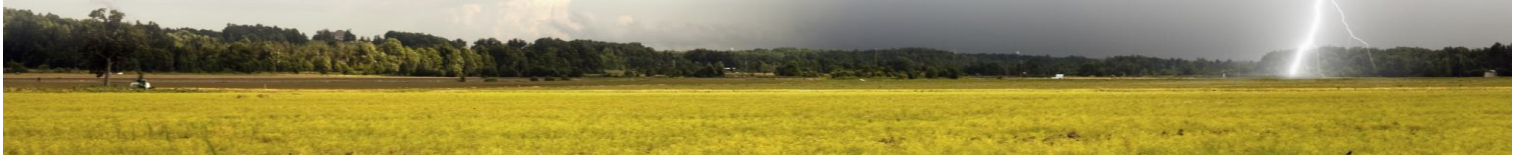


Next Economy Index

Fourth Quarter Review • December 31, 2017



Green Alpha[®]

Review Contents

Portfolio Overview	1 - 2
Allocation by Market Cap	2
Characteristics	2
Manager Commentary	3 - 6
Performance History Charts	3
Top Ten Holdings	7
Sector Allocation & Attribution	7
Attribution: Top 5 Contributors, Detractors	8
Disclosures	9

Why Invest in the Next Economy Index?

- Passive, diversified exposure to many sectors and industries
- Global companies driving the transition to the Next Economy™
- Invests in innovative solutions to core economic and environmental risks
- Fossil fuel free since inception

Inception Date: December 30, 2008

Style: All-Cap Global Growth Equity

Available Vehicle: Separately Managed Account

Next Economy Investment Philosophy

Green Alpha's investment philosophy is straight forward: don't invest in companies that cause global systemic risks; instead, invest in the solutions.

We believe companies that create or enable innovative solutions to climate change, resource scarcity and widening inequality are the greatest growth drivers of the twenty-first century. That's the Next Economy.



Portfolio Construction: Next Economy Index

The Green Alpha Next Economy Index is a passively managed index designed to reflect and benchmark the Next Economy™ – the unfolding, solutions-oriented, innovation-driven, highly efficient economy. It exists to: (1) define all aspects of the Next Economy (2) demonstrate the diversity, growth, breadth and depth of the Next Economy, and (3) serve as a performance benchmark for sustainable active, public equity investment strategies. The Index seeks long-term capital appreciation and serves as a basis for all of Green Alpha Advisors' actively managed portfolios. The portfolio uses a modified market-cap weighting and is rebalanced annually. While the managers may choose to add or remove companies from the Index on an inter-rebalance basis, it is anticipated that these changes will not have a large effect on portfolio turnover. Like all Green Alpha portfolios, the Next Economy Index is a fossil fuel free, all-cap, cross-sector, global equity strategy.

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

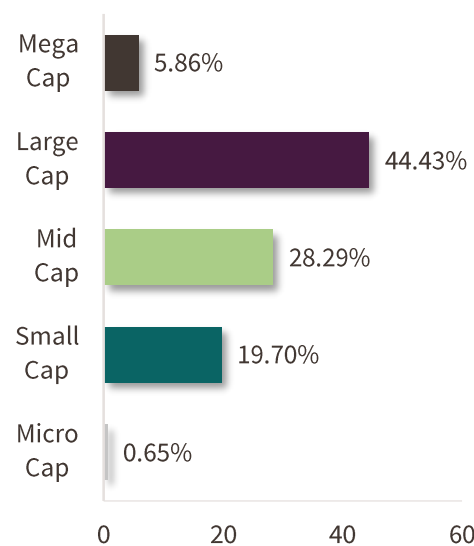
Portfolio Overview: Next Economy Index

Portfolio characteristics, how they compare to other portfolios, and allocation by market cap

Next Economy Index 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 investment process to enter the Index
- **Fundamentals-driven** – because the quality of the companies you invest in and the price you pay for them matter
 - ✓ **High growth** – indicated by Sales Growth, drop from current P/E to Forward P/E as revenue and earnings grow
 - ✓ **Compelling valuation** – demonstrated by Price/Sales, Price/Book metrics
 - ✓ **Strong balance sheet, solid management execution** – expressed by LT Debt/Equity, Current Ratio
- **Fossil fuel free since inception** – we have never invested in companies that prospect, extract, refine, or transport fossil fuels, nor fossil-fired utilities
- **Diversified** – we look for solutions wherever we can find them - across the globe, in firms of all sizes, and in every industry
- **Public equities, long-only** – largest asset class, largest opportunity for impact

