Portfolio Review • September 30, 2018

Green Alpha€

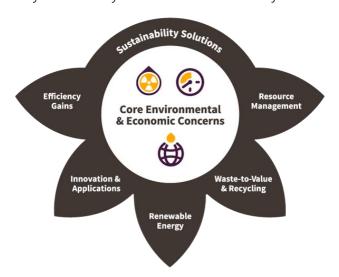
Review Contents

The Po	rtfolio	1-4
	Characteristics	2
	Top Ten Positions	3
	Market Cap & Sector Allocation	4
Performance		
	Performance History & Sector Attribution	5
	Top Five Contributors & Detractors	6
	Manager Commentary	7-8
Disclosures		

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.



Why Invest in Next Economy Select?

- Actively managed, long-only equity strategy seeking long-term capital growth
- 45-65 global, market-leading 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: March 31, 2013

Style: All-Cap Global Growth Equity Available Vehicles: Mutual Fund,

Separately Managed Account

Portfolio Construction: Next Economy Select

The Next Economy Select portfolio is designed for investors seeking long-term capital growth. The strategy is available both as a mutual fund and as a managed account to help provide democratized, low-minimum account size access to high quality investing. Because of this, the portfolio's primary objective is capital appreciation via high-conviction, market-leading Next Economy companies, with moderately less volatility than some of our other strategies. Since the primary vehicle available within this strategy is a mutual fund, this product follows standard mutual fund industry diversification guidelines, such as: no position sizes over 5% of the portfolio and no sector concentration in excess of 25%. Under normal market conditions, Next Economy Select is generally composed of at least 80% global equities and at most 20% cash and cash equivalents. Like all Green Alpha portfolios, Next Economy Select is a fossil fuel free, all-cap, cross-sector, global equity strategy.



Portfolio Overview: Next Economy Select

Portfolio characteristics and how they compare to the S&P 500 (SPY) and other Green Alpha portfolios

Next Economy Select Characteristics

- Highest conviction stocks, two investment vehicles democratizing access to leading Next Economy companies via a mutual fund and SMAs
- 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

Characteristics	Green Alpha Next Economy Select	Benchmark: S&P 500 (SPY)	Green Alpha Next Economy Index	Green Alpha Next Economy Social Index	Green Alpha Growth & Income	Sierra Club Green Alpha
# of Securities	53	500	94	73	33	39
Sales Growth, TTM	20.68%	13.00%	17.93%	17.96%	12.38%	18.22%
P/E, Current	24.82	35.01	37.05	37.69	32.73	31.21
P/E, 1-Year Forward [†]	17.74	16.81	21.18	21.02	18.28	18.17
Price/Sales	0.98	2.25	1.75	1.76	2.14	1.36
Price/Book	1.89	3.52	3.08	3.41	2.13	2.15
LT Debt/Equity	0.66	0.85	0.58	0.65	1.19	0.66
Current Ratio	2.62	1.92	2.86	2.83	2.39	2.73
Dividend Yield, TTM Dividend Yield, Current	2.26%	1.80%	1.63%	1.50%	6.04% 5.08%	2.13%
US Domicile Non-US Domicile Cash	71.40% 26.64% 1.96%	100%	77.68% 20.26% 2.06%	83.89% 13.62% 2.49%	76.85% 21.05% 2.11%	70.68% 25.30% 4.03%
Market Capitalization Weighted Avg (US\$B)	45.54	247.17	74.47	79.79	21.86	68.04
Turnover, TTM	8%	-	17%	35%	29%	23%
Beta, TTM	1.00	1.00	1.05	1.05	0.87	0.97

TTM = *Trailing Twelve Months*

[†] Bloomberg consensus estimates



Top Ten Positions

And how the top five positions are driving progress toward the Next Economy

Pattern Energy Group, Inc. (Utilities, Power Generation)

- Portfolio of 20 wind power facilities with a geographical footprint that includes the US, Canada, Chile, Mexico.
- Also includes projects around solar, transmission & storage.
- High quality, investment grade, & long-term power purchase agreements translate to steady revenue stream.
- Above average gender diversity for a utility company, witha woman in Senior Leadership & two on the Board of Directors (29%), including the Chair of the Nominating, Governance & Compensation Committee.

Vestas Wind Systems (Energy, Renewable Energy)

- Global leader in wind energy technology & services, making wind a mainstream energy source.
- Also a global leader in onshore installations & onshore gridconnected installations.
- Strong gender diversity for renewables; two women in Senior Management (22% of the team) & three on the Board of Directors (25%).

