



October 2020

# Impact Report: Our First Five Years





Terra Alpha Investments is a public equity manager founded in 2014 by highly experienced investors who share the conviction that our rapidly evolving world requires a change in investment thinking. Our rigorous and proprietary Environmental Productivity (EP) analysis values our planet's natural resources and sits at the center of our successful investment process. Our innovative process of quantitative and qualitative analysis helps us identify leading companies with the optimal combination of enduring business models and superior EP. We believe this process is the primary driver of our ability to deliver superior long-term investment returns for our investors.

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## A Letter from our Founder & CIO

Terra Alpha Investments was founded in 2014 in order to make a positive impact in our world. We designed our firm, our investment process, and our engagement and advocacy program to provide better financial and environmental outcomes for our investors, push companies towards sustainable or regenerative environmental pathways, and to create a world in which our economy operates in harmony with our natural systems and serves our societal needs.

All of Terra Alpha's work is premised on these beliefs:

Investors should be active owners and invest in a manner that serves both their long-term financial needs and societal goals.

A truly sustainable economic system must recognize its use of and impact on natural resources, as well as the costs and benefits to society.

The power of the capital markets influences business behavior, policy decision-making, and broader investor action.

Those companies and investors who adapt most effectively to our rapidly changing world will derive significant benefits.

This impact report looks back at the work Terra Alpha has undertaken and the successes we have achieved in our first five years. We have engaged with many of the world's largest companies, investment firms, leading NGOs, leading academics, and policymakers. We have broadened awareness that large multinational corporations can be agents of positive, scalable change. We have supported the argument that meeting shareholders' goals need not be at odds with protecting the interests of all stakeholders. We have demonstrated that a well-designed investment process that integrates material environmental, social, and governance information can create superior financial returns.

We are proud of the impact we have had and the positive change we have seen in awareness and actions by companies and investors in our initial years. Yet, we know that the impacts of climate change on our planet's natural systems has accelerated and our time to address the climate crisis, and other environmental challenges, has grown shorter and more dire.

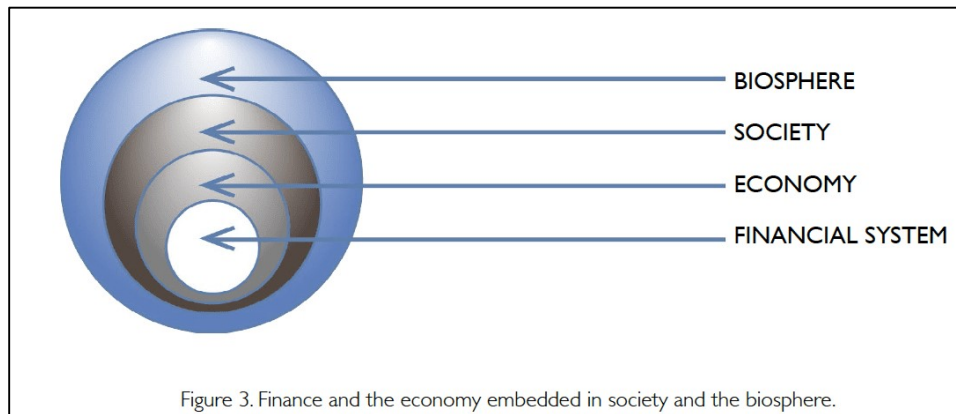
In the decade ahead, our global economy must evolve in order to address the demands of nine billion people in full recognition of our planet's overtaxed and deteriorating natural resources. This will require decarbonizing our global energy and transportation sectors, evolving our food systems, tackling water shortages, and creating a more circular product design and manufacturing system given limited essential raw materials. These changes will create enormous opportunities and risks for both companies and investors, while creating a better world for all of earth's inhabitants. Terra Alpha is committed to doing our part to help drive our world to a sustainable future – while serving the interests of our investors.

Sincerely,

Timothy Dunn, CFA  
*Founder & Chief Investment Officer*

## Better Financial Returns, Better Environment, Better World

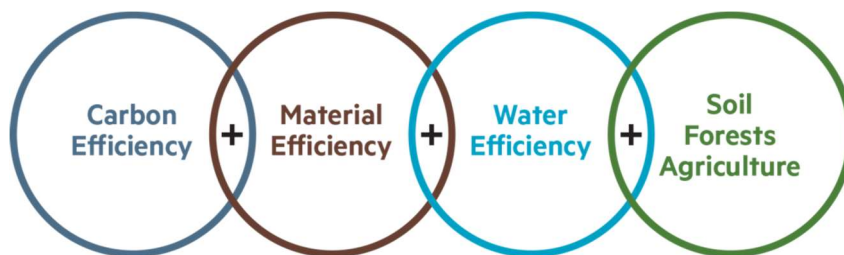
We believe that our rapidly changing world requires an evolved approach to investing: one which recognizes that integrating the intrinsic value of our planet's natural resources is not concessionary, but critical to long-term financial returns; and that actively investing in and engaging with corporations on behalf of our investors not only drives returns, but catalyzes positive economic change while building a more sustainable future for all.



Source: [Capital Institute](#)

### Environmental Productivity

Integrating the value and cost of our planet's natural resources is critical to our rigorous quantitative/qualitative research process, and our proprietary Environmental Productivity (EP) analysis—which covers carbon, water, waste, and other natural resources—is embedded within every investment decision.



Our analysts work to develop a holistic understanding of a company's EP - its ability to seize opportunity and manage risk in our increasingly natural resource-constrained world. The quantitative component of our analysis summarizes how the company's corporate disclosure, target setting, and risk assessment practices compare to our ideal standards. The qualitative assessment incorporates our conviction that the company contributes to and will thrive in a sustainable world. As part of this analysis, our analysts consider a company's intentionality, enabling qualities, and performance/progress towards its goals.

As part of our analysis and in an effort to better understand a company's role in our changing world, we classify companies into the categories of forward thinker, enabler, or pioneer.

