March 2023

Enabling a Sustainable Planet for Society

2022 Impact Report

TERRA ALPHA
INVESTMENTS

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About Terra Alpha

Terra Alpha Investments is grounded on the belief that our economic system can, and must, transition to one that is truly sustainable – one that provides for the needs of society while operating within our planet's regenerative natural resource limits. Our positive vision of a sustainable economy underlies every aspect of our work: how we invest, engage with companies, and advocate for broader change via our thought leadership work.

Our firm was founded in 2014 by highly experienced investment professionals to provide asset owners with a differentiated way to invest in our rapidly changing world. We utilize our proprietary Environmental Productivity and Enduring Business Model analytical frameworks to identify investment opportunities and to allocate investor capital into publicly traded companies that are profitably leading the transition to a truly sustainable economy. We are a signatory of the Net Zero Asset Managers initiative and 100% dedicated to sustainable investment strategies.

http://www.terraalphainvestments.com

Washington, DC | Los Angeles, CA

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TERRA ALPHA INVESTMENTS

BY THE NUMBERS

Terra Alpha's Impact

1st
and only US-based asset manager with a validated science-based target

SCIENCE BASED TARGETS

20+
social and governance metrics being tracked

100%
AUM we have committed to manage in line with net zero emissions by 2050

CO_2

1,012
proxy proposals voted by Terra Alpha Investments

68%
of portfolio companies have boards with more than one-third female members

90%
less carbon intensive portfolios versus the benchmark

Terra Alpha team:
39% women
22% underrepresented groups

36
active engagements with companies

35%
less waste generated compared to the same $1M invested in the benchmark

6,074
cubic meters of water usage avoided compared to the same $1M invested in the benchmark

69%
science-based targets portfolio coverage as of YE 2022

24,953
total views on Terra Alpha publications sent throughout the year.

II. Introduction & Report Overview

At Terra Alpha, the work we do to enable a sustainable planet for society has three core components, each of which we believe will lead to real world impacts.

Our Portfolio

- Invests in companies leading the charge to a more sustainable global economy
- Companies in our portfolio – forward thinkers, enablers, and pioneers
- Our companies have significantly lower carbon, water, and waste intensity values versus their peers

Corporate Engagement

- Increase Broad Disclosure – company-disclosed measurement leads to better management of natural resources
- Portfolio-wide Engagements
- Company Specific Engagement – analysts identify the highest priority issues to discuss based on materiality factors, etc.
- Active Proxy Voting

Thought Leadership

- Collaboration – contribute to peer learning organizations & collaborate with like-minded investors
- Public Advocacy – orchestrate & participate in webinars, conferences, lectures, academia
- Public Education – EP Insights, Terra Alpha white papers, Terra Alpha Voices

First and foremost, our investment process and portfolio construction are designed to identify and allocate capital to companies that are profitably leading the transition to a truly sustainable planet that serves the needs of society. We believe that this allows our investors to put their financial assets to work delivering impact, while signaling to companies that investors will support their efforts to build a better business and a better world.

Second, we engage directly with portfolio companies through actively voting proxies, portfolio-wide campaigns, and company-specific requests, all with the goal of driving companies to improve their sustainable business practices and disclosures.

Third, we advocate for broader change within the capital markets and business community via our thought leadership work. This work includes collaborative efforts, direct communications with policy setters, webinars/panels, and written work (e.g., EP Insights, TAI Voices).

Our annual impact reports seek to update our investors and other interested parties about the actions we have taken in the most recent year and their outcomes, while setting out our impact plans for the year ahead.

A few of the most notable actions and impacts from 2022 and early 2023 are that we:

Investment Process

- Raised the bar in our Environmental Productivity (EP) analysis framework

Transparency

+ Provided our first Carbon Disclosure Project (CDP) report on climate change (Task Force on Climate-Related Financial Disclosures (TCFD) aligned)
+ Completed our first portfolio reporting via The Partnership for Carbon Accounting Financials (PCAF)
+ Released our Investor Climate Action Plan (ICAP)

Corporate Engagement

+ Continued a portfolio-wide campaign on Net Zero commitments and action plans
+ Had 36 active engagements with portfolio companies
+ Co-filed two shareholder resolutions

Climate/Net Zero/Science-Based Targets (SBT)

+ Had our SBTs as a financial institution validated by the Science-Based Targets Initiative (SBTi)
+ Saw our portfolio SBT coverage rise from 61% to 69% at year-end

Diversity, Equity, and Inclusion (DE&I)

+ Signed the CFA Institute's DE&I Statement
+ Made strides in our firm's diversity, along with portfolio companies

For 2023, our focus is on:

+ Continuing to drive our portfolio companies to validated SBTs and action plans to achieve their targets,
+ Further integrating Scope 3 greenhouse gas (GHG) emissions in our investment analysis and introducing portfolio reporting,
+ Setting higher expectations on corporate water management, and
+ Furthering our work to build more diversity within our firm and portfolio companies.

As always, we thank all our investors, partners, and peers for your support of our shared goals for a prosperous and sustainable world for all society.

III. Firm Initiative: Our Commitment to Net Zero

Terra Alpha has always viewed global decarbonization as an essential component of a sustainable future, and we believe we have a three-pronged role in furthering the goals of the Paris Agreement:

1. To invest in a portfolio of companies leading the transition to a low-carbon economy,
2. To engage with and improve companies in our portfolio that are lagging behind our climate-related expectations, and
3. To serve as a thought leader on net zero investing in the broader investment community.

After signing on to the Net Zero Asset Managers initiative (NZAM), committing to manage 100% of our assets in line with the Paris Agreement goals, and submitting our near-term targets to the SBTi for validation in 2021, we spent 2022 focused on making concrete progress towards our commitments.

2022 Progress: Portfolio

We believe that net zero investing means investing in portfolio companies that are themselves demonstrating progress towards the goals of the Paris Agreement. This is an ongoing journey, and none of our portfolio companies currently meet all of our expectations. That said, we are approaching the challenge step by step, and in 2022 we focused on ensuring that our portfolio companies understand our near- and mid-term expectations, which are for them to:

+ Measure their full value chain emissions, including Scope 3,
+ Set science-based emissions reduction targets,[1]
+ Develop and disclose robust plans to achieve their targets (including resource allocation), and
+ Demonstrate absolute emissions reductions over time.

Below is a summary of our portfolio's status on these priorities as of year-end 2022:

Disclosure and Data Quality: Scope 1, 2, and 3 Emissions

Reliably measuring GHG emissions is prerequisite to evaluating any company's decarbonization progress – and thereby any equity portfolio's progress.

Terra Alpha is pleased with our portfolio companies' disclosure of Scope 1 and 2 emissions. As **Figures 1 and 2** illustrate, 100% of our year-end 2022 portfolio companies measured and disclosed Scope 1 and Scope 2 emissions[2] for 2021, with 88% obtaining external verification[3] on Scope 1 and 62% on Scope 2.

[1] By "science-based" targets, we mean those that are ambitious enough to result in near-term absolute emissions reductions, inclusive of Scope 3 emissions as appropriate, without over-reliance on offsets/removals, and with validation by the SBTi.

[2] Terra Alpha uses location-based Scope 2 data whenever available; if location-based Scope 2 data is not available, we use market-based.

[3] Either limited/moderate or reasonable/high assurance.