Equity Allocation by Market Cap



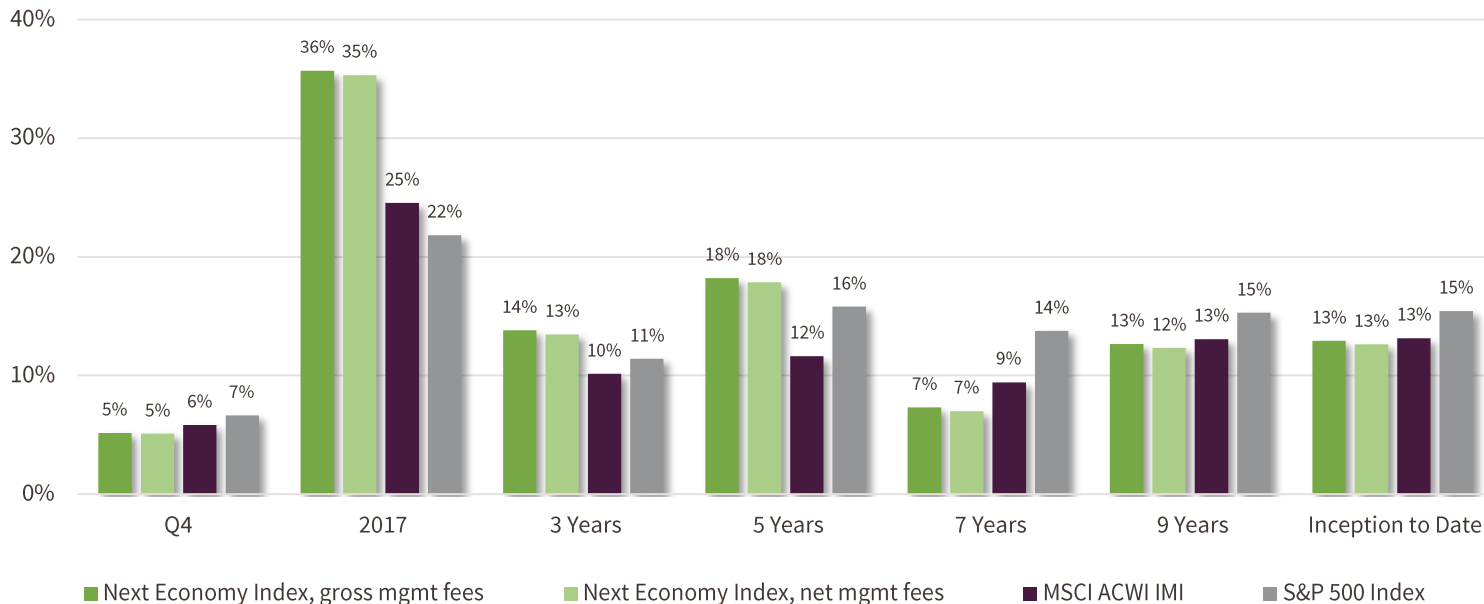
Characteristics	Green Alpha Next Economy Index	Benchmark: S&P 500	Green Alpha Growth & Income	Sierra Club Green Alpha	Green Alpha Next Economy Select
# of Securities	95	500	30	33	52
Sales Growth, 1-Year Trailing	16.17%	9.77%	9.53%	13.69%	14.02%
P/E, Current	38.82	32.95	44.26	42.02	36.32
P/E, 1-Year Forward†	31.67	22.13	30.67	30.20	24.48
Price/Sales	1.71	2.23	2.06	1.22	1.01
Price/Book	2.92	3.30	2.18	2.05	2.03
LT Debt/Equity	0.58	0.87	0.94	0.53	0.59
Current Ratio	2.92	2.10	2.58	3.55	2.96
Dividend Yield	1.63%	1.89%	4.70%	1.25%	1.86%
US Domicile	75.96%	100%	74.35%	65.66%	63.87%
Non-US Domicile	22.97%	-	23.24%	30.82%	27.70%
Cash	1.07%	-	2.41%	3.52%	8.43%
Market Capitalization Weighted Avg (US\$B)	59.42	197.05	20.17	49.04	35.48
Turnover, 1-Year Trailing	19%	-	32%	19%	24%
Beta, 1-Year Trailing	1.22	1.00	1.08	1.40	1.21

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

Manager Commentary & Performance History

2017 in Review

Performance History



Welcome to our review of the Next Economy in 2017. In 2017, markets held up in spite of uncertainties, and Green Alpha strategies performed particularly well, outpacing major benchmarks, and our assets under management grew substantially to \$112 million. So, what was relevant about our Next Economy investment thesis in 2017?

