040, ten years ahead of the Paris Climate Accord.
- Renewable Energy Sourcing: All of their data center facilities run on 100% renewable energy. They have initiatives to further increase renewable energy use in other operations. Customers can receive detailed reports on energy consumption and renewable energy credits through the Green Power Pass Program.
- Eco-Box: They offer customers sustainable storage solutions like the Eco-Box, made of 80% recycled materials and certified by the Forest Stewardship Council, and IRM securely manages the disposal and recycling of end-of-life electronics to minimize e-waste and promote a circular economy.

SL Green Realty Corp *(Sector: Real Estate, Industry: REIT)*

- SL Green is a fully integrated real estate investment trust (REIT) specializing in the acquisition, management, and development of commercial properties, primarily office buildings, in New York City's Manhattan borough.
- Portfolio: SLG owns and operates a vast portfolio of high-quality office properties, including iconic buildings like One Vanderbilt and One Astor Plaza. They also have investments in retail properties and debt and preferred equity. L Green is recognized as the largest commercial landlord in Manhattan, holding significant market share and influence
- Value Creation: The company aims to maximize the value of its properties through strategic leasing, redevelopment, and operational efficiencies.
- SL Green's sustainability focus is among the industry's best:
  - Science-Based Targets: SLG has committed to emissions reduction targets aligned with the Science Based Targets initiative (SBTi), demonstrating their ambition in combating climate change.
  - Renewable Energy: SLG actively pursues renewable energy sources, both through on-site installations and by purchasing renewable energy credits.
  - Energy Efficiency Upgrades: SLG extensively invests in energy-efficient retrofits of their buildings. This includes lighting upgrades, HVAC optimization, and building envelope improvements.
  - Water Conservation: They implement water-saving measures, reducing their footprint across properties.

Macroeconomic Commentary

"The first quarter of 2024 revealed a more-persistent-than-hoped picture of inflation. While showing significant deceleration compared to 2023 peaks, inflation rates remained stubbornly above central bank targets. This defied earlier expectations of a rapid return to price stability, forcing a retrenchment in interest rate expectations. The Federal Reserve, and its global counterparts, signaled that rates will likely stay higher for longer than previously anticipated. Stock markets, with their fixation on immediate, and even incorrect but narrative-promoted results, entered a realm of extreme short-termism. Share prices became increasingly volatile, exhibiting rapid reactions to the smallest shifts in inflation data or monetary policy announcements. The focus on short-term fluctuations often overshadowed longer-term trends during the period; therefore, overlooked potential growth opportunities.

Disruptive sectors like electric vehicles (EVs) and renewable energy faced misleading criticisms in Q1. Despite visible growth and advancements, narratives emerged suggesting a slowdown in EV demand and the failure of the renewable energy transition. These narratives circulated primarily among market commentators, who focused on short-term share price dips. This underscores a dangerous disconnect between on-the-ground business results and their corresponding stock performance.

Some Key Observations and Themes from the Quarter

- **Resilient, but Weakening Consumer:** Consumer spending, a prime driver of the economy, showed signs of strain due to high prices and borrowing costs. Yet, household balance sheets remained strong, providing a buffer for consumption.
- **The Labor Market Paradox:** Job reports continued to defy expectations with low unemployment and robust job growth. This, however, increased wages and contributed to the sticky inflation. It raised concerns about a potential wage-price spiral.
- **Geopolitical Volatility:** Renewed geopolitical tensions impacted energy prices and global supply chains, creating further hurdles for policymakers trying to tame inflation.

EVs and the Green Transition: A Reality Check

The skepticism directed towards EVs and renewable energy in Q1 stems from a misunderstanding of long-term transformational trends. While short-term fluctuations in demand or input costs exist, the broader trajectory remains undeniably clear:

- **EV Adoption is Accelerating:** Sales of EVs continued their upward trend. Major automakers ramped up production to meet demand. Charging infrastructure steadily expanded, further driving adoption. China's leading EV makers are producing compelling cars at extremely competitive prices relative to internal combustion engine automobiles.
- **Renewable Energy Installations are Soaring:** Deployment of wind and solar grew significantly, driven by falling costs and favorable policy support. Storage technologies continued to improve, addressing intermittent supply concerns.