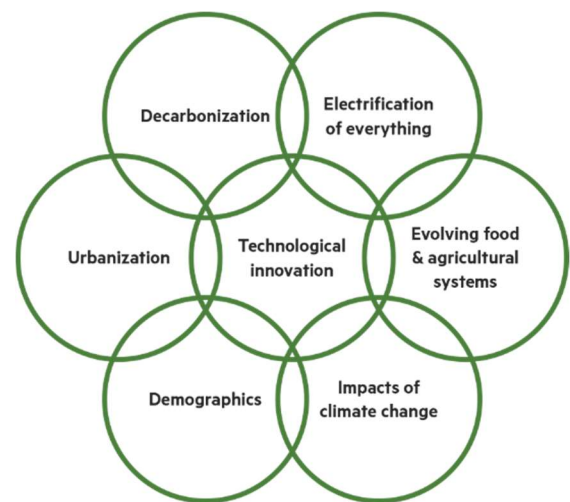
- Forward thinkers are companies that clearly consider our changing world in how they operate and that recognize there are risks and opportunities to how they operate (e.g., Unilever - multinational consumer goods company with focus on nutrition, hygiene, and personal care).
- Enablers are those companies that consider our changing world in the products and services they provide. They often allow or help other industries or customers to be more efficient at utilizing natural resources through the goods they produce or services they offer (e.g., Xylem - leader in developing innovative water solutions with the use of smart technology).
- Pioneers are those companies that are disrupting traditional industries in an effort to adapt to a changing world (e.g., Tesla - electric vehicle and clean energy company).

Our intentional and rigorous approach to EP serves as a foundational pillar to our research efforts and helps us identify material risks and opportunities for the companies in which we invest.

## Enduring Business Model

We view a company's superior Environmental Productivity as necessary, but insufficient, grounds for investment. To complement this perspective, our Enduring Business Model (EBM) research assessment measures a company's ability to deliver long-term (5+ year time horizon) positive returns and provide relevant, desirable products and services throughout the transition to a more sustainable global economy.

Terra Alpha's EBM Scoring process is designed to measure a company's ability to deliver long-term (5+ years) positive returns in our rapidly changing world. These changes will accelerate the creative-destructive nature of our capital markets, increasing risk and creating new opportunities for investors.



Our senior investment team and the sector analysts individually assess each company across a range of factors. In the end, we build a portfolio of companies; each of which we believe will thrive in our rapidly changing world as leaders in building a sustainable economy.

## Measuring our Portfolio's Impact

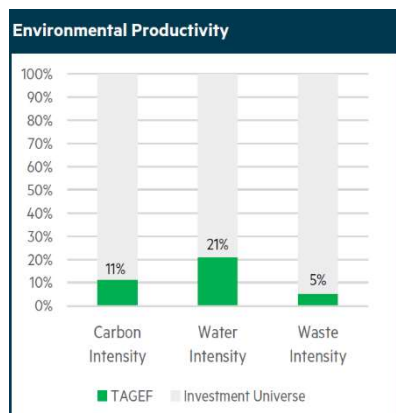
From the beginning, we set out to demonstrate that by incorporating Environmental Productivity into investment analysis and security selection, we could create a better way to invest that would result in better outcomes for our investors. Our first five years clearly support that belief; **Terra Alpha's global diversified strategy has generated superior environmental and financial returns since its inception.**

The strategy naturally gravitates towards companies with significantly lower carbon, water, and waste footprints than those of their industry peers and of the overall economy, translating into better environmental outcomes. This underlines our contention that all investment assets have impacts, both positive and negative, and moving from negative towards positive impacts must be a central part of every individual's and organization's sustainability agenda.

### Measuring Environmental Intensity Values

We designed our research process to include a quarterly recalculation of our Environmentally Productive Investable Universe. At the beginning of this process, we utilize a third-party data provider that collects corporate-disclosed data from companies' integrated annual reports, corporate sustainability (CSR) reports, and CDP survey responses (we do not use third-party estimated data in our company analysis). During the initial quantitative steps in this process, we calculate GHG emissions, water, and waste intensity values (e.g., CO<sub>2</sub>e emissions/revenues) to compare a company's relative environmental performance versus its peer grouping.

### Portfolio Footprint Reporting



We report the weighted-average environmental intensity values of our funds to our investors on a quarterly basis. We also provide the underlying company level data to our investors annually (or upon request). As an example, the graph to the left shows our diversified strategy's carbon, water, and waste intensity scores versus our disclosure universe. The information presented is updated as of 06/30/20.