Company Name	Ticker	Weight
Pattern Energy Group, Inc.	PEGI	5.67%
Vestas Wind Systems	VWDRY	5.47%
First Solar, Inc.	FSLR	4.05%
Applied Materials, Inc.	AMAT	3.96%
Tesla, Inc.	TSLA	3.81%
SunRun, Inc.	RUN	3.68%
Canadian Solar, Inc.	CSIQ	3.64%
Alphabet, Inc.	GOOG	3.53%
Int'l Business Machines	IBM	3.36%
Hannon Armstrong Sustainable	HASI	2.91%
% of Portfolio		40.08%

First Solar, Inc. (Energy, Renewable Energy)

- Has developed, financed, engineered, constructed & currently operates many of the world's largest grid-connected solar PV power plants.
- Business spans utility-scale solar, corporate renewables, community solar, "turnkey" systems for developers, & operations & maintenance services.
 - Makes unique CdTe technology solar cells, which are inexpensive, more efficient than C-Si panels in hot environments, and also outperform in cloudy and shady conditions. CdTe tech is also exempt from current U.S. tariffs.

Applied Materials, Inc. (Technology, Semiconductors & Manufacturing Equipment)

- Next Economy applications include manufacturing of semiconductors, displays, solar cells, & many emerging technologies.
- Also offer automation software, thereby improving efficiency in production of these essential technologies.
- Two women (22%) participants on the Board, including Chair of the Corporate Governance & Nominating Committee, & one women in Senior Management.

Tesla (Consumer Discretionary, Autos)

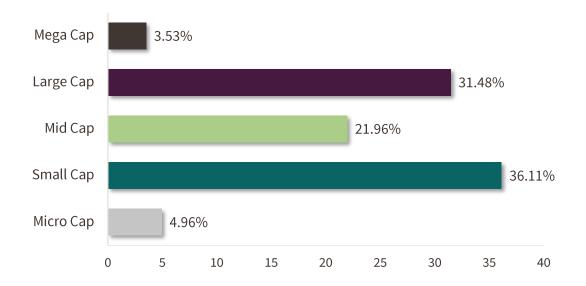
- Designs, develops, manufactures and sells fully electric vehicles and energy storage systems; also installs, operates and maintains solar products.
- Aims to accelerate the global transition to sustainable energy.
- While Tesla sometimes misses its ambitious short-term production goals, they continue to drive unmatched, long-term progress in the EV market.



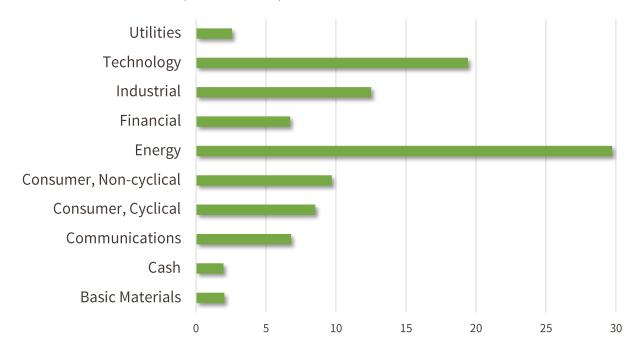
Allocation by Market Cap & Sector

Our search for Next Economy companies is unconstrained. We seek solutions to systemic risks wherever they exist – across sectors, market caps, and geographies. The following divisions are the result of our Next Economy process, rather than the starting point.

Equity Allocation by Market Cap



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



^{††}Bloomberg Investment Classification System



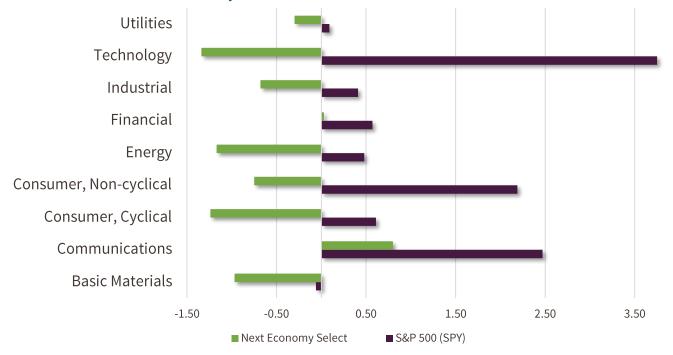
Performance History & Sector Attribution

For commentary, see pages 7 - 8.