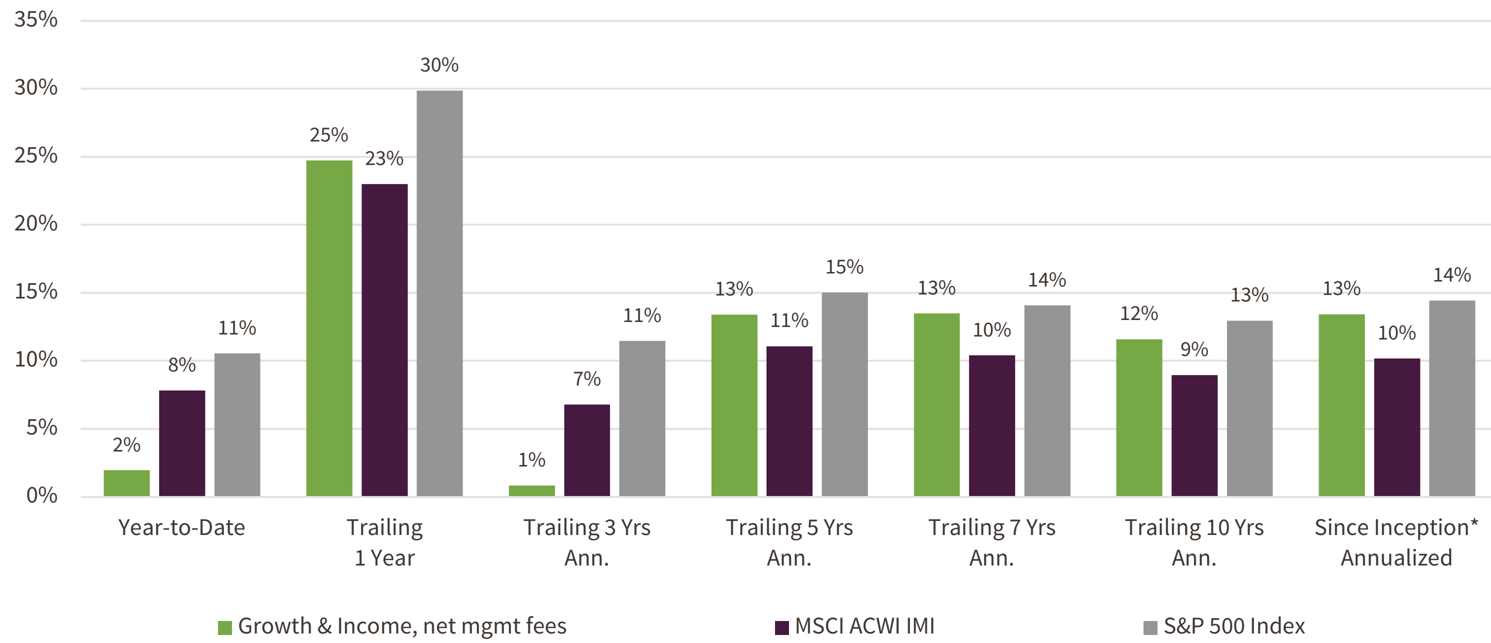
The Stock Market Disconnect

The negative narratives around promising sectors contrasted starkly with their business fundamentals. Many EV manufacturers reported record production and sales in Q1, with strong growth projections. Renewable energy companies announced major capacity expansions. This performance was decoupled from stock valuations, suggesting that the market remains fixated on immediate returns, missing the potential of future growth.

Conclusion

Q1 2024 demonstrated that taming inflation would be a more arduous task than many had hoped. It also highlighted a market environment where short-term noise reigns, threatening to overshadow promising long-term economic shifts. Discerning investors can navigate this landscape by grounding their decisions on verifiable data–as opposed to on narrative–and a recognition of the transformational forces at play in the global economy.

Portfolio Performance & Commentary



For the first quarter 2024, the Growth & Income portfolio returned 1.95% net of management fees, versus its benchmark, the MSCI All Country World Investable Market Index (MSCI ACWI IMI), which returned 7.82%.

The sectors diminishing returns the most from the strategy's returns were Energy and Real Estate.

