



## Terra Alpha Quarterly



*To commemorate the 50th anniversary of the first photo of an Earthrise.*

*January 2019*

Just over fifty years ago, humans first left our planet's outer atmosphere and circumnavigated the Moon. Unexpectedly, that mission's major legacy was this first visual perspective of our planet Earth. For the first time, we were confronted with the true uniqueness and fragility of our planet.

In December of 1968, when the Earthrise photo was taken, there were 3.54 billion humans on the planet - just 500 million were considered middle-class. Today, the global human population stands at over 7.5 billion and is projected to grow to over 9.5 billion (3 billion of which are projected to be middle class) by 2050. Our current economic demands of our planet's natural systems require 1.8 planets. Unchanged, we will need 5 planet Earths to serve the needs of 9.5 billion people. This defines an unsustainable situation.

Throughout human history, we have adapted to survive. At Terra Alpha, we see the natural systems risks and limits confronting our society. We also believe that there is a path to a truly sustainable economy that can assure our society's ability to thrive in an increasingly natural resource-constrained world. We refer to this as Capitalism 2.0; an improvement of our economic system that properly includes the value of our planet's essential natural resources and our society into decision-making. This sustainable economic model requires driving meaningful change in our natural resource use and impact through operational efficiencies, adoption of new technologies, innovative product developments and designs, and smarter decision-making by all elements of society.

Terra Alpha is pioneering innovations in traditional investment management in order to provide a better way to invest in our changing world as well as to help shift our economy to better align with our planet's natural limits. Simply put, our Environmental Productivity™ analytical framework puts our Earth's limits in the heart of our investment strategy because we believe it will deliver superior outcomes.

Our best wishes for a sustainably prosperous 2019,  
Terra Alpha Investments

**VIIF Report on Public Equities - Featuring Our Case for Impact via Public Equities**

The recently formed [Virginia Impact Investment Forum \(VIIF\)](#) has a mission to connect those who are active in the Impact Investing space with those who want to learn more and perhaps do more. Terra Alpha was asked to contribute to their first project - a collection of impact investing opportunities in Virginia. A summary of our input follows:

The world's public equity markets are the largest and most free-flowing pool of capital with over \$80 trillion of value in the hands of pensions, endowments, foundations, and individuals. The flows in the public equity markets have enormous influence in shifting the status quo toward a more sustainable and equitable system. A new report from the Virginia Impact Investing Forum, features Terra Alpha Investments' views on incorporating Environmental Productivity™ across the global economic system and the role of public equity markets in achieving this transition.

[VIIF Report](#)

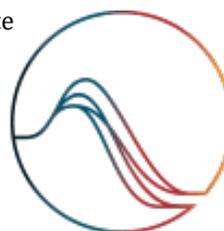
### Investing in a Time of Urgent Climate Change Warnings

Following the recent Intergovernmental Panel on Climate Change (IPCC) report and U.S. National Climate Assessment, Terra Alpha Founder and Chief Investment Officer, Tim Dunn, discusses actionable ways that Terra Alpha has driven the transition to a sustainable economy through our investment approach.

[Full Article](#)

### How We Incorporate Science Based Targets into Our Work

In 2018, we saw some of the largest impacts of climate change around the world, with record heat waves, major storms, wildfires, and droughts. These created tens of billions of dollars of economic loss and led to thousands of human deaths. Knowing that GHG emissions are a major cause of climate change, hundreds of companies are leading efforts to reduce carbon emissions by utilizing [Science Based Targets \(SBT\)](#), a tool created by the Science Based Targets initiative (SBTi)\*. SBT help companies determine individualized emissions reduction targets that are in line with the requirements of the Paris Agreement on Climate Change, to keep global temperature rise below 2C.



