

# Next Economy Social Index

June 30, 2019

## Green Alpha<sup>®</sup>

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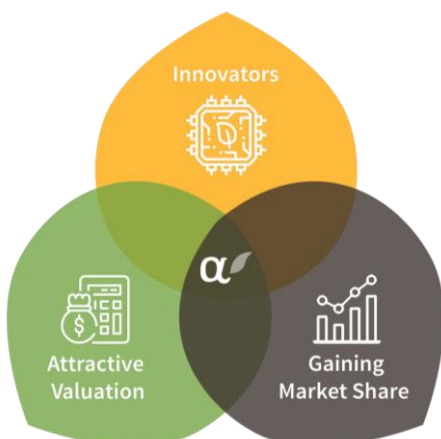
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### Investment Philosophy

We believe companies that create or enable innovative solutions to climate change, resource degradation and scarcity, and widening inequality are the greatest growth drivers of the twenty-first century. The idea is to invest in the best, growing industries that are building an extremely efficient, sustainable economy – that’s what we call the Next Economy.

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

We believe these companies will gain market share from their legacy economy counterparts – today and into the future. That makes investing in them our best chance at helping clients preserve and grow their purchasing power.



### Why Invest in the Social Index?

- Applies unique gender and social inclusion criteria to Green Alpha’s largest basket of innovators
- Passively managed, diversified exposure to many sectors and industries, currently in 95 companies
- Invests in global, market-leading companies driving the transition to the Next Economy™
- Fossil fuel free since inception

**Inception Date:** December 31, 2015

**Style:** All-Cap Global Growth Equity

**Vehicle:** Separately Managed Accounts

### Portfolio Construction: The Social Index

The Next Economy Social Index is an actively-researched, passively-managed portfolio designed to harness the powerful long-term performance potential of Next Economy companies run by diverse leadership teams and boards of directors. Portfolio construction is based on the premise that the cognitive power of groups exceeds that of individuals, and the more diverse the group the greater the cognitive capacity.

To manage the Social Index, we start with our list of [Next Economy Index](#) constituents, then remove any that lack strong female representation in leadership or on the board. We select weights based on market cap sizes, and then assign additional portfolio weight to companies where women hold positions of significant decision making authority, have especially strong representation in leadership, and/or corporate policies are socially inclusive.

Stocks are actively selected using Green Alpha’s top-down (evaluating contribution to a sustainable economy, and gaining market share away from legacy economy peers) and bottom-up (seeking the strongest financial positions and long-term growth expectations within acceptable levels of risk) investment criteria.

# Next Economy Social Index

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

## Characteristics

- **Largest Next innovators, diversity leaders** – harnessing the performance enhancing and risk reducing potential offered by diverse teams, we apply gender and social inclusion criteria to the Next Economy universe
- **Fundamentals-driven** – the underlying quality of the companies you invest in and the price you pay for them matter
  - ✓ **High growth** – indicated by Sales Growth, drop in 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 or internal combustion engine manufacturers
- **Diversified** – we look for solutions wherever we can find them – across the globe, companies of all sizes, in every industry
- **Public equities, long-only** – largest asset class, largest opportunity for impact

Characteristics	Green Alpha Next Economy Social Index	Benchmark: MSCI ACWI IMI (ACIM)	Green Alpha Next Economy Index	Green Alpha Next Economy Select	Green Alpha Growth & Income	Sierra Club Green Alpha
# of Securities	95	8,866	115	56	31	42
Sales Growth, Trailing 1-Yr	13.84%	10.61%	11.62%	8.90%	12.21%	12.00%
*P/E, Current	61.90	26.27	59.45	99.12	34.14	96.74
P/E, 1-Year Forward <sup>†</sup>	27.39	15.16	24.33	25.44	19.67	21.59
Price/Sales	1.78	1.46	1.66	1.49	2.20	1.64
Price/Book	3.43	2.20	2.87	2.38	2.22	2.52
LT Debt/Equity	0.87	0.83	0.71	0.77	1.14	0.75
Current Ratio	2.87	1.70	2.82	2.93	2.06	2.66
Dividend Yield	1.56%	2.56%	1.54%	1.67%	4.73%	1.55%
Market Capitalization Weighted Avg (US\$B)	56.53	150.34	58.86	38.21	20.87	51.72
Market Capitalization Median (US\$B)	7.40	1.03	5.82	2.98	13.05	3.59
Turnover, Trailing 1-Yr	28%	-	25%	13%	14%	10%
Beta, Trailing 2-Yrs	1.09	1.00	1.08	1.10	0.86	1.01
Active Share	95.13%	-	95.19%	98.06%	98.37%	97.63%

\*P/E, Current is abnormally higher in Green Alpha portfolios this quarter due to one holding, which has a material weighting, that transitioned from negative earnings to slightly positive during the quarter.