For those of us who don't live and breathe Next Economics, a refresher may be useful. Next Economics rests on the idea that the global economy is becoming ever more efficient and productive as it 1) increasingly incorporates tech-leveraged innovation and 2) moves to minimize the global risks that threaten the economy's ecological and social underpinnings and, as a result, economic growth. In its ultimate realization, the economy will be efficient enough that it can provide good standards of living for everyone without overtopping any of these tolerances, thereby preventing probable systemic collapse. By generating long-term wealth via risk-mitigating products and services – rather than short-term wealth via risk-exacerbating industries like fossil fuels – it is possible to achieve an economically, environmentally, and socially “sustainable” economy.

In terms of portfolio construction methodology, we take a private equity-like view of public equity investing in that we seek the best growth opportunities representing the most innovative, dynamic, risk-solving, and fast-growing companies, often tech-leveraged, that we can identify. Therefore, our strategies are all cap, cross sector, cross industry, and global. As such, our portfolios don't lend themselves to comparison with any individual benchmark. Indeed, as a matter of thesis, we believe that most traditional benchmarks reflect the inefficient legacy economy as much as, and probably more than, they do the highly productive Next Economy. Not only do our strategies not correlate especially closely with most traditional benchmarks (apart from definitional equity correlation), we don't especially want them to; correlating with the legacy economy is not within our mission. *Cont. on Page 4.*

All returns presented above that are greater than 1 year in length have been annualized. Performance data quoted represent past performance. Past performance does not guarantee future results and current performance may be lower or higher than the data quoted. Next Economy Index performance results reflect actual performance for a representative account, net of actual management fees and transaction costs. Assets managed in the Next Economy Index strategy representative account receive a reduced fee from the standard fee schedule. Next Economy Index performance results do not reflect the reinvestment of dividends and interest. 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. Please see more important disclosures on page 9 of this document.



Manager Commentary (cont.)

2017 in Review

Since our thesis holds that Next Economy innovations will increasingly gain market share from their legacy economy predecessors and counterparts in any given industry, we believe that our strategies should, within the additional context of stock selection, realize this lack of correlation as an ability to earn alpha over the long term versus traditional index benchmarks. Over time, we anticipate broad market index turnover to reflect the growing scale and number of representatives of Next Economics in the global economy, and therefore the differences between the output of our thesis and major market indices will become less. This will be a decades-long process.

Common threads of 2017 among Green Alpha portfolios

What, then, are the primary portfolio drivers of ever-increasing, sustainable productivity? In 2017, tech-leveraged innovation and cheap renewable energies led the charge. The global economy is increasingly characterized by automation, machine learning and AI, robotics, connectivity for all smart objects, and waste-to-value based resource management – all powered by true renewables like wind and solar. Unsurprisingly, the leading companies behind these inventions have been growing. More detail about specific sectors and industries can be found below within each strategy's review, but let's begin by looking more closely at renewable energy, the cornerstone of an indefinitely sustainable economic system.

We're keen to own leaders in renewable energies since overall, renewable generation remained one of the fastest growing global industries in 2017. Solar is [poised to install 108 GW](#) of new capacity in 2018 – up from [9 GW in 2007](#). Don't expect these trends to slow down. [According to Bloomberg](#), "Electricity demand worldwide grows 58% to 2040 and this is met by a doubling of installed capacity to 13,919GW in 2040 from 6,719GW today, with wind up 349% and solar expanding a whopping 14-fold." In this light, we have to agree with the energy journal [TerraJoule](#), which recently observed (December 18, 2017 edition) that "while surprising, it's not complicated: two technologies for capturing energy (wind + solar) were comically uneconomic for 30 years and, now, are dangerously competitive. Moving the world economy steadily towards the power grid is, by definition, a process whereby the next unit of GDP is far likelier to be created on the platform of electricity, rather than oil."