Performance History



Year to Date 2018 Sector Attribution by BICS^{††}



^{††}Bloomberg Investment Classification System

All returns presented above that are greater than 1 year in length have been annualized. Performance data represents past performance and does not guarantee future results. Current performance may be lower or higher than the data quoted. Next Economy Select performance results reflect actual performance for a composite, net of actual management fees and transaction costs. Some assets managed to the Next Economy Select strategy in the composite receive a reduced fee from the standard 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 all full-month periods under management with Green Alpha Advisors, LLC. Next Economy Select performance results 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 the final page of this document.



Attribution: Top Five Contributors & Detractors

Next Economy innovation doesn't unfold overnight—or even a quarter. Think of this as one way of looking at the previous quarter's performance, not necessarily the long-term picture.

Five Largest Contributing Stocks – 3rd Quarter

Company Name	Ticker	Average Weight	Stock Price Return	Contribution to Portfolio Return
Invitae	NVTA	1.07%	127.62%	0.89%
Canadian Solar, Inc.	CSIQ	3.37%	18.46%	0.56%
Universal Display	OLED	1.81%	37.16%	0.53%
Sierra Wireless	SWIR	2.30%	25.62%	0.51%
Pattern Energy Group	PEGI	5.30%	8.25%	0.49%

Five Largest Detracting Stocks – 3rd Quarter

Company Name	Ticker	Average Weight	Stock Price Return	Contribution to Portfolio Return
Tesla, Inc.	TSLA	3.89%	-22.80%	-1.20%
Applied Materials, Inc.	AMAT	4.03%	-15.93%	-0.74%
United Natural Foods, Inc.	UNFI	1.74%	-29.79%	-0.61%
JinkoSolar	JKS	2.29%	-21.79%	-0.52%
Veeco Instruments, Inc.	VECO	1.06%	-28.07%	-0.34%

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 Select 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.

info@greenalphaadvisors.com 303.993.7856 www.greenalphaadvisors.com



Manager Commentary

Q3 2018 in Review



In Q3 2018, we saw that the economy is functioning at a high level. It was a quarter of unusually rapid economic growth in the U.S., enough that the Fed took the word "accommodative" out of their <u>September FOMC Statement</u>, meaning they estimate that the economy is healthy enough to no longer require unusually cheap capital to continue growing.

But uncertainties in the political world—led by the specter of trade wars—loom large along with interest rate rises and the winding down of QE. In September, Fed Chairman Powell went out of his way to remind everyone that, while the economy is growing sufficiently to merit a 0.25% raise to the Fed Funds rate, the Fed is not responsible for trade policy. He <u>stated</u> that "many of our country's economic challenges are beyond the scope of the Fed, but we are doing all we can to keep the economy strong and moving forward." Separately, and specifically on trade, Powell <u>recently said</u>, "The truth is this: Since War II we've had this trading system develop, and consistently tariffs have come down and trade has grown. And I think that's served the global economy, and particularly the United States economy, very well... Part of the independence that we have is to stick to our lane, stick to our knitting, so really wouldn't want to comment on fiscal policy really, or trade policy."

Ford Motor Company, by contrast, did recently comment on current trade policy: "The metals tariffs took about a billion dollars of profit from us," <u>said CEO Jim Hackett</u> at a Bloomberg event in September. Q3 also saw ongoing efforts to renegotiate several trade deals, most importantly NAFTA, China, and Japan. As of the end of the quarter, nothing has been signed, and China is threatening to cancel the next meeting with US delegates. **The scene right now can be summed up as: growth with uncertainty.** (Note: as of 10/1, a provisional tri-lateral <u>update to NAFTA</u>—now the USMCA—has been agreed to by the U.S., Canada, and Mexico. Uncertainty is diminished a little—in this hemisphere, at least.)

On the interest rate hike, Chairman Powell <u>noted</u> that the Fed doesn't see in their data any reason to fear a recession in the next year or two and therefore multiple raises may be in order for 2019. More raises in the short-term rate could have the effect of inverting the yield curve, but the Fed doesn't necessarily see that as a harbinger of recession (although history does show a correlation there).

Yet a correction is certainly plausible. In general, the very low interest rate environment we've been in for years now has encouraged even conservative investors to leave bonds and money markets for investments that have higher yield or return potential but are farther out on the risk curve. Often, this means stocks. The often-discussed scenario—a stock market correction resulting from some combination of rising rates (which attract risk averse money back out of stocks and into cash and debt instruments), QE winding down, and trade uncertainty—seems plausible at some point in the next few years. So, how do we proceed?