<sup>†</sup> Bloomberg consensus estimates. Please see the final page of this document for important disclosures about portfolio, benchmark and characteristic information

# Largest Positions

How the Social Index is driving progress toward the Next Economy

Company Name	Ticker	Weight
Int'l Business Machines	IBM	2.22%
Universal Display Corp	OLED	2.14%
Autodesk	ADSK	1.89%
Exact Sciences Corp	EXAS	1.87%
Invitae Corp	NVTA	1.78%
Switch	SWCH	1.74%
Sunrun	RUN	1.72%
Splunk	SPLK	1.69%
Danone	DANOY	1.59%
Oracle Corp	ORCL	1.59%
<b>% of Portfolio</b>		<b>18.23%</b>

## IBM (Technology, Technology Services)

- Adroitly managing transition from legacy IT and consulting services to Next Economy tech and innovation powerhouse
- Highlights: top patent holder across many domains; cloud and cognitive software, quantum computing, enabling distributed ledger; pioneering AI; developing security methods atop lattice cryptography; advancing nanotechnology; developing and applying Watson (AI) across industries, including medicine, water, food safety; recently developed the most accurate weather forecasting tech available
- Female CEO is building a diverse team to maximize the company's ability to innovate, with six women (30%) in Senior Management and three on the Board of Directors (23%), including key Committee Chairs

## Universal Display (Technology, Semiconductors)

- Universal Display Corporation is a designer and IP owner of organic light emitting diodes (OLED) technologies and materials, which it licenses to other display manufacturers
- OLED displays are more energy and materials efficient than other technologies - more than 2x as energy efficient as LCD displays, and offer superior brightness despite less power use, light weight, short response times, and wider visible viewing angles
- Universal Display Corp's IP is found in most smartphone, tablet, notebook computer, desktop monitor, smart watch and TV displays available today; you're probably reading this with their IP right now
- OLED boasts 40% Executives being female, and the Board of Directors 25%, including the Compensation Committee Chair

## Autodesk (Technology, Software)

- Leading design software with tools spanning architecture, engineering and construction, platform solutions and emerging business, manufacturing, media and entertainment. Autodesk's products have revolutionized design and engineering times from idea to finished product.
- Designing the new wave of efficient products requires effective, data-driven tools to create them. Recurring revenues constitute 93% of total revenue. Successfully growing subscription revenue. They also offer and enables 3D printing, which is instrumental in growing waste-to-value product lifecycles
- Women make up 27% of Senior Management and 44% of the Board of Directors, including two Committee Chair positions

## Exact Sciences (Healthcare, Medical Equipment)

- Technology for earlier and less invasive cancer detection - Pioneer of accurate, less expensive and simpler methods of colorectal cancer detection, approved by FDA and covered by most major insurance including Medicare and Medicaid
- Leadership features two female Executives and two women Board members, including Compensation Committee Chair

## Invitae (Health Care, Health Care Facilities & Services)

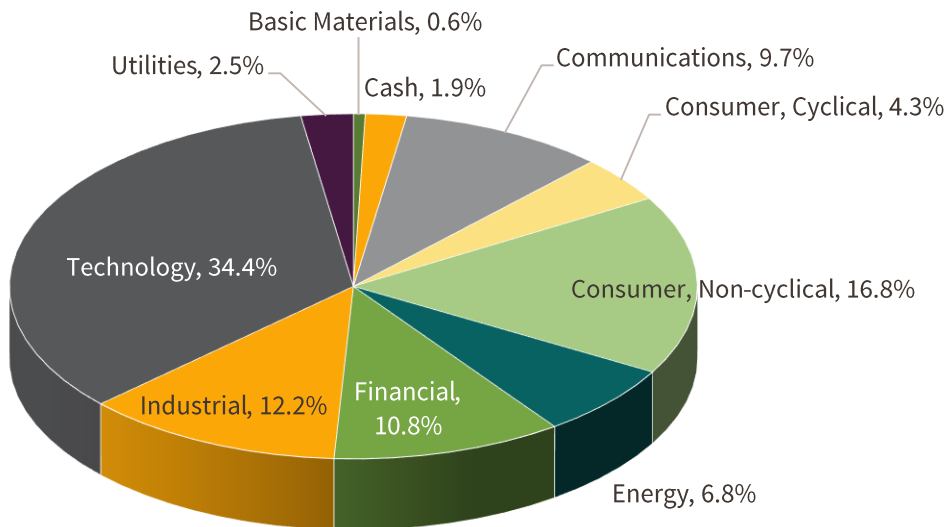
- Leading genetic testing provider and IP owner – Invitae's stated mission is to provide "genetic testing into mainstream medical practice by providing high-quality, affordable genetic testing"
- Genetic testing is revolutionizing medicine, offering better, earlier and even predictive diagnostics to patients, with the promise of therefore extending lifespans, quality of life and outright prevention
- Invitae's lead and IP ownership in many forms of genetic testing do not have a close second available in equity markets
- Senior Management includes four women (33%), including the CFO, CAO, and CCO; the female Board member is Audit Committee Chair; 10 of 15 (67%) Medical Directors are women