In the case of renewables in particular, one additional factor supported share prices in 2017: increasing demand for the stocks themselves. This could have been the result of expanding acceptance of renewables as the soon-to-be primary energy source for the global economy, pro-sustainability galvanization in the face of destructive U.S. policy, or, most likely, some combination of the two. Although the world emitted [historic levels of CO2 in 2017](#), renewable power and electric transportation had meaningful impacts, and are now transforming the global system, with both industries consistently and significantly outstripping expectations and forecasts. Wind and solar are now making power so inexpensively and growing deployments so fast, *Wired* magazine has gone so far as [to say](#), "clean energy... is, in effect, the new Silicon Valley—filled with giddy, breathtaking ingenuity and flat-out good news." On the tech progress front, a [recent headline](#) from *Vox* proclaims "Solar panels have gotten thinner than a human hair. Soon they'll be everywhere." We agree, and we believe that, as a result, there is no clear long-term path for demand growth in fossil fuels. For a detailed round up of the remarkable business advances in renewable energies and electric vehicles, see Michael Liebreich's "[Long-Term Clean Energy Optimism, Short-Term Caution.](#)"

Cont. on page 5.

Manager Commentary (cont.)

2017 in Review

So, after a long time in the doghouse, many of our energy positions finally saw sentiment turn positive in 2017.

Renewable energies weren't the only sector where Green Alpha portfolios returns were propelled by greater-than-average market demand for Next Economy stocks; we also saw this phenomenon in technology, industrials and some consumer non-cyclicals. This was the result of one key factor: better than expected business results, leading to frequent upside revenue and earnings surprises from companies across our strategies. As the best positioned and most productive denizens of the Next Economy continue to gain market share from their legacy economy predecessors, we expect this trend to generally continue over the long term. As with renewables, we may have also seen a shorter-term increase in portfolio constituents' share demand resulting from backlash against political efforts to undermine progress towards general and economic sustainability, but this is harder to quantify.

Within each sector, we of course select only representatives of the future economy. In utilities, that means renewables-generated electricity providers and responsible water custodians. For financials, that means firms that provide financing for renewable energy and efficiency projects. In industrials, makers of stainless steel and connected water infrastructure, providers of efficient displays for phones and other devices, and makers of highest quality decking material made from recycled plastics, all of which made meaningful 2017 return contributions. Yes, we do invest in traditional sectors. No, we don't always or even frequently select the traditional candidates.

Clearly, some things don't change from year to year; innovative companies and their problem-solving ideas remain integral to our Next Economy thesis. However, the Next Economy's results can emerge differently across portfolios due to distinct portfolio construction goals, so let's take a brief look at performance by sectors for the portfolio.

When reading the portfolio-specific comments below, we recommend examining since inception performance chart details on page three and the sector attribution chart on page seven. These provide visuals to aid the description below.

What you won't find below is an explanation of why a particular sector had a negative contribution to the portfolio's return for 2017, because none of the 10 sectors, as defined by the Bloomberg Investment Classification Scheme, had a detracting effect on any of our portfolios.

Next Economy Index – Please refer to page 7 for Sector Allocation and Attribution charts

The Next Economy Index provides the broadest view of the Green Alpha Next Economy universe, because it serves to benchmark the sustainable economy's evolution, and therefore represents the largest and most diversified spread of Next Economy companies across approximately 95 stocks.

The five sectors that contributed the most to the Next Economy Index's returns for the year, from greatest to least are: technology, industrials, consumer non-cyclical, communications and renewable energy.

Within the technology sector, the semiconductor industry contributed the most to performance. Leading semiconductor firms all contribute critical pieces of the Next Economy, including powerful processors that enable machine learning and automation, IoT connectivity, and upstream machinery needed to fabricate these and other kinds of integrated circuits. *Cont. on page 6.*

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

Manager Commentary (cont.)

2017 in Review

Processing power in particular made great strides in 2017. The CEO of one of our best performing firms noted that his company's advances in processing power are far outstripping the gains predicted by Moore's Law, and that the advances in machine learning and processes for automation are therefore poised to realize equally impressive advances. A real world example of the magnitude of these gains in 2017 came from the world of AI vs. humans in the ancient game of Go. DeepMind program AlphaGo had famously defeated world Go champion Lee Sedol four games to one in March of 2016 running on a system requiring 48 AI optimizing processors. By May of 2017, DeepMind was running a vastly superior version of AlphaGo on a system using only four processors. This may seem like it's just about a game, but it gives us real insight into the rate of change occurring in both machine learning efficiency and in semiconductor advancements. Customers, accordingly, are lining up to take advantage of the power of these systems, and revenues are growing fast for the market leading companies.