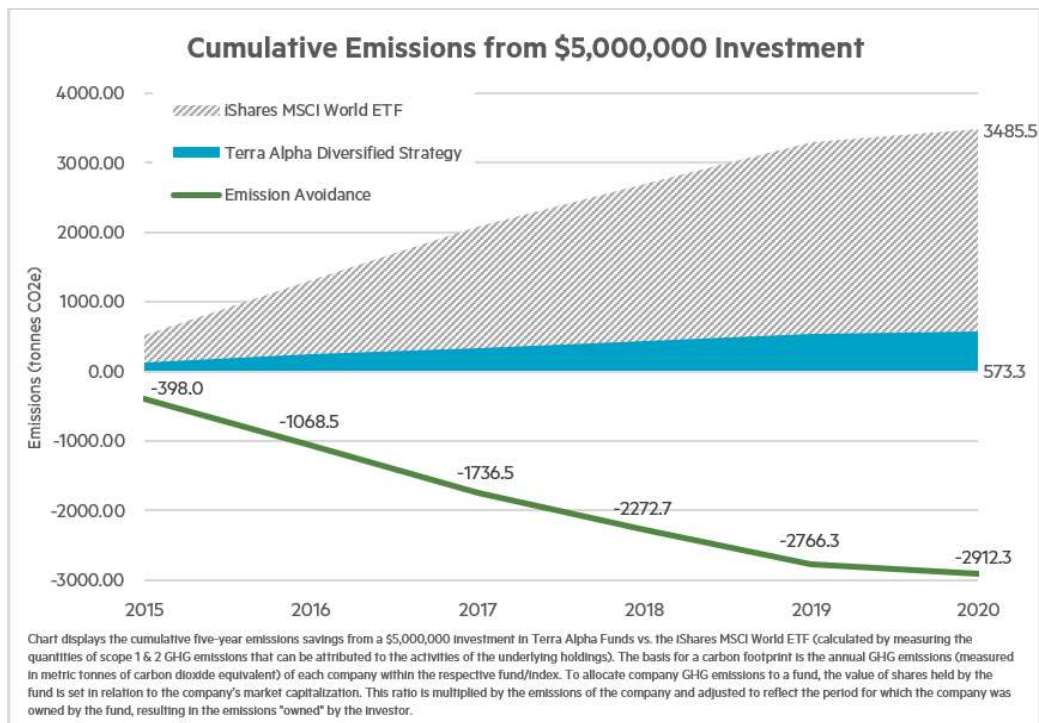
### Cumulative Portfolio Impact

We calculate our funds' carbon, water, and waste impacts (i.e., the resource streams our funds are "responsible" for via our investment in companies) on an annual basis. Below we show the cumulative five-year impacts of our global

diversified fund as compared to a standard global index. *Please note that due to data disclosure limitations, some portfolio footprint measurements include the use of estimated data where corporate-disclosed data is unavailable.*

## Carbon

Based on a \$5 million investment, our diversified strategy avoided 2,912 tonnes of CO<sub>2</sub>e, which is 83% less than the standard global index. For context, this is the equivalent of the [average American's carbon footprint](#) over 182 years.

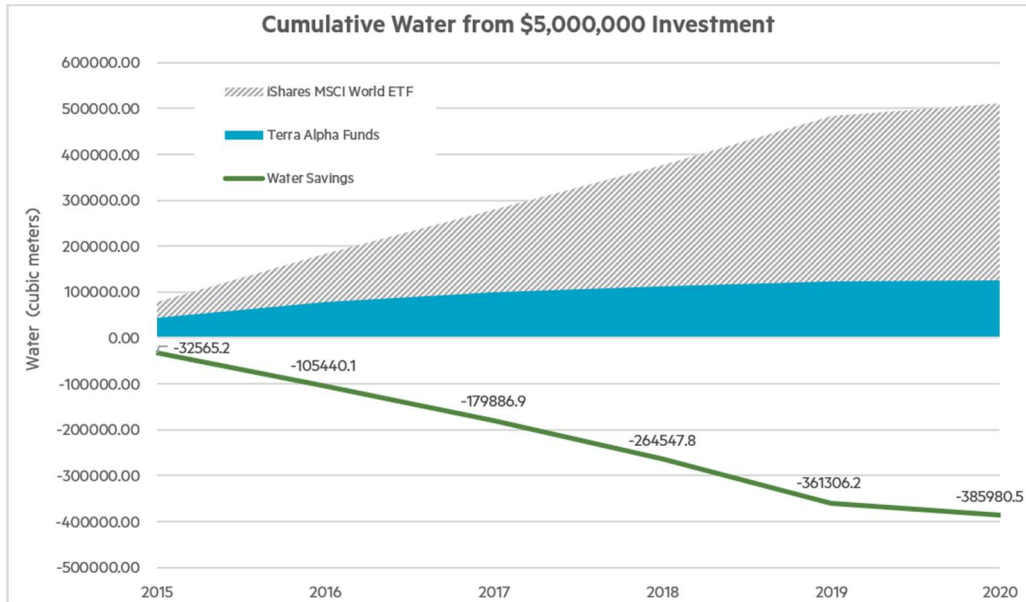


The chart above shows the cumulative five-year greenhouse gas emissions (measured by CO<sub>2</sub>e) avoidance from a \$5 million investment in the Terra Alpha diversified strategy vs. the same dollar amount invested in the iShares MSCI World ETF.

## Water

Based on a \$5 million investment, our diversified strategy avoided 385,980 cubic meters of water, which is 75% less than the standard global index. For context, this is the equivalent of the [average American's water use](#) over 319 years.

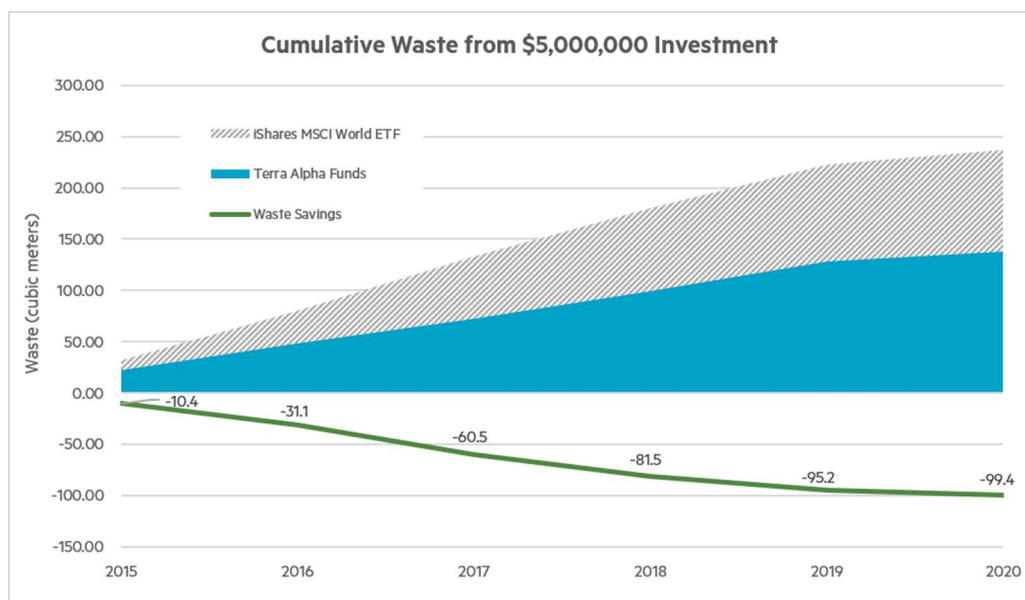




The chart above compares the cumulative five-year water use (cubic meters) associated with a \$5 million investment in the Terra Alpha diversified strategy vs. the same dollar amount invested in the iShares MSCI World ETF.