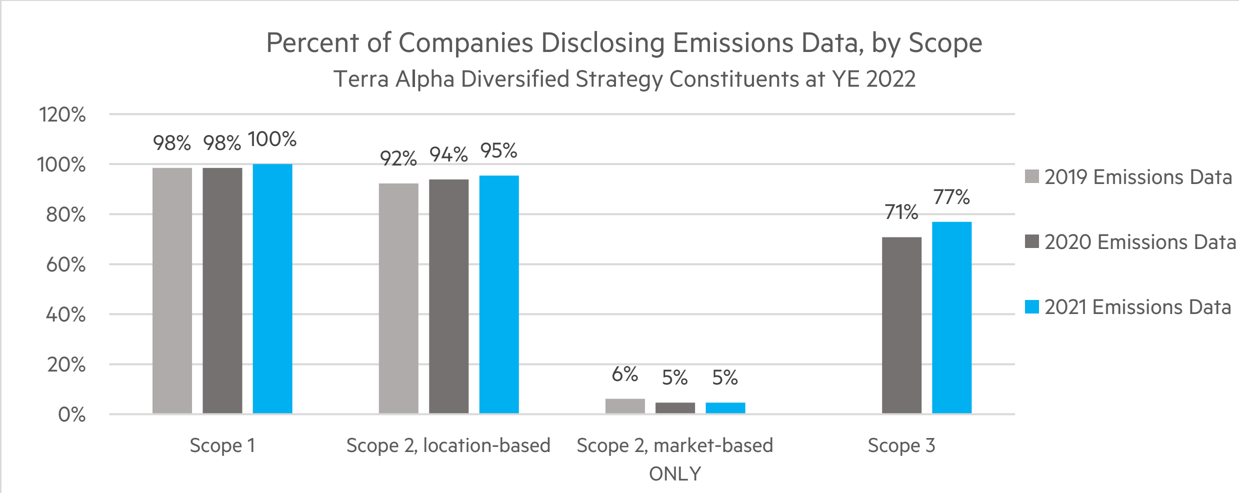


Figure 1. *Scope 1, 2, and 3 emissions disclosure trends.*

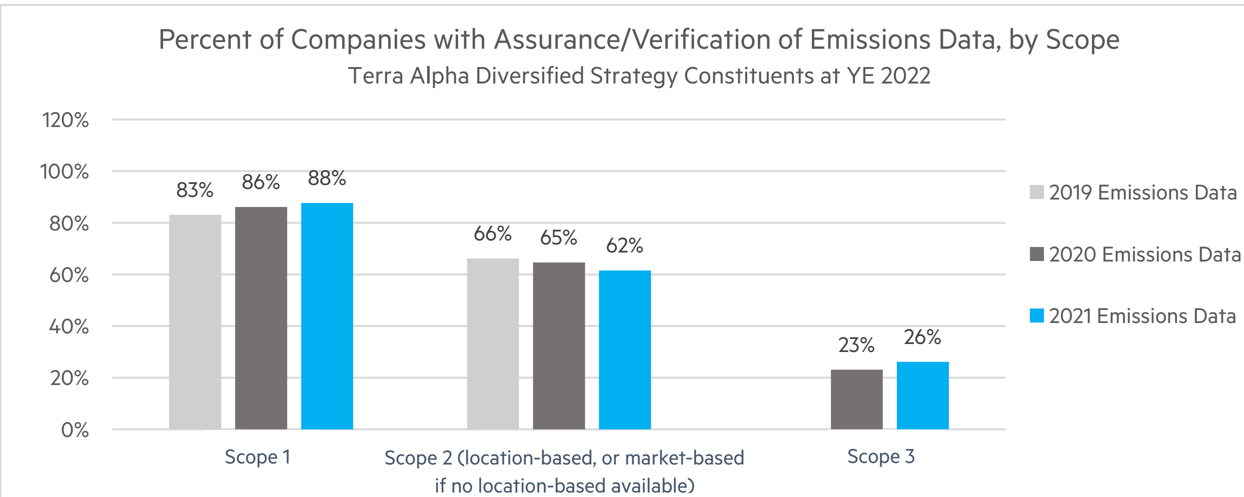


Figure 2. *Verification of company-reported emissions data.*

However, Scope 3 progress lags behind that of Scope 1 and 2. This is not surprising to see in our portfolio, since Scope 3 data availability and quality remain a global challenge.

Of Terra Alpha's portfolio companies at year-end 2022, 77% provided a reasonable Scope 3 inventory for 2021. Only 26% obtained external verification. Terra Alpha continues to encourage all portfolio companies to measure Scope 3 emissions in order to ensure that they are aware of and managing carbon-related risks throughout their value chain.

Cautionary notes on drawing conclusions from Scope 3 data

- "Scope 3" refers to emissions associated with a company's upstream activities (e.g., purchases from suppliers) or downstream value chain (e.g., use of sold products).
- Measuring Scope 3 emissions is generally more difficult than measuring Scope 1 and 2 emissions. For example, measurement may require modeled data, estimated inputs, or expansive data collection from external suppliers/ customers. Globally, corporate disclosure of Scope 3 emissions lags behind that of Scope 1 and 2 as a result. Further, comparability between companies is often difficult.
- Scope 3 inventory completeness and external assurance/verification are also not yet the norm.

For these reasons, Terra Alpha's focus is currently on Scope 3 data availability and quality. We do not believe Scope 3 data is ready for progress-tracking and year-over-year comparisons.

Science-Based Target Setting

Although target-setting is only an interim step toward achieving absolute emissions reductions, we believe that companies manage what they measure, and target-setting is an important catalyst for action. As such, we engage with our portfolio companies to push them toward SBTs.

In 2022, eight more of our portfolio companies received SBTi validation of their GHG reduction targets as illustrated in **Figure 3** below:

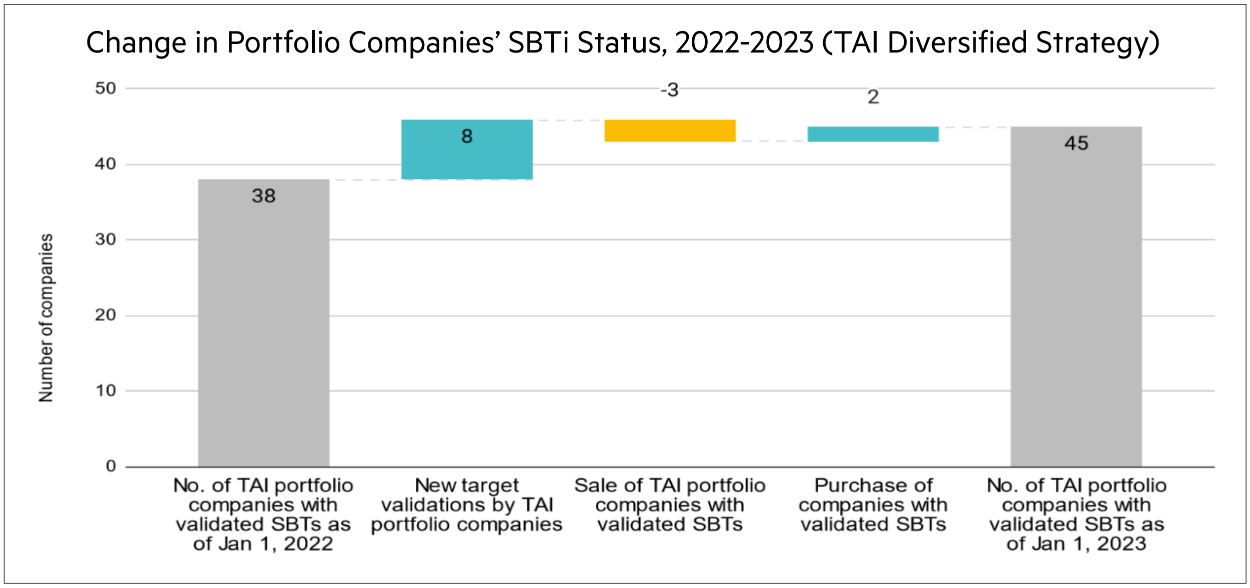


Figure 3. *Portfolio coverage evolution in 2022.*

By 2025, Terra Alpha aims to achieve 75% SBT portfolio coverage, and by 2030, 95% coverage. As of year-end 2022, we reached 69% and feel confident in delivering on our goals (**Figure 4**).