Elsewhere in tech, the software subsector drove returns with products like simulation software that enables major efficiency gains in areas like engineering and architecture. In computers, we saw the largest company in the world by market cap demonstrate leadership by transitioning to 100% renewable energy and striving to make all its products using 100% waste-to-value sourced feedstock.

Industrials delivered with products like digitally-connected industrial equipment, efficient lighting systems, and infrastructure. One of the world's leading power grid and engineering firms – that is working to integrate renewables and to enable demand response via automation – was particularly strong, and two water infrastructure builders showed impressive growth. Consumer non-cyclicals (including non-invasive cancer diagnostics, small business payment services) and communications (including efficient online commerce, world-leading search engine, information-democratization platforms) followed industrials.

Despite real political headwinds (e.g. "[In 2017, climate change vanished from a ridiculous number of government websites](#)") and perceived ones, renewable energies did well overall, and represented the fifth largest sector (out of 10 sectors) contribution to the Next Economy Index's overall return for the year. In solar, the global leader of thin-film solar PV manufacturing grew its business and gained market share, booking at least 6.7 GW of solar panel sales in 2017 and announcing a production capacity expansion that will bring up to 5.7 GW of additional capacity by the end of 2020. The firm continued to exhibit innovation and industry leadership as well, unveiling new utility-scale solar panels that are three times larger and more efficient at converting photons to electricity than previous generations of panels.

Across technology, renewable energies, and utilities, one theme was consistent: the innovators in the economy continued to gain market share. The world's leading turbine company, for example, logged record order flow and service contract intake, further cementing the company's global leadership in onshore wind. This record-breaking sales activity signaled the company's growth in absolute, organic terms and also gained market share from legacy economy fossil fuels-based electricity generation capacity makers.

Lest we sound like unrepentant techno-optimists, let us make one note: we don't believe that technology itself is deterministic. We must, as a global economy, and in full awareness of our limitations, strive to put new technologies to their most productive and highest uses. The Next Economy universe is doing just that.

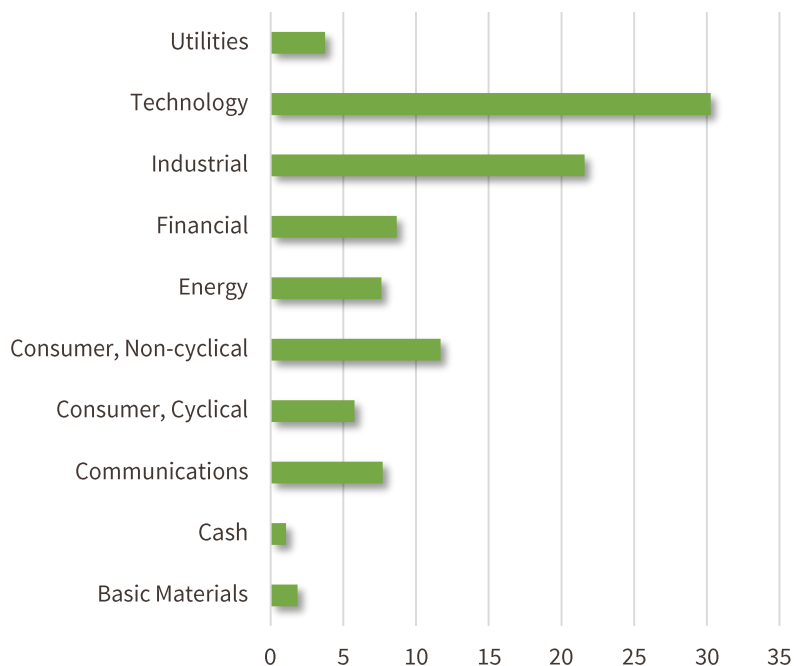
Please see the final page of this document for important disclosures about portfolio, benchmark and characteristic information.