### **Waste**

Based on a \$5 million investment, our diversified strategy avoided 99 cubic meters of waste, which is 42% less than the standard global index. To put this in perspective, 99 cubic meters of waste is equivalent to **approximately 12,351 lbs of mixed municipal solid waste** ([otherwise known as everyday trash](#)).



The chart above shows the cumulative five-year waste (cubic meters) avoidance from a \$5 million investment in the Terra Alpha diversified strategy vs. the same dollar amount invested in the iShares MSCI World ETF. [Source: EPA - Volume to Weight Conversion Factors, April 2016](#)

## Corporate Engagement & Active Ownership

### How We Engage with Companies

#### *Positive Engagement, Analyst Driven*

Our corporate engagement has two primary approaches, both led by our research analysts: general portfolio campaigns and customized company engagement. This is more efficient for us and more effective in driving impact.

In our general portfolio campaigns, our primary focus is to improve disclosure of Environmental Productivity (EP) metrics and business practices. We firmly believe companies that disclose their environmental impact (e.g., GHG emissions, water use, waste streams) will make more profitable investment choices and build a more sustainable company. Since 2015, we've launched three campaigns targeting: increased disclosure of carbon, water, and waste data, ideal disclosure practices, and commitments to Science Based Targets.

In our customized engagements, the analyst utilizes Terra Alpha's Environmental Productivity and Enduring Business Model frameworks, our Ideal Disclosure guidelines, and our proxy voting policies to identify the highest priority issues to discuss. We plan to deepen our customized corporate engagement work in the years to come.

#### *Introductory CEO Letter*

For each new portfolio company, Terra Alpha sends a letter to the company's Chief Executive Officer and Investor Relations team to discuss the company's successes, and shortcomings, based on our Environmental Productivity research. We include our [Ideal Disclosure white paper](#) with each company letter as a point of reference when considering our feedback. Each letter is tailored to the particular company's strategy to ensure the information is fully relevant and digestible. We have seen strong response rates across our portfolio, indicating interest in turning our feedback into action.

#### *Ideal Corporate Disclosure*

When designing our investment process, we intentionally decided to use corporate disclosed data to calculate our Environmentally Productive Investable Universe (EPIU). A multitude of reasons informed this choice (the inadequacy of estimated data, the inconsistency of third-party ratings, our confidence in our own understanding of the nascent data's limitations), but the simplest reason is perhaps the most powerful; we maintain that a company disclosing its use of natural resources is more likely than its non-disclosing peers to be measuring and managing its footprint because it recognizes the impact on its bottom line.

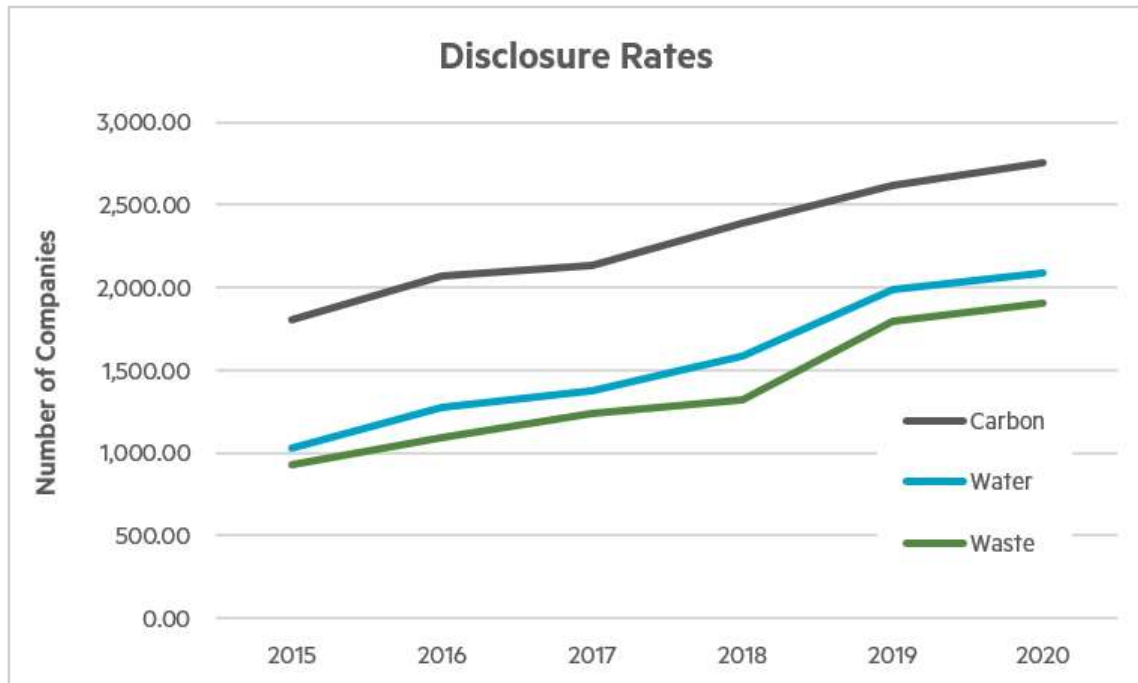
We advocate for environmental data disclosure to help business leaders and the investment community make better-informed decisions. We believe that the investment community at large will increasingly demand environmental information.

In January of 2017, we published a white paper entitled [Investors' Ideal Corporate Environmental Data Disclosure](#). The report contains the table below, which showcases ideal environmental data disclosure from an investor's perspective—complete with expectations around timing, range of information, as well as the depth and breadth of released data. As an investment firm, we use disclosed environmental data as a key, material piece of information in our corporate analysis. We assess a company's Environmental Productivity, because we believe that the most environmentally productive companies will be the most prepared for, and best positioned for success in, an increasingly resource-constrained world.