- Energy was the sector detracting the most from returns. The Growth & Income portfolio holds only two energy companies, and both were down appreciably in Q1, leading to the sector's underperformance. Both companies, world leaders in gigawatts shipped in their respective areas of solar PV manufacturing and wind turbine making, had outstanding business results in Q1, revealing a continuing disconnect between markets and reality, which we believe is the result of a prevailing negative news narrative.
- Real Estate, which as a sector has more weight in this portfolio than it does in any other Green Alpha strategy, was the second largest detractor from returns in Q1. While negative returns for the sector overall, our REIT-specific returns were mixed, with half being up and half declining. The bookends were far apart, with the best name returning 24% and the worst being -30%. We can't help but note that both these companies are in the same business and have very similar property and credit profiles. In addition, data center REITs were uniformly up in the quarter as AI proliferation continued to accelerate.

The strategy's top performing sectors were Technology and Health Care.

- Technology was by far the best performing sector. In Tech, semiconductors, led by the world's dominant advanced semis foundry, contributed the most to returns. Within the Technology sector, the Growth & Income portfolio leans into upstream, dividend-paying semiconductor equipment makers, which uniformly had a strong quarter. In fact, there were no declining names from the sector in the portfolio. The lowest performer, a communications infrastructure stock, was up 9.2%.
- In Health Care, with only 5.6% portfolio weight for the quarter, gains emerged from our exposure to biotech and pharmaceuticals. Specifically, returns were led by exposure to a large pharma name that is one of the most advanced and innovative vaccine developers, followed by one of the world's leading genomics-based therapeutics makers.

**Portfolio Inception: December 31, 2012. 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 Index** – Inception 12.31.2008
  - **Social Index** – Inception 12.31.2015
    - **DiversiTerra** – Inception 3.31.2018
  - **Sierra Club Green Alpha** – Inception 12.31.2010
  - **Growth & Income** – Inception 12.31.2012
  - **Next Economy Select** – Inception 3.31.2013

- **High Income** – a compelling combination of growth and dividend income that is higher than the broad equity market
- **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

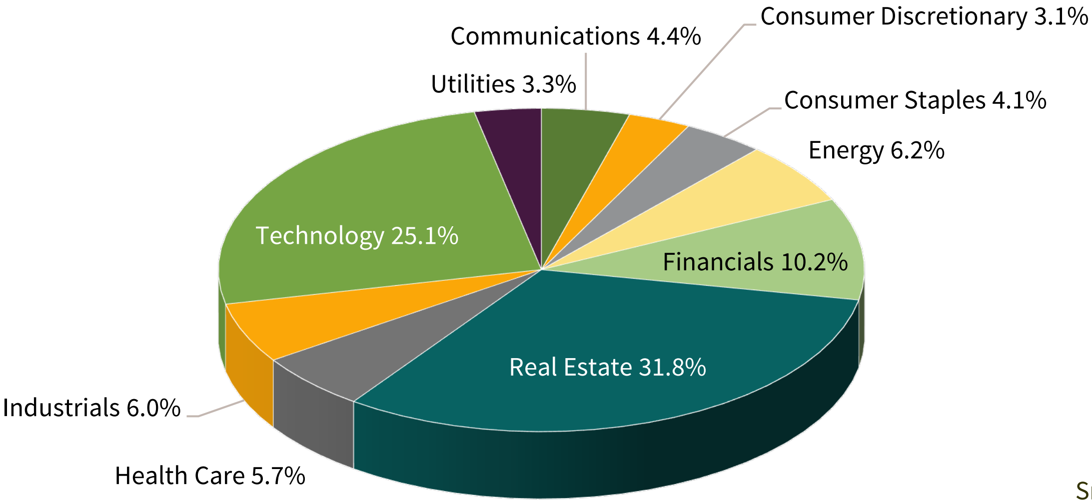
Characteristics	Growth & Income	Benchmark: MSCI ACWI IMI (SPGM)	Next Economy Index	Social Index	Next Economy Select	Sierra Club Green Alpha	DiversiTerra
# of Securities	36	2,644	150	114	61	46	58
Active Share vs MSCI ACWI IMI	97%	-	92%	93%	97%	96%	95%
Active Share vs Next Economy Index	69%	-	-	29%	66%	68%	61%
Sales Growth, Trailing 3-Yr	23%	15%	34%	49%	32%	25%	44%
P/E, Current	19.8	20.2	27.7	30.1	23.3	19.4	29.8
P/E, 1-Year Forward	16.0	17.8	25.1	26.6	20.7	17.7	21.8
Price/Sales	1.2	1.9	2.3	2.3	1.7	0.9	2.1
Price/Book	1.8	2.8	2.9	2.8	2.3	1.9	2.5
LT Debt/Equity	86%	165%	54%	54%	45%	56%	55%
Current Ratio	3.3	2.4	3.7	3.8	5.1	3.7	4.1
Dividend Yield	3.90%	1.95%	1.16%	1.03%	1.85%	2.00%	1.56%
Market Cap, Wtd Avg ($B)	$108.03	$484.77	$126.15	$120.81	$124.18	$131.65	$114.34
Market Cap, Median ($B)	$28.20	$2.66	$7.21	$9.29	$5.46	$8.01	$5.99
Turnover, Trailing 2-Yr Avg	10%	Not Available	25%	39%	16%	10%	28%
Beta, Trailing 3-Yrs	1.27	1.00	1.35	1.43	1.40	1.36	1.35
U.S.-Domiciled Companies	67%	60%	79%	88%	66%	72%	82%
% Revenue Derived in U.S.	51%	45%	52%	60%	51%	52%	59%