Start by focusing on what's emerging, growing and gaining market share from incumbent economy predecessors and counterparts. **Even in bear markets, there will always be parts of the economy that are developing faster than others.**

Then, focus on intrinsic value—the 'true value' based on a company's tangible and intangible assets. **If you can buy a company** because you can get it for close to what it's worth—as opposed to buying it regardless of its intrinsic value because it's in an index—you have a better chance of avoiding overpriced stocks. Therefore, you are more likely to withstand a downturn and better positioned to recover early and with some velocity. Stocks do tend to return to their intrinsic value more quickly than they will return to being overvalued. On that point, it's worth revisiting the portfolio characteristics as of the end of Q3, 2018 on page 2 of this document.

Owning growth in the form of innovative, sustainability-driving companies without paying too much (at the aggregate portfolio level) above intrinsic value is what we strive to do. (continued on page 8)



Manager Commentary (cont.)

Q3 2018 in Review

Markets are always going to be changing on us. There will always be new events and innovations, including things far outside our control. What we can do is be adaptable. We can consider the most likely scenarios and prepare for them. At Green Alpha, we look to scientific consensus, since science aims to show us what's real; it is the closest we can come to truly *knowing* what those future scenarios hold and how to address them.

While some progress is slowly being made, the financial industry has by and large failed to integrate such scientifically-based risk calculus into its methods. Many investors continue to buy fossil fuel-based stocks as though there is no risk to the underlying assets and there are no *financially viable* alternatives. This tells us they are not being skeptical. This won't last. What will cause the fossil fuels bubble to burst is the accelerating development of renewable energies (e.g., China's clean energy push) and energy efficiency technologies, followed by plunging prices.

The overall picture at the end of Q3 2018 is one of growth with uncertainties, both geopolitical and economic, with a plausible case for market correction or even recession over the next few years, along with areas of rapid growth and productivity improvements occurring within that context.

As always, we remain true to thesis, never engage in style drift, are fossil fuels free, and focused on what's next.

In Q3 2018, our portfolios saw generally favorable results, but with some dispersion between strategies. Returns are summarized on pages 5 and 6. As a supplement, here is a look into Q3's performance attribution by strategy.

Next Economy Select - Portfolio Commentary

- ▶ The Green Alpha Next Economy Select portfolio was up 0.94% for Q3 2018. Industrials was the top sector, contributing 1.36%.
 - Within Industrials, the sustainable building materials specialty subsector added 0.47%. Demand for recycled product viewed as higher-quality-for-price versus primary resource materials continues to grow in the U.S.
- Communications followed as the second highest contributor, adding 0.80% to portfolio return.
 - In Communications, Internet of Things connectivity modules contributed 0.51%. The beginnings of 5G networks, together with greater global data flow, are the key catalysts here. We expect this to continue.
- ➤ The largest negative contribution came from Technology at -0.89%.
 - In Technology, the detractors were all from the semiconductor space. Within the Select portfolio, eight of nine semiconductor holdings were negative for the quarter, causing the group to detract 1.84% from the portfolio overall. Semiconductor firms had a difficult quarter in Q3 as near-term analysis at many large banks' research desks saw reasons to expect weaker sales in Q4. Given that data and computational demand continue to expand along with continued device proliferation, we view this signaling as short-term ephemera. Growth in this space should continue for many years to come. Semiconductor shipments will continue to grow year-on-year for the foreseeable future.
- Consumer Cyclical detracted 0.73% during the quarter.
 - The Consumer Cyclicals holdings in Next Economy Select are all electric vehicle related. Within that group, half were up and half down, but the down outweighed the up by a portfolio-level detraction of 1.05%. This was largely due to regulatory overhang, which negatively impacted share price despite output growth.



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.
- Dividend information for the Growth & Income Portfolio: The dividend yield for the trailing twelve months (TTM) for the Growth & Income Portfolio included a significant one-time special dividend distribution by TerraForm Power, Inc. The TTM dividend yield for the portfolio (6.04%) was materially higher than the current dividend yield (5.08%) as a result of the special dividend. The current dividend yield is shown in addition to the TTM dividend yield as a more appropriate reflection of the portfolio's current dividend yield as of September 30, 2018.
- Composite-level performance data shown on page 3 includes performance data for the mutual fund, which is sourced from Morningstar, Inc., and performance data for separately managed accounts, which is sourced from each client's custodian.
- All other performance and characteristics data in this document 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 throughout this document 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 cites 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.
- At the time this commentary was written and published, Green Alpha portfolios did not have any positions, long or short, in Ford Motor Company (ticker F).
- 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."
- For additional legal information and Form ADV Part 2, please see http://greenalphaadvisors.com/about-us/legal-disclaimers/.