<u>TAI's Expectations for Corporate Disclosure of Environmental Data for an Investor</u>	Current Minimum Base Requirement	Preferred Base Requirement	Expected Disclosure	Best-in- Class Future Expectation
Publicly disclose the data	x	x	x	x
% of operations included in disclosure			x	x
All operations/locations are included in the data numbers				x
Sustainability reporting			x	
Integrated reporting				x
Emissions: GHG Scopes 1/2 (tonnes CO2e)	x	x	x	x
Scope 3, explained				x
Targets for reduction			x	x
Disclose progress toward targets			x	x
Targets are all science-based (GHG)				x
Water extracted and purchased (cubic meters)		x	x	x
Water audit/assessment			x	x
Targets for reduction			x	x
Disclose progress toward targets			x	x
Waste generated -recycled, non/hazardous (tonnes)		x	x	x
Targets for reduction			x	x
Disclose progress toward targets			x	x
Identify risks from climate change scenarios (per Financial Standards Board Task Force on Climate-related Financial Disclosures)				x
Environmental data assured			x	
Environmental data audited				x

### **Disclosure Rates**

We have always engaged directly with companies for greater environmental data reporting. We won't consider investing in a company without it first reporting basic greenhouse gas (GHG) emissions data. When we first launched Terra Alpha Fund LP in 2015, there were fewer than 1,800 companies that reported scope 1 and scope 2 emissions and qualified for our disclosure universe. Since then, we have seen a significant increase in such disclosure. By June 2020, emissions reporting has grown 52% to 2,753 companies. Water use disclosures have increased 104%, while waste disclosures have risen 106% over the same time frame.



### Science Based Targets



**SCIENCE  
BASED  
TARGETS**

DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

A key factor we consider when assessing a firm's Environmental Productivity is whether it has adopted Science Based Targets (SBTs). As more companies make the transition to low-carbon processes, SBTs offer a helpful framework to accurately plan for and adjust to a low-carbon system.

The Science Based Targets initiative (SBTi) supports companies in their efforts to reduce greenhouse gas (GHG) emissions by helping them set targets that align to the Paris Agreement. The initiative champions science-based target setting as a powerful way to boost companies' competitive advantage in the transition to a low-carbon economy. It is a collaboration between CDP, the World Resources Institute (WRI), the World Wide Fund for Nature (WWF), and the United Nations Global Compact (UNGC), and it is one of the We Mean Business Coalition commitments.

Since SBTi's founding in 2015, the initiative is the most credible approach for corporate carbon targets with approximately 500 companies across the globe having been approved. Of our 66 current portfolio constituents, over 55%\* have committed to or already set Science Based Targets. We will continue to advocate for all companies, and all of our portfolio holdings, to commit to SBTs.

*\*Information is relevant as of September 2020.*



## Active Ownership – Proxy Voting Policies & History

Terra Alpha has always taken an active role in voting proxies on behalf of our investors. While individual circumstances may vary, Terra Alpha seeks to vote in harmony with our values, as reflected by the policies below:

1. We expect companies to understand their natural resource uses and impacts and to integrate the implications of our planet's changing climate and finite natural resources into their strategies.
2. We expect companies to operate in an ethical manner that supports all stakeholders.
3. We believe diverse perspectives and experience makes for better decisions, though we do not have prescribed quantitative measures for employee or Board composition.
4. We advocate for overall good governance and operational practices (including supply chain oversight and a healthy workforce).
5. We are generally in support of efforts to amplify transparency and disclosure.

### Where We Focus



Environment - We will generally vote in favor of resolutions that request disclosure of material environmental data and information.



Climate Change - We will generally vote in favor of resolutions that request disclosure of climate change risks.



Water - We will generally vote in favor of resolutions that request water auditing or risk assessments, that companies report water use and risks, or that companies disclose programs to mitigate the risks.



Materials & Waste - We will generally vote in favor of resolutions that request disclosure of efforts to evaluate risk and to raise efficiency of materials use.



Other Natural Resources - We will generally vote in favor of resolutions that request disclosure of forest impacts, soil evaluation, or data on other natural resources.



Governance, Commitment & Transparency - We will generally vote in favor of resolutions that ask the board to be engaged in considering environmental impacts as strategic areas. We will likely support implementing a reporting line for the sustainability person into the C-Suite. In the spirit of transparency, we would likely vote in favor of transparency around political contributions and lobbying efforts.



Diversity & Inclusion - We would likely support resolutions that encourage greater gender and racial diversity at the board and senior management levels. We would likely support resolutions around adoption and disclosure of policies for workforce safety and well-being.