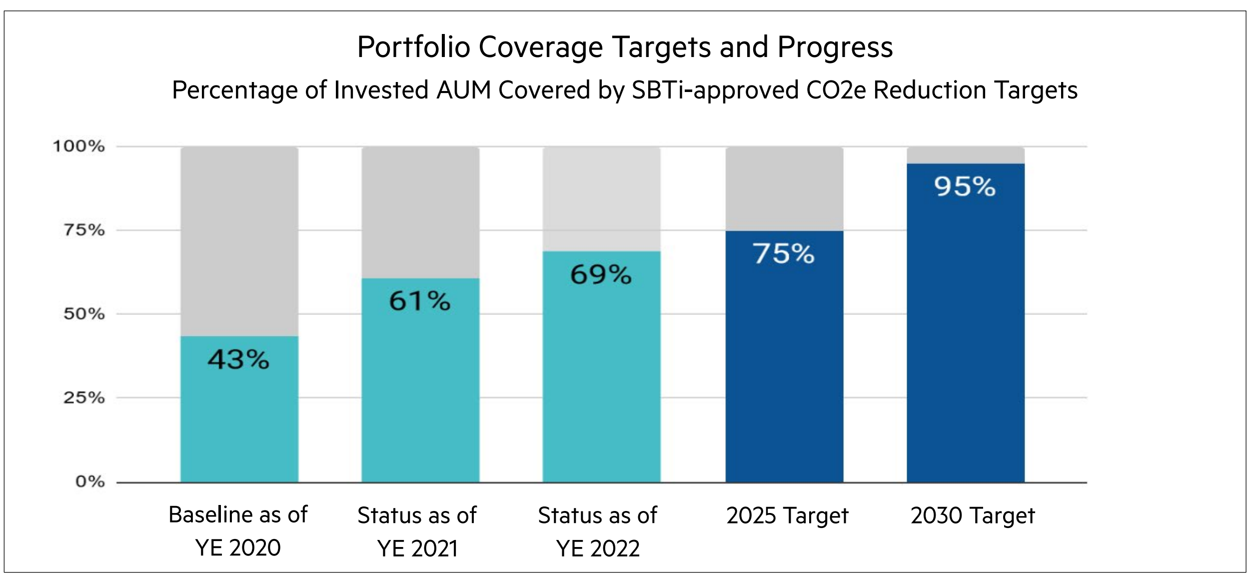


Figure 4. *Terra Alpha's science-based portfolio coverage targets and progress.*

Plans to Achieve Targets

In parallel to setting GHG reduction targets, we expect companies to develop and disclose their operational plans – including resource allocation and capital expenditures – for achieving said targets. Further, we expect them to transparently disclose their progress and roadblocks encountered at least annually.

In 2022, Terra Alpha analysts re-assessed each of our portfolio companies' plans and strategies to achieve their emissions reduction targets, as part of the Environmental Productivity component of our investment analysis. According to our analysts' assessments, 0% of companies in Terra Alpha's portfolio have disclosed a truly robust plan; however, 57% have disclosed a high-level roadmap for achieving their climate targets. This topic remains an engagement priority in 2023.

Tracking Absolute Emissions

The purpose of encouraging companies to set SBTs and develop robust plans to achieve them, of course, is to get them to reduce their absolute emissions over time.

Terra Alpha has manually compiled a database of what we believe to be the best-available data for our portfolio companies' Scope 1, 2, and 3 emissions to enable financed and absolute emissions tracking.[4] As noted earlier in this section, we do not believe that Scope 3 data is reliable enough yet to provide meaningful year-over-year comparisons. Data quality is better for Scope 1 and 2 emissions, however, and our dataset indicates that:

+ Of Terra Alpha's portfolio companies at year-end 2022, more than half disclosed a decline in their absolute emissions (Scope 1 and 2) between 2021 and 2020.
+ However, if we introduce a "significance" threshold to only give credit for a reduction of 5% or greater, less than half reported a "significant" decline between 2021 and 2020.

We believe we will see more portfolio companies reducing their absolute emissions as the share of companies setting SBTs and developing robust plans to achieve their targets increases.

Measuring Financed Emissions

An investment manager's share of its portfolio companies' emissions, (e.g., the manager's emissions from investing activities), is referred to as its "financed emissions."

In 2022, Terra Alpha aligned its financed emissions measurement with the emerging best practice standard developed by the Partnership for Carbon Accounting Financials (PCAF). Appendix 1 details our methodology in depth. Three developments are of particular note:

1. We now weight our percentage ownership of each company by enterprise value including cash (EVIC), instead of by market capitalization.

> **The Partnership for Carbon Accounting Financials (PCAF)**
>
> In 2022, Terra Alpha joined PCAF, an industry-led effort to harmonize the measurement and disclosure of financed GHG emissions.
>
> PCAF's global Financed Emissions Standard provides requirements and recommendations for measuring financed emissions across a variety of asset classes. In Terra Alpha's case, we utilized the listed equity guidance.
>
> By joining PCAF, we seek to promote transparency into our reporting practices, as well as to aid comparability and progress-tracking industry-wide.

[4] Please see Appendix 1 for a summary of our data compilation process and instances where human judgment, and/or estimated Scope 3 data, was required.

2. We are now disclosing a data quality score, as defined by PCAF. The best score is a 1 (indicating verified/ assured data).
3. We have included Scope 3 for the sake of transparency; however, the data quality score again indicates the caveat that the quantity and reliability of company-disclosed Scope 3 data lags behind that of Scope 1 and 2.

Financed Emissions - PCAF Methodology	2019	2020	2021	*2022**
Diversified Strategy				
Financed Emissions (Scope 1)	487	488	509	577
Data Quality Score (Scope 1)	*1.15*	*1.13*	*1.11*	*1.11*
Financed Emissions (Scope 2)	383	365	338	405
Financed Emissions (Scopes 1 & 2)	**870**	**853**	**847**	**982**
Financed Emissions (Scope 3)	N/A	15,198	28,837	34,565
Data Quality Score (Scope 3)	N/A	*2.32*	*2.22*	*2.17*
Financed Emissions (Scopes 1, 2, & 3)	**N/A**	**16,052**	**29,683**	**35,547**
Financed Emissions (Scope 1)	N/A	258	511	504
Data Quality Score (Scope 1)	N/A	*1.07*	*1.05*	*1.09*
Financed Emissions (Scope 2)	N/A	120	184	171
Financed Emissions (Scopes 1 & 2)	**N/A**	**377**	**696**	**675**
Financed Emissions (Scope 3)	N/A	4,220	9,700	11,084
Data Quality Score (Scope 3)	N/A	*2.21*	*1.93*	*2.04*
Financed Emissions (Scopes 1, 2, & 3)	**N/A**	**4,597**	**10,396**	**11,759**
Total (Diversified Strategy + Concentrated Strategy)				
Financed Emissions (Scope 1)	N/A	746	1,020	1,080
Financed Emissions (Scope 2)	N/A	485	522	576
Financed Emissions (Scopes 1 & 2)	**N/A**	**1,231**	**1,542**	**1,657**
Financed Emissions (Scope 3)	N/A	19,418	38,537	45,649
Financed Emissions (Scopes 1, 2, & 3)	**N/A**	**21,879**	**41,621**	**48,963**

Table 1. *Terra Alpha's Financed Emissions, 2019-2022*

*2022 reflects YE 2022 portfolio holdings and their 2021 emissions data; to be updated with 2022 emissions data is available

Financed Emissions: Tonnes CO2e

Carbon Intensity Metrics*	2019	2020	2021	*2022***
Diversified Strategy				
Weighted Average Carbon Intensity (scopes 1 & 2)	46.5	46.6	39.5	37.6
Average Carbon Intensity of Holdings (scopes 1 & 2)	47.0	45.8	40.3	37.2
Economic Emissions Intensity (scopes 1 & 2)	16.2	12.1	10.0	13.2
Concentrated Strategy				
Weighted Average Carbon Intensity (scopes 1 & 2)	N/A	70.6	66.2	59.3
Average Carbon Intensity of Holdings (scopes 1 & 2)	N/A	69.6	61.9	53.8
Economic Emissions Intensity (scopes 1 & 2)	N/A	16.0	15.0	13.9
Total (Diversified Strategy + Concentrated Strategy)				
Weighted Average Carbon Intensity (scopes 1 & 2)	N/A	52.7	49.2	46.3
Economic Emissions Intensity (scopes 1 & 2)	N/A	13.1	11.8	13.5