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

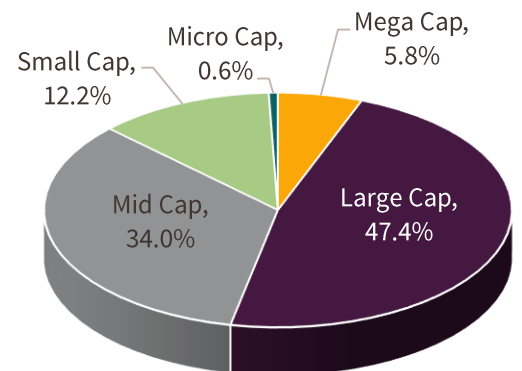
# Portfolio Allocations

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

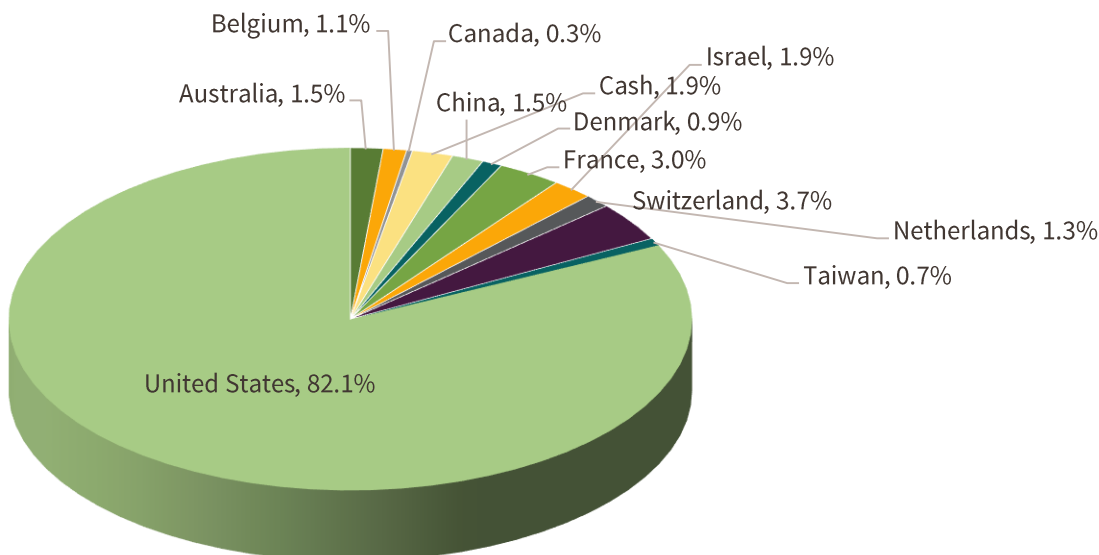
## Economic Sectors<sup>††</sup>



## Market Capitalizations

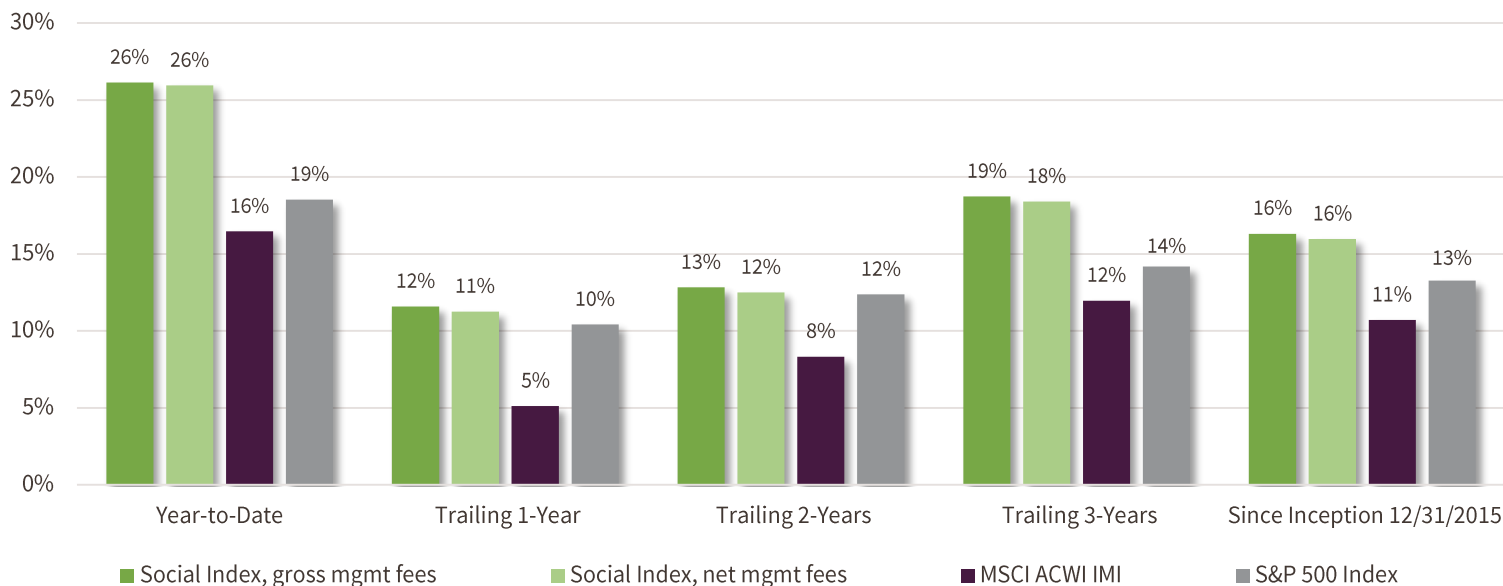


## Companies' Main Headquarters



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

# Performance & Commentary



Markets experienced a positive second quarter of 2019, as, overall, optimism about interest rate cuts and strong employment numbers outweighed fears of a global trade war and associated economic slowdown.

Next Economy companies fared particularly well, as many of our holdings in renewable energies, semiconductors, and biotech reported strong earnings and upbeat forecasts. As a result, Green Alpha's portfolios—across the board—outperformed their benchmarks for the period.

In the second quarter of 2019, the Next Economy Social Index returned 5.50%, net of management fees, compared to the MSCI All Country World Investible Market Index (MSCI ACWI IMI) return of 3.58%.

The highest contributing sectors in the Social Index for Q2 were:

- Technology, which contributed 1.90% to the portfolio. The rally in semiconductors carried over from Q1 and was the lion's share of the Technology sector's return in Q2 as well. Contributors in semiconductors were a diversified set, including upstream manufacturing equipment, makers of 5G connected chips, integrated circuits for general computing and communications, and microcontrollers and automation enablers.
- The Industrial and Energy sectors tied for second largest contributions to the portfolio, each contributing just over 1% for the quarter. Companies producing high-efficiency display technology, LED lighting, and the global leader in high-efficiency solar PV panel manufacturing were the standouts in these sectors.

During the quarter, the lowest contributing sectors were both slightly negative, detracting from the portfolio's returns modestly.

- The Social Index's worst performing sector for Q2 was Communications, detracting 0.05%, driven by the Internet industry, with digital security, search, and ecommerce leading the declines.
- The second worst performing sector was Utilities, which detracted 0.04%. The renewables-based electric utilities industry added to returns, but not enough to overcome the slightly negative returns from the water industry, specifically due to exposure to Western U.S. water utilities.

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

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- MSCI ACWI IMI: The MSCI ACWI Investable Market Index (IMI) captures large, mid and small cap representation across 23 developed markets and 24 emerging markets countries. With over 8,700 constituents, the index is comprehensive, covering approximately 99% of the global equity investment opportunity set. Investors cannot invest directly in this index.
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