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

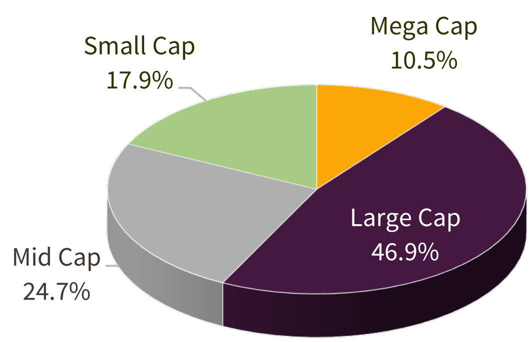
Portfolio Allocations

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

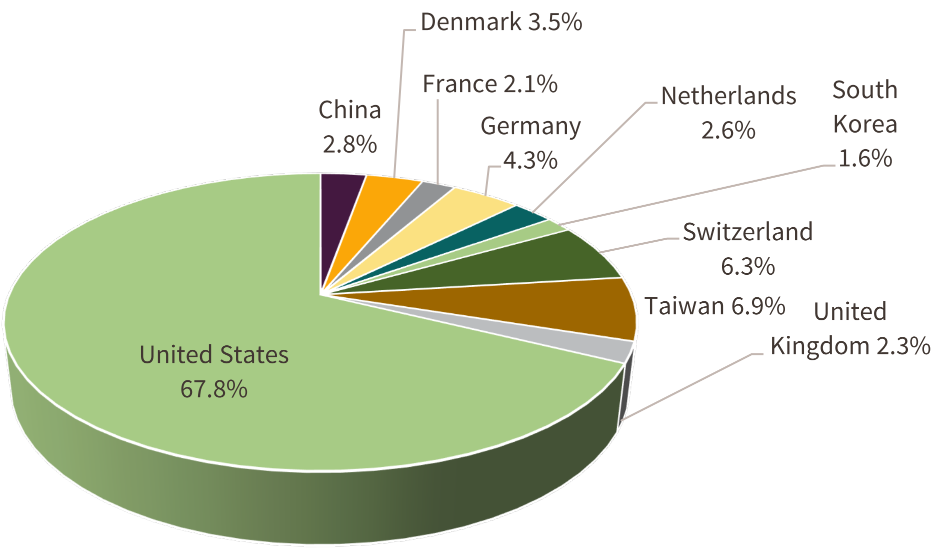
Sectors



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.
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- 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 Growth & Income performance results are a composite of discretionary client accounts invested in the Growth & Income 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 $25,000. The Growth & Income 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 Growth & Income 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. Growth & Income composite performance results do not reflect the reinvestment of dividends and interest.
- Prior to July 31, 2021, the 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 Growth & Income strategy contains equity stocks that are managed with a view towards capital appreciation and current income. 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.
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- 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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