Sector Attribution & Top Ten Holdings

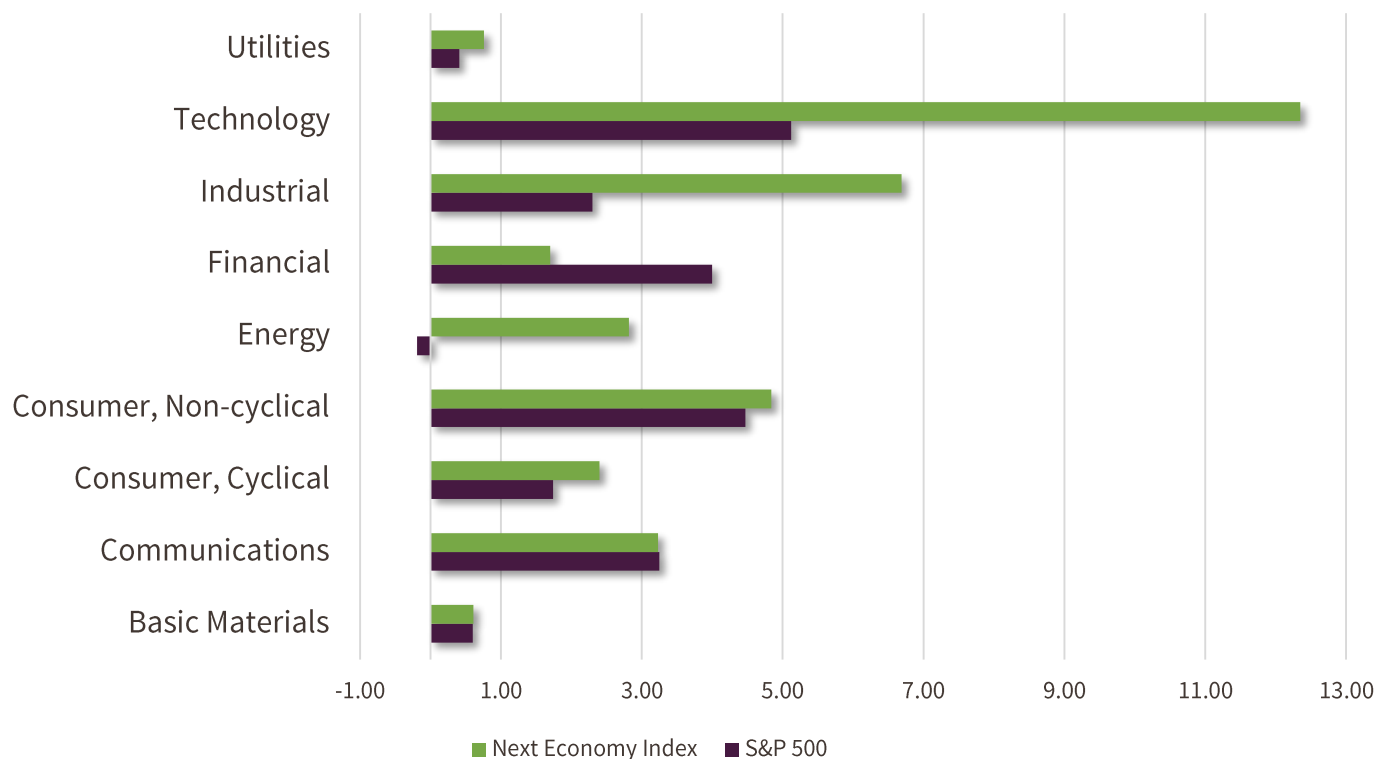
10 Largest Next Economy Index Holdings

Company Name	Weight
Alphabet, Inc.	2.54%
NVIDIA	1.88%
International Business Machines	1.86%
Alibaba Group	1.67%
Apple, Inc.	1.64%
ABB	1.63%
Applied Materials, Inc.	1.61%
Gilead Sciences, Inc.	1.56%
Qualcomm, Inc.	1.55%
Dassault Systemes	1.54%
Top 10 Total (% of portfolio)	17.50%

BICS^{††} Sector Allocation (% of Portfolio)