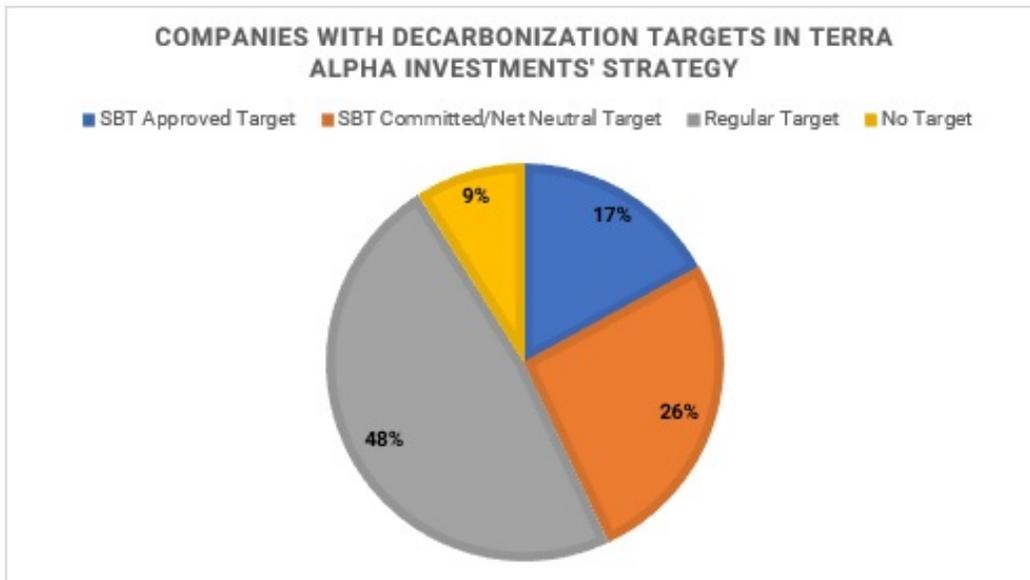
SCIENCE  
BASED  
TARGETS

DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

Businesses that have SBT, which are third-party verified under the SBTi, utilize scientifically-assessed data to manage their direct operations and associated impacts, consistent with either a 2 degree or 1.5 degree scenario. (Note: SBT do not allow companies to utilize purchased renewable energy credits to achieve targets.) Currently, 515 companies have committed to setting or have set a science-based target to cut emissions.

As investors, Terra Alpha aims to identify companies that are leaders in our changing economy and our natural resource-constrained world. As part of our Environmental Productivity™ analysis for our portfolio holdings, we seek to find forward-looking companies who have set targets, ideally Science-Based Targets. We see this as both an indicator of best management practices and a harbinger of better future risk-adjusted returns.

Of the 75 holdings within Terra Alpha's investment strategy, 91% have a plan to reduce GHG emissions with a target. 43% have set or are in the process of setting a Science Based Target. (13 of our holdings have official SBT approved and 20 are either SBT committed or have set a carbon net neutral target.) This compares to less than 10% of all major publicly-traded companies.



- 17% of our holdings have official SBT approved
- 26% of our holdings are SBT committed or have a carbon net neutral target
- 48% of our holdings have a regular target
- 9% of our holdings have no target (*many of which are in the process of setting one but don't have one yet*)

\*The Science Based Targets initiative is a collaboration between CDP, the United Nations Global Compact, World Resources Institute, World Wildlife Fund, and one of the We Mean Business Coalition Commitments established in mid 2015.

### **Terra Alpha is a Signatory of the 2018 Global Investor Statement to Governments on Climate Change**

In the wake of inaction on climate change, a warming world could cause \$23 trillion in global economic losses over the next 80 years - three to four times the scale of the 2008 financial crisis. While investors are beginning to incorporate climate change scenarios and climate risk management strategies into their investment products, governmental actions to address climate change continue to lag.

In an effort to close this gap, Terra Alpha Investments joined 319 investors, representing \$28 trillion in assets, in signing the *2018 Global Investor Statement to Governments on Climate Change*. This letter urges governments to work closely with investors to incorporate Paris-aligned climate scenarios into their policy frameworks, as well as encourages companies to report climate-related financial information to price climate-related risks and opportunities effectively.

In the age of resource scarcity, Terra Alpha recognizes that initiatives alone will not solve these serious problems. Nonetheless, they add weight to the effort to drive change.

[Press Release](#)

### **Terra Alpha Joins Confluence Philanthropy as a Practitioner Advisor Member**

Terra Alpha has recently joined Confluence Philanthropy as a Practitioner Advisor Member.

[Confluence Philanthropy](#) has a stated vision of

advancing mission aligned investing by supporting and catalyzing a community of foundations, donors, investors, and advisors who seek to drive a positive impact within the economy through their investments.



Terra Alpha is excited to join and learn from the Confluence group of like-minded leaders and innovators with a demonstrated conviction that impact and investment returns are compatible objectives. We believe that it is part of the patchwork of activities, actions, and sentiment that have given rise to greater awareness and recognition of the market and physical challenges we face in a resource-constrained world. Through this partnership we hope to continue to drive systemic change in our economy so that it is more aligned with our natural systems.

### New Director of Business Development - Tara Doyle

[Tara Doyle](#) joined our firm on December 3rd as our Director of Business Development. Tara has worked in business development roles in the financial services industry for the last seven years. Most recently, she was Director of Business Development for MTN Capital Partners in New York City. She has previously worked at Piper Jaffray and Nomura Securities. She holds a BA in English and American Literature from Middlebury College.



Tara will assume responsibility for investor relations, working with existing investors and building new relationships. She will be based in our Washington DC office. Her email is [tara@terraalphainvestments.com](mailto:tara@terraalphainvestments.com).

### New Advisory Board Member - Amy E. Dine



Terra Alpha Investments is pleased to welcome Amy E. Dine to our [Advisory Board](#). Her professional background and previous experience working internally at Terra Alpha will provide unique insights to our board.

[Press Release](#)