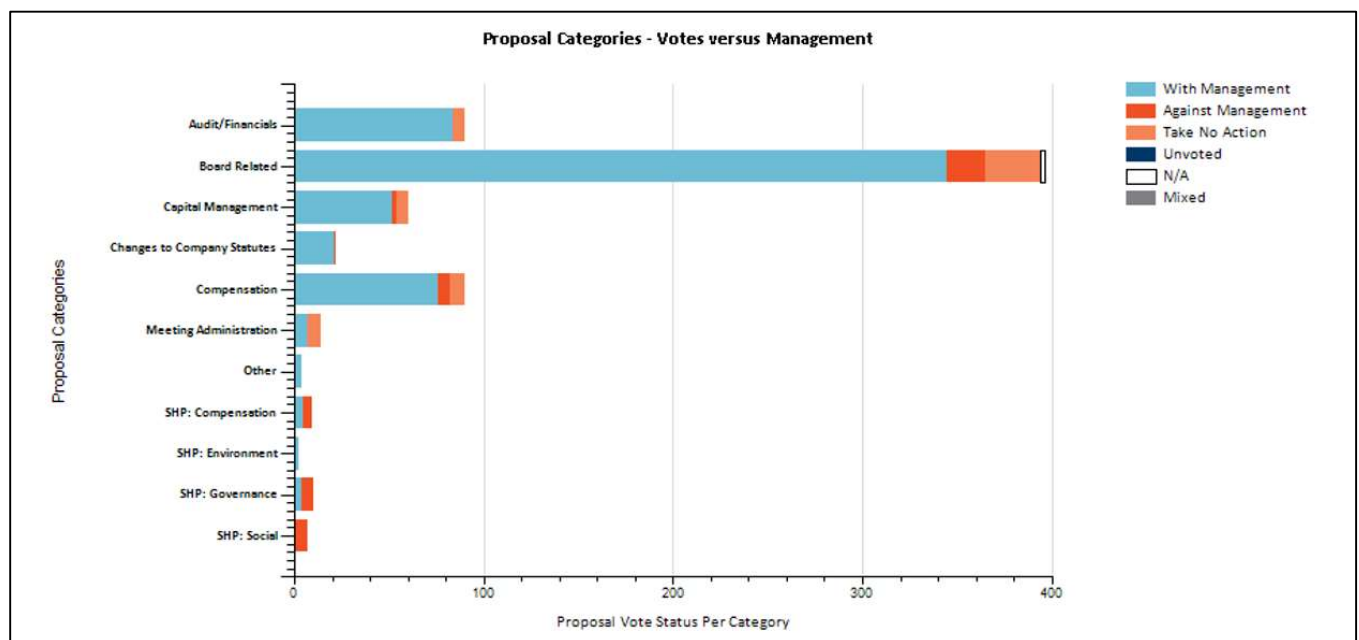
## Voting History

In 2019, Terra Alpha began utilizing Glass-Lewis' infrastructure to administer the process. Terra Alpha records its own final vote, while considering recommendations Glass Lewis provides. Our votes are guided by our mission, vision, advocacy goals, and investment process.

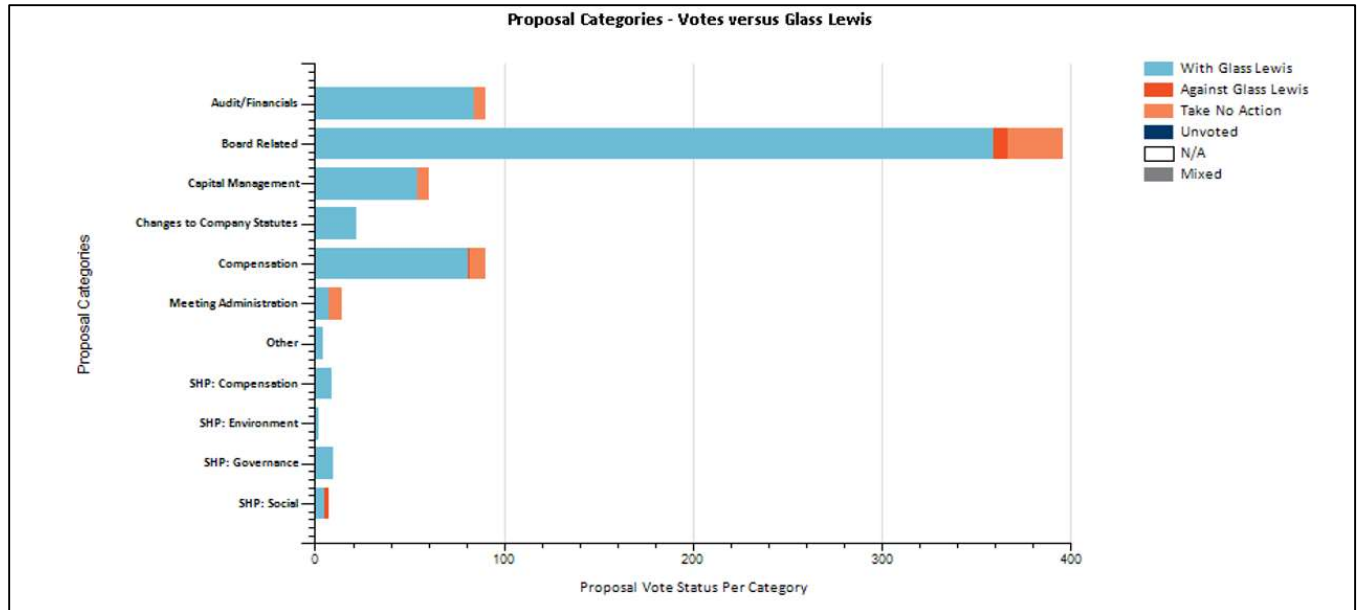
Below we have outlined how our voting in 2019 and 2020 differed from management, as well as Glass Lewis' recommendations:

### 2019

Between January 1 and December 31, 2019, Terra Alpha participated in 704 votes. Of those votes, we voted with management 601 times, against management 45 times, and took no action 56 times (two votes were not applicable over this period). Over that same period, we voted for Glass Lewis' recommendations 637 times, against Glass Lewis' recommendations 11 times, and took no action 56 times.