YTD 2017 Attribution by BICS^{††}



[†] Bloomberg consensus estimates

^{††} Bloomberg Investment Classification System

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

Attribution

5 Largest Contributing Stocks – 4th Quarter

Company Name	Average Weight	Stock Price Return	Contribution to Portfolio Return	Comment
Universal Display Corp. <i>OLED</i>	2.18%	34.02%	0.70%	OLED benefitting from mass adoption of organic LEDs as the IP/patent leader; high margins relative to peers
First Solar, Inc. <i>FSLR</i>	1.14%	47.17%	0.44%	Exceeded revenue growth expectations; sold out production capacity through first half of 2019; announced production of Series 6 panels for utility-scale solar (17% efficiency, more watts/lift than other CdTe panels); not subject to Section 201 trade case
Twitter, Inc. <i>TWTR</i>	0.86%	48.67%	0.42%	Reformulation of user count revealed better than expected people:bot ratio; revenues and earnings beat expectations
Square, Inc. <i>SQ</i>	1.96%	20.34%	0.40%	Subscription- and transaction-based offerings both showed strong growth; strong conversion to earnings growth by management
Tokyo Electron <i>TOELY</i>	1.72%	17.96%	0.30%	Macro tailwinds as memory demand expands rapidly, TOELY's integrated circuits and semiconductor businesses growing equally rapidly; flat panel division receiving increase in orders

5 Largest Detracting Stocks – 4th Quarter

Company Name	Average Weight	Stock Price Return	Contribution to Portfolio Return	Comment
Vestas Wind Systems <i>VWDY</i>	1.18%	-23.47%	-0.33%	Despite record turbine & service orders, anti-renewables market sentiment and political headwinds punished share price
Ultra Clean Holdings, Inc. <i>UCTT</i>	0.90%	-24.59%	-0.29%	Q3 earnings slightly (\$0.02/share) below expectations, share price drop on announcement; management also reported higher expectations for Q4 earnings; stock added to S&P SmallCap 600 Index
Tesla, Inc. <i>TSLA</i>	3.00%	-8.72%	-0.19%	Market concerns of ability to deliver expected quantities of Model 3 in 2018; activated 100MW battery in Australia (delivering within 100 days, as promised), used solar & batteries to reopen Children's Hospital in Puerto Rico; manufacturing solar panels in Buffalo NY means TSLA not subject to Section 201 import tariffs
Brooks Automation, Inc. <i>BRKS</i>	0.83%	-21.13%	-0.19%	After dramatic run-up in share price, short-term traders took profits and sold the price down after Q4 revenue and earnings higher than expected, Q1 reported to be better than previously expected
Veeco Instruments, Inc. <i>VECO</i>	0.47%	-30.61%	-0.18%	Adverse legal finding from Chinese court limits potential sales of one of their devices in China, market overreacted to the news as only 1% of revenues at risk, growth tailwinds in all other segments

Past performance is not a guarantee of future results. To obtain information about the calculation methodology used to select the representative account's largest contributors and detractors from performance or to obtain a list showing every holding's contribution to the account's performance during the measurement period, contact us at info@greenalphaadvisors.com. Given differences in account sizes, custodial fee arrangements and other client-specific factors, not all accounts invested in the Next Economy Index experienced the exact portfolio contributions shown above. The holdings identified throughout this document do not represent all of the securities purchased, sold, held or otherwise recommended for advisory clients. Nothing in this document should be considered recommendation to purchase or sell any particular security.

Important Information & Disclosure

- Performance data quoted 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.
- All performance and characteristics data are sourced from Bloomberg Finance L.P. 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 on pages 7 and 8 do not represent all of 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 S&P 500 Index is an unmanaged index of 500 common stocks chosen for market size, liquidity and industry group representation. It is a market-value weighted index. The S&P 500 Index figures do not reflect any fees expenses or taxes. Investors cannot invest directly in this index.
- The SPDR S&P 500 ETF (SPY) seeks to provide investment results that, before expenses, correspond generally to the price and yield performance of the S&P 500 Index. Investors can invest directly in SPY.
- MSCI ACWI IMI: The MSCI ACWI Investable Market Index (IMI) captures large, mid and small cap representation across 23 developed markets and 23 emerging markets countries. With over 8,600 constituents, the index is comprehensive, covering approximately 99% of the global equity investment opportunity set. 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 of the information that may be required to evaluate Green Alpha Advisors and its investment strategies.
- 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” and “Investing in the Next Economy.”
- Green Alpha is a certified B Corporation. B Corps are for-profit companies certified by the nonprofit B Lab to meet rigorous standards of social and environmental performance, accountability, transparency and aspire to use the power of markets to solve social and environmental problems. This certification does not represent a statement of any Green Alpha client and does not describe any experience with or endorsement of Green Alpha as an investment advisor by any such client.