Table 2. *Portfolio Carbon Intensity Metrics, 2019-2022*

*See Appendix 2 for metric definitions

**2022 reflects YE 2022 portfolio holdings and their 2021 emissions data; to be updated when 2022 emissions data is available

Weighted Average Carbon Intensity: Tonnes CO2e per $M company revenue

Average Carbon Intensity of Holdings: Tonnes CO2e per $M company revenue

Economic Emissions Intensity: Tonnes CO2e per $M TAI AUM

By definition, the financed emissions metric increases when (1) we increase our ownership in a company by purchasing more of its stock, and/or (2) the portfolio company increases its absolute emissions. Thus, the change in financed emissions between any two years is a combination of those two effects. The largest driver of the increase in our Concentrated Strategy financed emissions between 2020 and 2021, for example, was the growth of our assets under management.

Transparency and Reporting

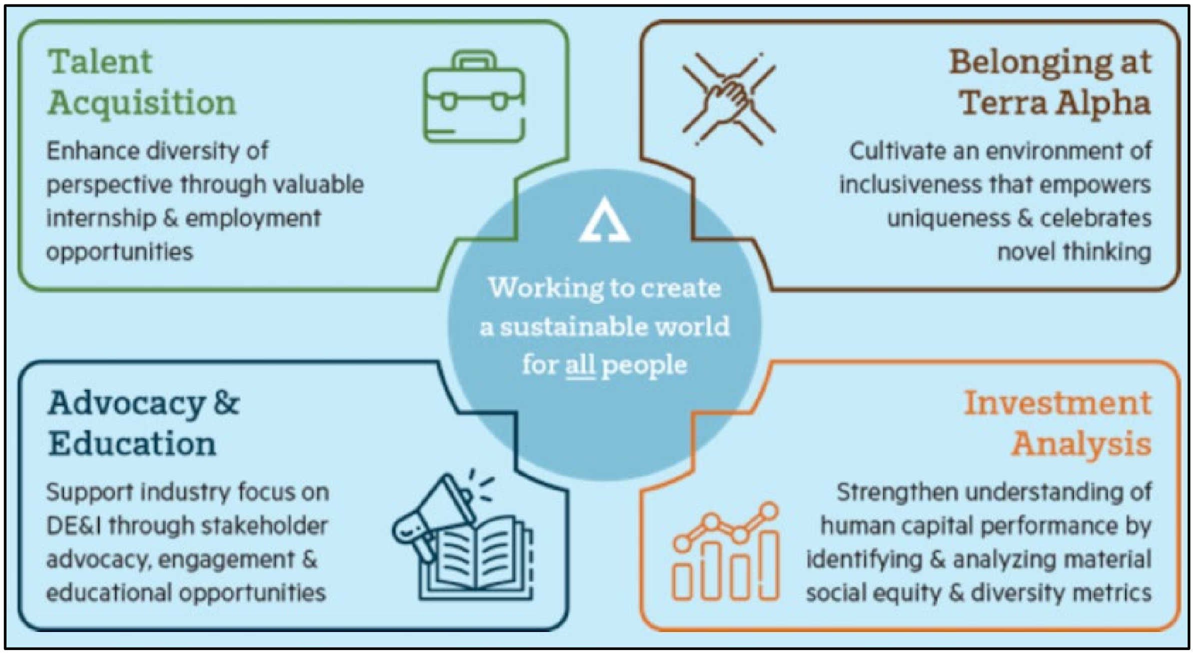
Just as we expect companies to measure and transparently report their climate-related plans and progress, we expect investment managers to do the same. To lead by example, we expanded our own disclosures and reporting over the past year by:

+ Becoming the first US-based asset manager, and one of only three US financial institutions, to have our climate targets validated by the SBTi,
+ Joining PCAF and implementing their financed emissions measurement methodology,
+ Reporting to CDP in 2022 on climate change, and
+ Publishing our ICAP in early 2023.[5]

[5] For more information on our ICAP, see Appendix 6.

IV. Firm Initiative: Our Commitment to Diversity, Equity, and Inclusion

An update on the Four Pillars



Talent Acquisition

We have been intentional about making DE&I a more formal and structural part of our hiring process and internship program. Focusing on DE&I in every step of the process, from the job description to the interview questions, has yielded great results. The applicant pool for our Research Analyst opening was full of talented and diverse applicants and led to two hires that have strengthened our team and increased our diversity in a number of important ways.

For our internship program, we have partnered with several organizations, including the Wall Street Diversity Accelerator, to source interns. The goals of our program are to augment our research capacity, educate the next generation of investors, provide meaningful opportunities for underrepresented groups in finance, and build a pipeline of talent for future hiring.

Belonging at Terra Alpha

Belonging at Terra Alpha is an ongoing process that aims to build on our culture of inclusiveness and respect that celebrates diverse thinking. We have built on many initiatives that started formally in 2021 and added additional initiatives in 2022. We have included an annual demographic survey, belonging survey, and an intercultural development inventory assessment.

Advocacy and Education

The Advocacy and Education pillar encompasses stakeholder advocacy and broader educational opportunities. In our proxy guidelines and voting, we have taken a clear stance on supporting DE&I in our corporate action. We worked with organizations like As You Sow to push for DE&I related actions and disclosures. We also became signatories of the Chartered Financial Analyst's DE&I Code, which strengthens our DE&I work, and continued our impact through education with our intern program.

Investment Analysis

We have formally added DE&I analysis into our Enduring Business Model's (EBM) pillars to assure that each analyst incorporates this unique information in their assessment of the Governance, Management, and Human Capital of each company. Understanding a company's DE&I strengthens our ability to understand company culture and management through its approach to human capital and speaks volumes about a company's governance and ability to execute on its business model.

Terra Alpha Firm's Diversity Metrics[6]

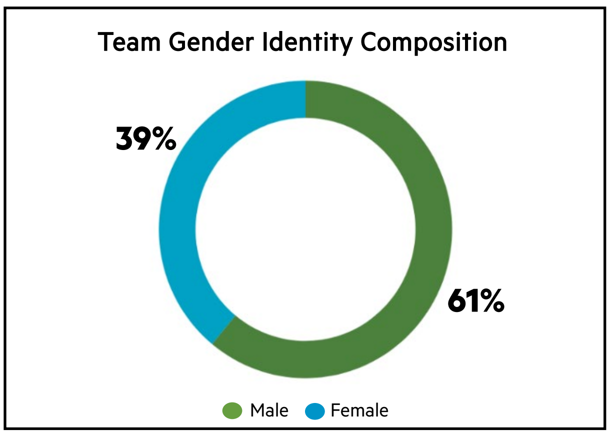


Figure 5. Team Gender Identity Composition

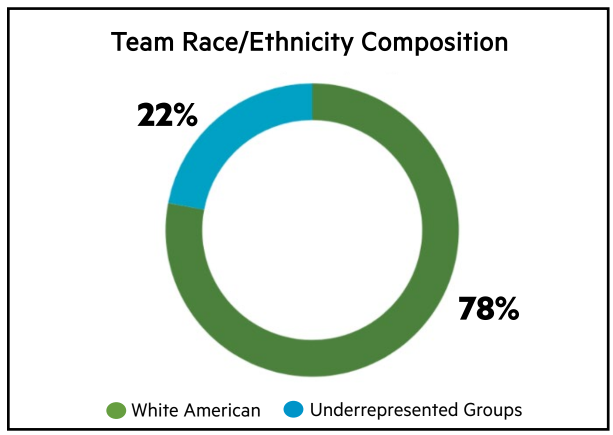


Figure 6. Team Race/Ethnicity Composition

[6] These metrics refer to full-time team members and advisors.