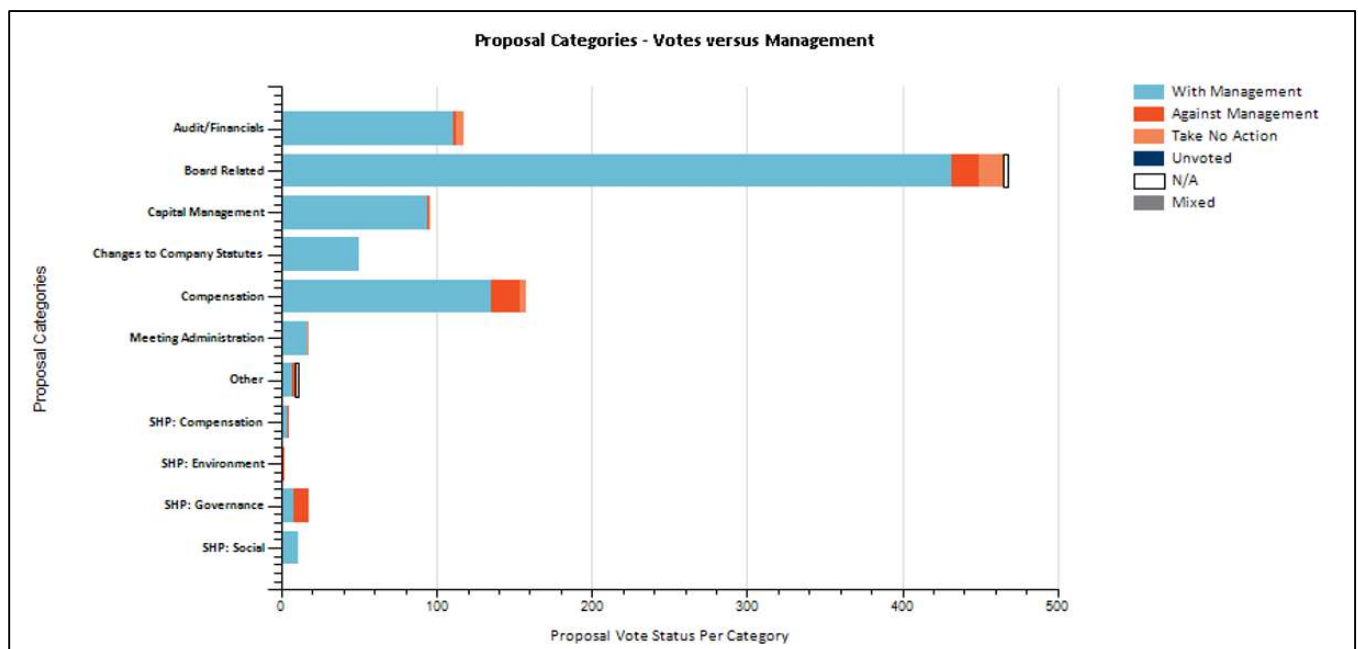
The chart presented above represents Terra Alpha votes versus company management. The time period represented is 01/01/19 to 12/31/19. Source: Glass Lewis



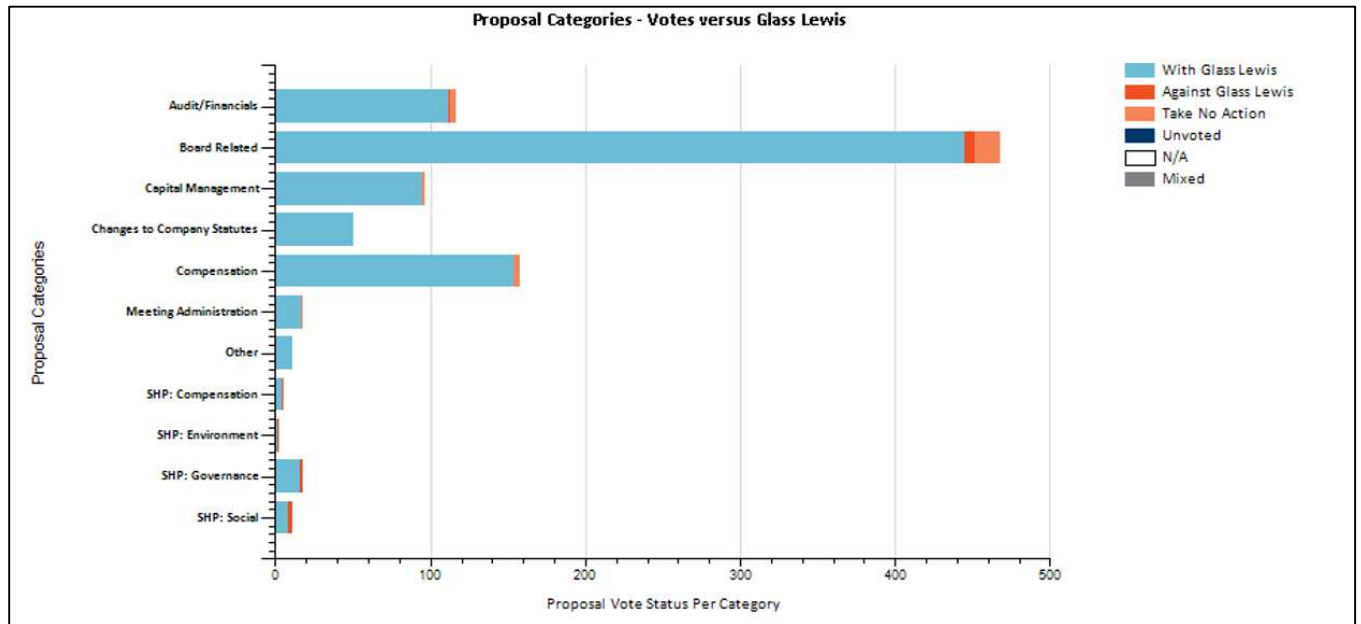
The chart presented above represents Terra Alpha votes versus Glass Lewis recommendations. The time period represented is 01/01/19 to 12/31/19. Source: Glass Lewis

## 2020

From January 1 to June 30, 2020, Terra Alpha participated in 954 votes. Over that period, we voted with management 870 times, against management 53 times, took no action 26 times, and had five votes that could not be compared to management. We voted for Glass Lewis' recommendations 913 times, against Glass Lewis' recommendations 15 times, and took no action 26 times.



The chart presented above represents Terra Alpha votes versus company management. The time period represented is 01/01/20 to 06/30/20. Source: Glass Lewis



The chart presented above represents Terra Alpha votes versus Glass Lewis recommendations. The time period represented is 01/01/20 to 06/30/20. Source: Glass Lewis



## Collaboration, Public Advocacy & Thought Leadership

At Terra Alpha, we take pride in our ability to bring a unique voice to many forums. We feel that sharing our perspectives and amplifying our actions through a wide range of efforts are critical parts of our impact program.

### Collaborating with Affiliated Organizations

We partner with a number of peer-to-peer learning organizations to facilitate conversations and collaboration across a wide breadth of sustainability initiatives. Through these partnerships, we have formed meaningful connections to like-minded professionals, shared our expertise with a broader audience, and signed on to shared commitments that align with our mission and amplify our voice. These include the CERES Investor Network and Water Network Hub, Investor Statement for Workplace Equity Disclosure, Clean100+, ClimateAction100+, and the Global Investor Statement to Governments on Climate Change.

We enter each partnership with intentionality, as we hold ourselves and these networks to the high standards necessary to create a better world. Below are some of the networks we are proud to work alongside.



#### Key takeaway from partnerships: PRI Assessment

Terra Alpha signed the UN Principles for Responsible Investment (PRI) in 2017. In 2019, we completed our first PRI Annual Assessment, which rates our responsible investment activities based on our responses to a variety of questions that address major topics in responsible investing. The results of the assessment give signatories the opportunity to compare their actions year over year and in relation to their peers.

In both 2019 and 2020, Terra Alpha received exceptionally high marks, scoring an “A+” in Strategy and Governance and an “A” in ESG Incorporation and Active Ownership on both assessments. These scores remain well above industry medians in all categories. Such high marks from one of the leading organizations calling for systemic change to financial markets further validates the intentionality of our investment process to fully account for a company’s management and measurement of its use of natural resources.

We continue to adapt to the evolving needs of our rapidly changing world. We strive to embrace new opportunities and information to continuously improve our already rigorous, proprietary investment process.

## Public Advocacy: Webinars, Conferences, Lectures and Collaborative Engagement



Through our unique network of affiliated organizations, we have enjoyed many opportunities to grow our knowledge and embrace new information sets. We have also led a variety of events, panels, keynotes, lectures, etc., to share our present thinking on some of the world's most pressing topics.

On the left we've highlighted a few of the institutions where Terra Alpha has been featured as a thought leader.

## Public Education

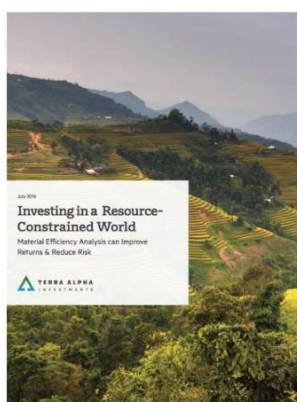
**EP Insights:** We believe that to achieve a sustainable future, positive action must be taken by the world's largest publicly-traded companies. Through our internal research process, we have identified countless examples of impactful action by companies around the world. Our EP Insights help to inform our readers about business practices that enhance EP, while encouraging even more action by companies.



**Terra Alpha White Papers:** We seek to build greater understanding of and advocate for our Environmental Productivity framework within a broader audience through our white papers. These reports are published on a variety of key environmental factors (e.g. carbon, water, soil, waste streams) to educate readers on the objective rationale for consideration of these factors in business and investment decision-making. We openly provide these reports on our website and actively share them with business leaders and portfolio companies.



Emitting Money: Why Carbon Efficiency Matters for Businesses and Investors



Investing in a Resource-Constrained World: Material Efficiency Analysis can Improve Returns and Reduce Risk



Navigating Rough Waters: Businesses & Investors Must Adapt for a Water-Stressed Future

## Thought Leadership

*The Terra Alpha Advisory Board:* In addition to providing insights to our investment and impact work, our advisory board members serve as exemplary thought leaders across many fields. They are committed to our mission and support our efforts both directly and through their professional and personal work. As a recent example of supporting our advocacy goal, two advisors, Charlie Bolden and Kathy Sullivan, joined our CIO in a Climate Change NYC webinar: [Exploring Planetary Boundaries: Two Astronauts' Perspectives](#).

In the months ahead, we will be amplifying the passion and work of each of our advisory board members to build a more sustainable future in a series of interviews conducted by KK Ottesen.

Our Advisory Board:

**Charles Bolden Jr.** - *Astronaut and former Administrator of NASA*

**Amy E. Dine** - *Shareholder Engagement Advisor at Terra Alpha and former ESG Specialist at Capital International*

**Frank Loy** - *Former US Under Secretary of State for Global Affairs and Board Member of Environmental Defense Fund*

**Jean Rogers, PhD** - *Chief Resilience Officer at Long Term Stock Exchange and Founder of the Sustainability Accounting Standards Board (SASB)*

**George Serafeim, PhD** - *Professor, Harvard Business School and Chair of Impact-Weighted Accounts Initiative*

**Margot Lee Shetterly, CFA** - *Author, Researcher, and Entrepreneur*

**Kathryn Sullivan, PhD** - *Scientist, Astronaut, and former Administrator of NOAA*

**David Yeh** - *Impact Investor, Managing Director at 3x5 Partners, and former Analyst at Generation Investment Management*

Our thought leadership program will continue to grow as we seek new opportunities to broaden awareness of our EP thinking and our approach to driving positive change.

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## Our Commitment to More Impact in the Years Ahead

We envision a world in which our economic systems operate in harmony with our natural systems. This vision, dismissed as paradoxical if not unworkable by most investment professionals just a few short years ago, is gaining ground. The irrefutable science of climate change and the swelling chorus of environmental concern around the globe have convinced many skeptics that people, planet, and profit cannot continue to be at odds with each other.

As a learning organization and a mission-driven team, we remain committed to pushing the envelope. In the years ahead, you can expect us to continuously evolve our investment and engagement processes as we raise our standards for ourselves, our industry, and the companies in which we invest. While we are proud of the progress we have pioneered, our work is not done; the challenges of climate change loom larger and closer than ever.

We recognize our responsibility to share our discoveries with investors and corporations alike as we race against the clock. The existential threats of the 21st century can only be countered by unprecedented levels of international cooperation and the mass mobilization of capital.

We are committed to the hard work of building a brighter, sustainable future for all through our investments, our corporate engagement, and our advocacy and thought leadership.