V. Portfolio Impact

Our portfolio continues to be the area where we can have the greatest impact for our investors, the environment, and society. At year-end 2022, our strategies were invested in companies with a combined market capitalization of $12.3 trillion and revenue of $3.5 trillion. These companies have impact not only through the products and services that they offer, but also through how they utilize natural resources throughout their value chains. When we invest in companies, we categorize them as follows:

+ **Enablers** are 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 – a leader in developing innovative water solutions with the use of smart technology). We have identified "enabler" as the *primary* category for approximately 58% of our portfolio holdings, though we see enabling characteristics in over 80% of the companies in which we are currently invested.
+ **Pioneers** are companies that are disrupting traditional industries in an effort to adapt to a changing world (e.g., Tesla – an electric vehicle and clean energy company). Pioneers, as a *primary* category, make up approximately 3% of our portfolio; however, we see pioneering qualities in nearly 30% of the companies in which we are currently invested.
+ **Forward thinkers** are companies that clearly consider our changing world in how they operate and recognize there are risks and opportunities to how they operate (e.g., Unilever – a multinational consumer goods company with focus on nutrition, hygiene, and personal care). While we consider "forward thinker" as the *primary* category for approximately 38% of our holdings, we see forward-thinking tendencies in over 90% of the companies in which we are currently invested.

Given our science-driven and intentional approach to investment decision making, our funds naturally gravitate toward companies with significantly lower carbon, water, and waste footprints than those of their industry peers and of the overall economy, translating to better environmental outcomes. Our EBM framework explicitly integrates key social and governance data and information within its four pillars – business model, financials, operations/operational assets, and governance & management.

Portfolio Intensity Metrics

We provide transparent reporting to our investors by sharing holdings information, which includes each company's EP rating, EBM score, and carbon, water, and waste intensity measures (when available).

Figure 7 to the right is a snapshot of the portfolio's intensity measures as of year-end, as an example of the information we regularly provide to our investors.

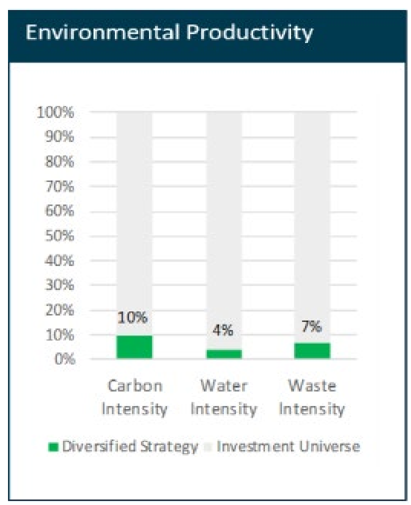


Figure 7. EP Intensity measures

Cumulative Portfolio Environmental Impact

We calculate our funds' carbon, water, and waste impacts (e.g., the resources our funds are "responsible" for via our investment in companies) on an annual basis. Below we show the cumulative impacts through 2022 of our global diversified fund as compared to a standard global index. Due to data disclosure limitations, some portfolio footprint measurements include the use of estimated data where corporate-disclosed data is unavailable. Historical data has been updated to reflect restated data provided by companies.

Methodology note: The metrics provided within this section reflect an equity-only approach to measurement. That is, the percentage of ownership is determined using market capitalization information rather than enterprise value. For more information around our financed emissions (aligned with PCAF methodology), please refer to the section Firm Initiative: Our Commitment to Net Zero.

Carbon

Based on a $1 million investment, our Diversified Strategy avoided 47 tonnes of CO_2e (Scope 1 and 2 emissions) in 2022, which is 76% less than the standard global index. Since the fund's launch in May 2015, based on a $1 million investment, the strategy has avoided 754 tonnes of CO_2e, or 83% less than the standard global index. Please note that the 2022 calculation uses 2021 emissions data, as 2022 emissions data is not yet available.

Figure 8 below shows the cumulative year-over-year GHG emissions (measured by CO_2e) avoidance from a $1 million investment in the Terra Alpha Diversified Strategy vs. the same dollar amount invested in the iShares MSCI World ETF.

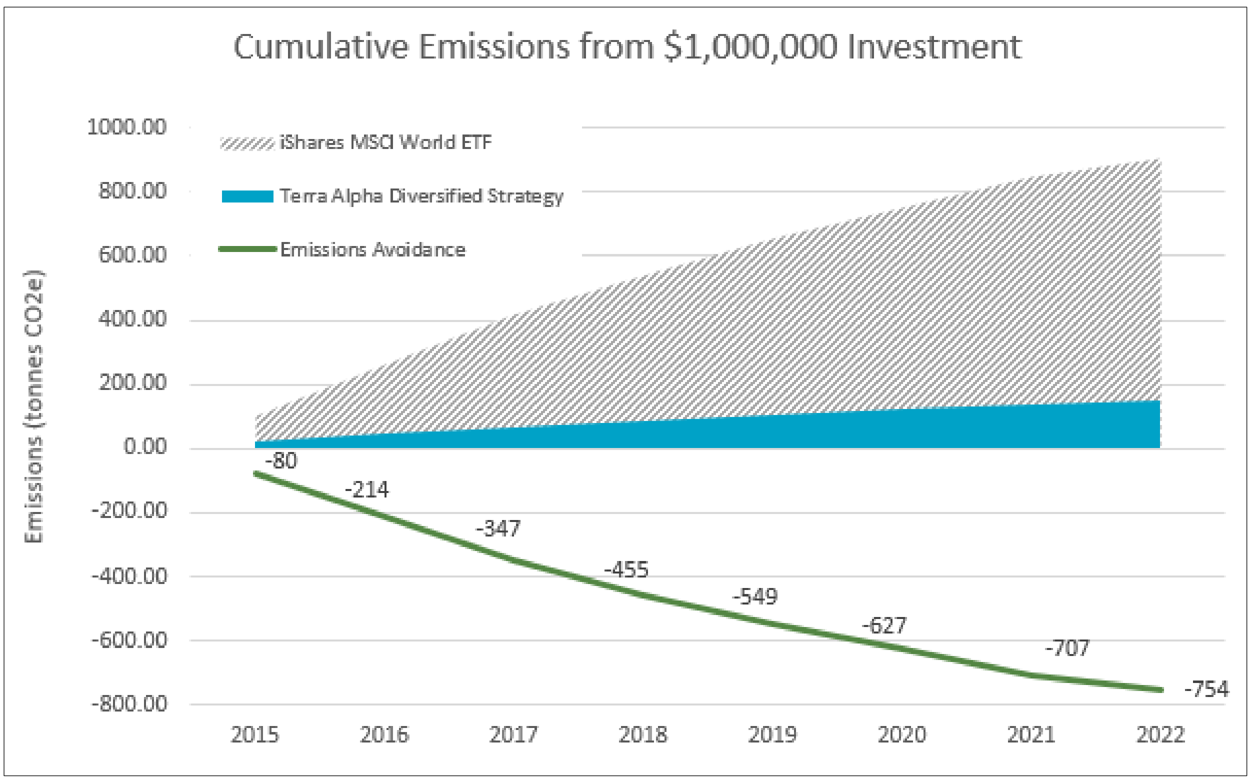


Figure 8. Source: Terra Alpha Investments

Water

Based on a $1 million investment, our Diversified Strategy avoided 6,074 cubic meters of water, which is 74% less than the standard global index. Since the fund's launch in May 2015, based on a $1 million investment, the strategy has avoided 87,450 cubic meters of water usage, or 75% less than the standard global index. Please note that the 2022 calculation uses 2021 water data, as 2022 water data is not yet available.

Figure 9 below compares the cumulative year-over-year water use (cubic meters) associated with a $1 million investment in the Terra Alpha Diversified Strategy vs. the same dollar amount invested in the iShares MSCI World ETF.

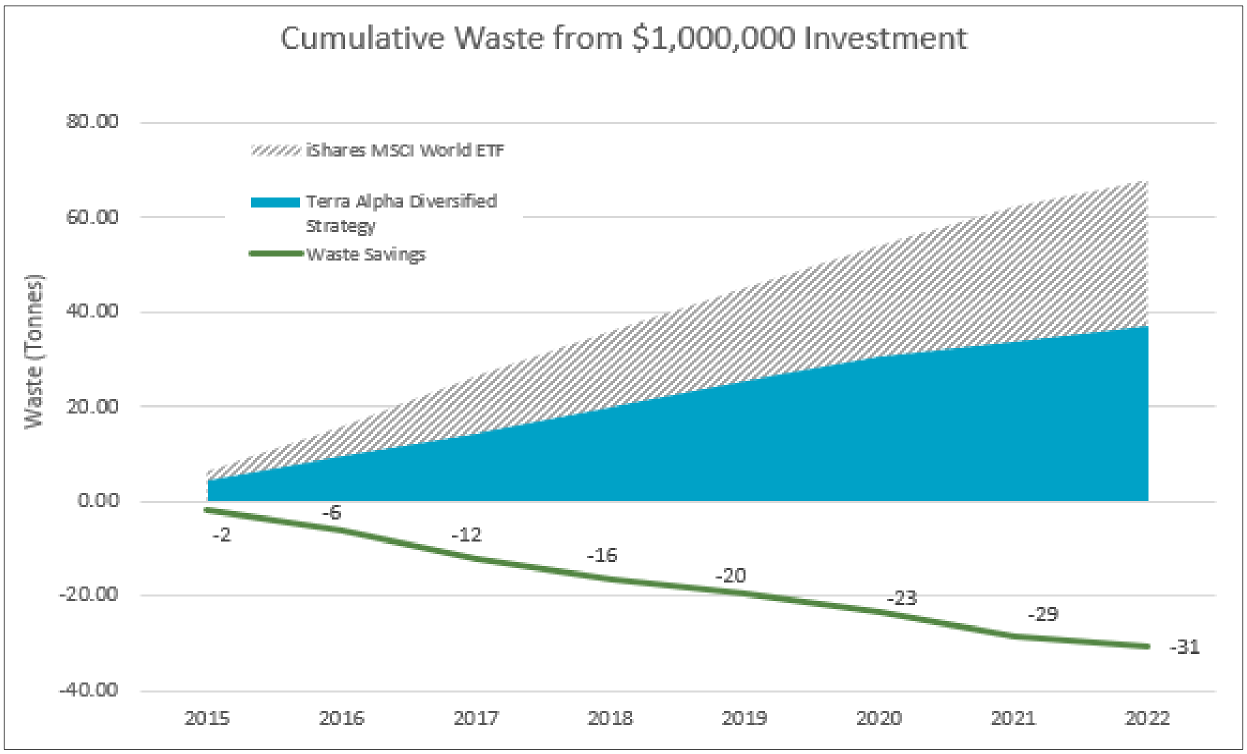


Figure 9. Source: Terra Alpha Investments

Waste

Based on a $1 million investment, our Diversified Strategy avoided 2 tonnes of waste, which is 35% less than the standard global index. Since the fund's launch in May 2015, based on a $1 million investment, the strategy has avoided 31 tonnes, or 45% less than the standard global index. Please note that the 2022 calculation uses 2021 waste data, as 2022 waste data is not yet available.

Figure 10 below shows the cumulative year-over-year waste (tonnes) avoidance from a $1 million investment in the Terra Alpha Diversified Strategy vs. the same dollar amount invested in the iShares MSCI World ETF.

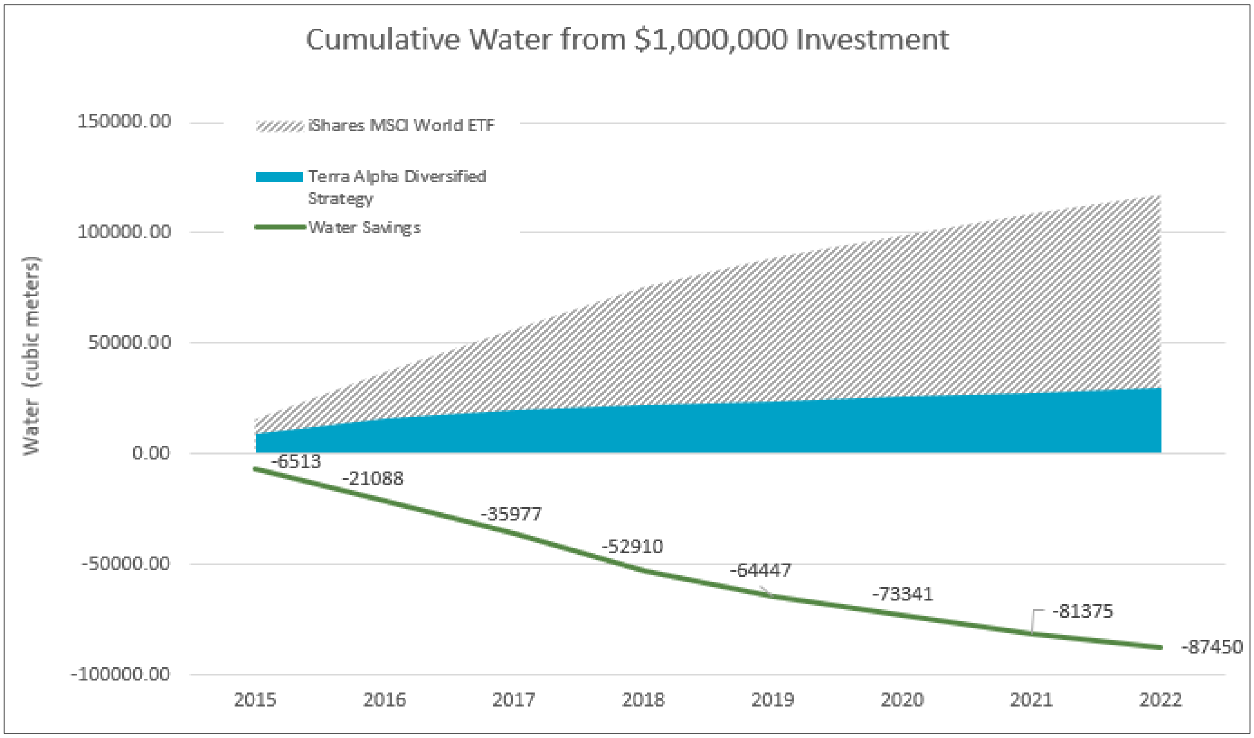


Figure 10. Source: Terra Alpha Investments.

Portfolio Reporting on Social & Governance Factors

As reflected previously within the Firm Initiative: Our Commitment to Diversity, Equity, and Inclusion section of this report, we have formally added DE&I analysis into our EBM framework to assure that each analyst incorporates this information into their assessment of a company's governance, management, and human capital.

Building upon the more formal commitment to research and reporting on DE&I that we made in 2021, we are now able to track progress over time. Below is a selection of the metrics that we track at the portfolio level. In these categories and in many others, our portfolio companies made progress toward improving their DE&I.

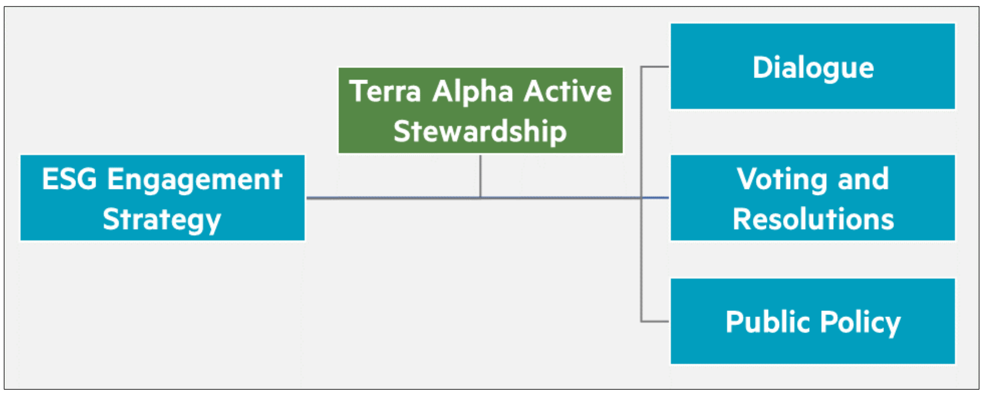
Disclosure Item	2021	2022
Boards with >33% Female Members	64.6%	67.7%
Conducts Global Gender Pay Equity Analysis	44.6%	50.8%
Boards with >75% Independent Directors	66.2%	67.7%
EEO-1 Disclosure (US Companies Only)	62.5%	86.7%
Avg. % Ethnic Diversity on Board of Directors (US Companies Only)	23.1%	24.3%
Avg. % Ethnic Diversity on Executive Teams (US Companies Only)	19.2%	21.5%

Table 3. *YE 2021 and 2022 Sample DE&I Metric Disclosure from TAI Portfolio Companies*

We have provided an update on a few portfolio-level metrics within this report. Moving forward, we will be adding social and governance metrics to the quarterly holdings reports that we send to our investors.

VI. Engagement Impact

In 2022, our engagement work was informed and guided by our updated Engagement Strategy, Engagement Escalation Policy, Proxy Voting Guidelines and Policy, and our approach to DE&I and governance characteristics. We used these parameters as guideposts and as levers for greater impact on climate issues and net-zero goals, governance concerns, and aspects of DE&I amongst our portfolio companies. We took our enhanced EP revisions and EBM criteria and applied these expectations to our 2022 outward engagement in our direct work with companies. We engaged in advocacy work with regulatory concerns with the Securities and Exchange Commission (SEC), and through a breadth of thought leadership outreach. *In Appendix 5, we describe our Engagement Strategy approach in more detail.*



2022 Company Engagement Examples:

Over the course of this past year, we used our Engagement Strategy to accomplish some important engagement milestones in 2022. In particular, we made strides along our engagement goal to increase the number of net zero and SBT and plans set by companies in our portfolio.

Specific examples of our work in 2022:

1. One-on-One Dialogue

   Terra Alpha has prioritized direct engagement with portfolio companies that have not yet set science-based emissions targets. One example has been a recycling company, which is doing good things for our planet every day through its business operations, but is not a leader in reducing emissions for its own operations. Leading up to this past year, we had met virtually with the Sustainability Director and members of the Investor Relations team to discuss our expectations around Scope 3 emissions measurement, SBTs, and the importance of reducing the company's full value chain emissions over time. Through the conversation, we better understood the company's challenges and progress toward Scope 3 measurement, and its other plans to progress toward our expectations. **In mid-2022, we were excited to see the company announce their formal commitment to the SBTi**.

2. Campaign for Net Zero Continues

We began the campaign across our entire portfolio in 2021 to have SBTs and plans to reduce emissions in each of our portfolio companies, using the SBTi framework in their emissions reduction planning. As noted previously, Terra Alpha set our 2025 goal at 75% of our portfolio committed to the SBTi, (on the way to 95% by 2030), as part of our own firm's original commitment in 2021. In 2021, the percentage of our portfolio companies committed to the SBTi rose from 43% to 61%. Our momentum has continued in 2022, so that at the **end of 2022, 69% of our portfolio companies are now counted as committed to the SBTi.**

The companies that had not yet committed to the SBTi were our focus for escalating our engagement. **We escalated with follow up letters to the Board** in late 2022, and promisingly, received responses from some companies' Board members quickly, and will continue to pursue and engage with the companies who have not yet replied or acted.

It has been encouraging to receive responses and engage in dialogues that recognize the importance of these targets and plans; it bolsters our efforts to encourage these emissions reduction targets as part of the path forward. The following is an example of a Board-level response and illustrates the work being done by our portfolio companies toward net zero:

[redacted]

January 25, 2023

Timothy P. Dunn
Amy E. Dine
Terra Alpha Investments
2101 L Street NW, Suite 300
Washington DC 20037

Dear Mr. Dunn and Ms. Dine,

I am writing in response to your letter dated December 6, 2022 regarding Terra Alpha Investments' views on science-based targets (SBT). I serve as the Lead Independent Director of [redacted] and in as much work closely with our Chairman and CEO on issues of corporate policy and strategy. On behalf of the entire Board, I can state that we are building on our comprehensive sustainability strategy and are committed to creating an impactful and measurable approach to environmental impact and emissions reduction.

As you have heard during discussions with our investor engagement team, we agree with the importance of sustainability and the measurement, evaluation and disclosure of emissions, water, and waste. Since we conducted our ESG materiality assessment in 2020 we have prioritized work around understanding and reducing [redacted] carbon footprint. The company's upcoming Sustainability Report, which will be released in mid-February, will feature this work.

In the past year, we completed a Scope 3 screening assessment to define which categories are material for our company. The intent is by the end of calendar year 2023 to join Science Based Target Initiative and submit our Scope 3 2022 carbon equivalent footprint as our baseline year.

We appreciate the continued engagement and sharing of your positions on matters of such importance.

Thank you again for your letter. We look forward to your continued interest in [redacted]

[redacted]

[redacted]
Lead Independent Director

In one case of these not-yet-committed-to-the-SBTi companies, we co-filed a shareholder resolution targeting a climate transition action plan, which was accepted by the SEC but has not yet reached an agreement or next step. The prose of that resolution can be found in the 'Shareholder Resolution Submission/Co-Filings' section below.

3. **Shareholder Resolution Submission/Co-filings**

Still fairly new to using the shareholder resolution tool from our Engagement Strategy toolbox, we doubled our filings with **two separate co-filed shareholder resolutions** in 2022. The first resolution addresses climate transition plans and the other addresses climate lobbying. Both resolutions were approved by the SEC to appear on the shareholder meeting's ballot for a vote.

As of the date of this report, negotiations with both companies are ongoing. Filing partners include other asset managers and asset owners, and we are eager to continue this sort of collaboration. The companies where we co-filed the resolutions are each well-known technology companies, and we are eager to move these topics forward with them given their enormous influence in their spheres of business.

Climate Transition Plans: One shareholder resolution called for the company to formulate climate transition plans that align with a 1.5-degree climate scenario. This is a technology company that was not responsive to our direct dialogue overtures. A meeting was held to discuss the resolution, but there has not yet been a course of action determined as of this report's writing, and the resolution may still appear on the ballot. This shareholder resolution's language about a climate transition plan is:

RESOLVED: *Shareholders request xxxxx issue a climate transition action plan describing how it could align its operations and full value chain emissions with the Paris Agreement's ambition of limiting global temperature increase to 1.5 degrees Celsius. The transition plan should describe the Company's GHG emissions reduction strategies and any deviations from science-based GHG emissions reduction pathways aligned with limiting temperature rise to 1.5 degrees Celsius for the Company's scopes 1 - 3 GHG emissions.*

The plan should be prepared, at reasonable expense and excluding confidential information, within a year and updated annually thereafter.

Climate Lobbying: The second resolution called for transparency about lobbying on climate-related matters. As of the date of this report, no definitive course of action has been set and discussions with the company continue.

We are hopeful these resolutions are successful levers for change, either in commitments that keep the resolution off the ballot, or, if they end up going to a vote, that the vote results show broad shareholder support causing action toward positive change. Our first year stepping into the arena of filing shareholder resolutions was 2021, and it led to constructive dialogue, robust commitments, and follow-through from the company. We are working to achieve similar results from these resolutions.

4. Advocacy on SEC Climate Rule

In 2022, the SEC proposed the new rule to require an array of **climate-related disclosures**. These have yet to be finalized but are expected sometime in 2023. Terra Alpha is squarely behind this proposal. We submitted our support, along with many other proponents and many others who disagree strongly, via a letter and responses to the 115 questions that the SEC put forth for feedback. (The letter itself is shared below). One of the striking features of this SEC proposal is that it comes at a timely moment to help the US align with a number of global, regional, and international requirements for climate-related disclosures. European, UK, some Asian, and the International Financial Reporting Standards (IFRS) Sustainability Disclosure Standards have articulated climate-related disclosure expectations, many also reflecting elements originally drawn from the Task Force on Climate-related Disclosure (TCFD) framework regarding climate risk assessments. **In addition to disclosure of emissions Scope 1, 2, and 3, the initial SEC rule proposal expects qualitative disclosures on transition plans, scenario analysis, and the use of internal carbon pricing, in terms of:**

+ Describing how climate-related risks may impact the business and financial statement materially, and 'strategy, business model, and outlook',
+ Confirming that a company has a process to assess and manage these risks, and if they are integrated into overall risk management,
+ Describing scenarios, assumptions, and financial impacts,
+ Disclosing a climate transition plan with targets and metrics and time-horizon of targets and goals, and
+ Providing annual updates on goals and targets.

It is encouraging that the SEC has proposed these expectations, and we will see what actually gets codified later this year amidst some strong opposition. Our letter supporting the SEC requiring disclosure on climate-related factors is below:

TERRA ALPHA INVESTMENTS

2101 L Street, NW Suite 300 Washington, DC 20037

Vanessa A. Countryman, Secretary
Securities and Exchange Commission
100 F Street NE
Washington, DC 20549-1090

June 13, 2022

We write in support of The Enhancement and Standardization of Climate-Related Disclosures for Investors (File No. S7-10-22).

Terra Alpha Investments invests in global public equities. The firm was established in 2014, with experience from some of the largest leading investment firms, and originally designed to specifically use environmental data such as Scope 1,2,3 emissions data as part of our investing process. Climate-related data helps us construct portfolios of companies that are prepared for future continued success.

Disclosed climate-related data helps our firm make investing decisions. Mandated disclosure will expand the universe of companies we can consider investing in. In an ever increasingly global world, standardization of a baseline set of emissions disclosures such as these proposed by the Commission would be useful for us as investors. As regulatory authorities around the globe have introduced voluntary and mandatory climate-related disclosures, alignment would be useful for registrants and investors.

As an US-based investor in public, global equities, we want to emphasize the following points:

- Scope 3 emissions should be assessed and disclosed by all companies along with Scope 1 and 2, and not just the largest or those that self-determine it is material to their business.
- Timing to begin this mandated disclosure cannot start soon enough.
- Inclusion of climate-related information in the financial statements promotes consistency in reporting, and is appropriate because climate-related impacts can materially affect a company's financial position and operations.
- A baseline set of globally disclosed environmental information - such as those proposed in this rule - would be a useful baseline for registrants and investors globally.
- Efforts to align with the developing ISSB standards are sensible and helpful for all.
- Assurance methodology should be disclosed if not performed by an accounting firm.
- We advocate that targets and plans for GHG emissions reductions should be science-based and aligned with a 1.5 degree scenario, exclude offsets except as a last resort, and we support the alignment with the TCFD expectations.

Responses to the specific questions the Commission posed are in the pages that follow.

Sincerely,

Timothy P. Dunn, CFA
Managing Partner and Chief Investment Officer

5. Advocacy Collaboration Highlights

+ We joined a letter to the Board of Directors of the US Chamber of Commerce – and were involved in subsequent outreach to the Chamber's Climate Solutions Working Group (an initiative within the Chamber of Commerce) – encouraging company members to **advocate for strong climate legislation** in the wake of the defeat of the US Build Back Better law, which included significant climate funding. We further encouraged members of the Climate Solutions Working Group to **urge the Chamber to lobby constructively on future climate bills.** The letter was drafted by the Interfaith Center on Corporate Responsibility (ICCR).
+ We contributed support to the 2022 Global Investor Statement to Governments on the Climate Crisis, an NZAM signatory effort.

+ We co-signed a letter to the SEC rebuking any requests to delay the release of the Climate Disclosure rule or remove Scope 3 disclosure from its requirement. The letter reiterates that investors need accurate information, and was composed initially by As You Sow.

2022 Proxy Voting Record

Voting our shares is considered part of our fiduciary duty at Terra Alpha. We utilize our Proxy Voting Policy and cast votes at all possible company meetings, as this is **considered a crucial component of our engagement strategy**. We utilize Glass Lewis as an administrator to execute our votes, though we retain final say on all votes placed. From January 1 to December 31, 2022, Terra Alpha participated in 1,012 votes. We voted with management 708 times, against management 62 times, took no action 217 times, and had 22 votes that were mixed. We voted against management on proxy items related to Social issues 32% of the time and Governance issues 60% of the time. As seen in the **figures 11** and **12** below, our votes aligned with Glass Lewis' recommendations 737 times, against Glass Lewis' recommendations 36 times, we took no action 217 times, and had 22 votes that were mixed.

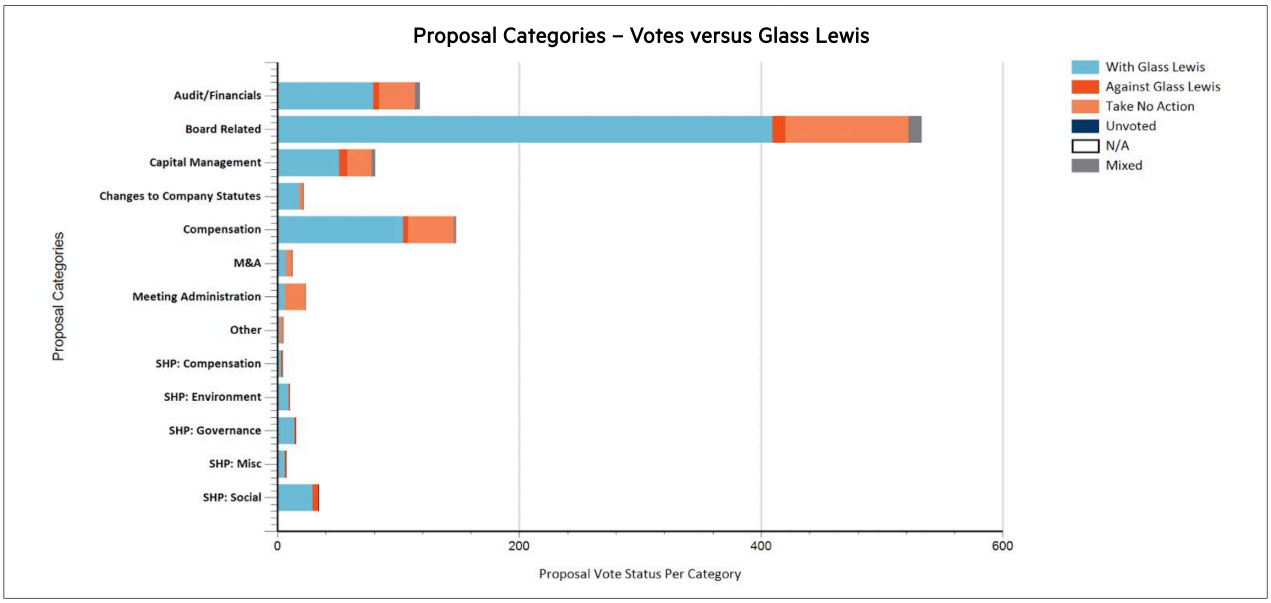


Figure 11. *Terra Alpha's 2022 proxy voting record as compared to Glass Lewis.*

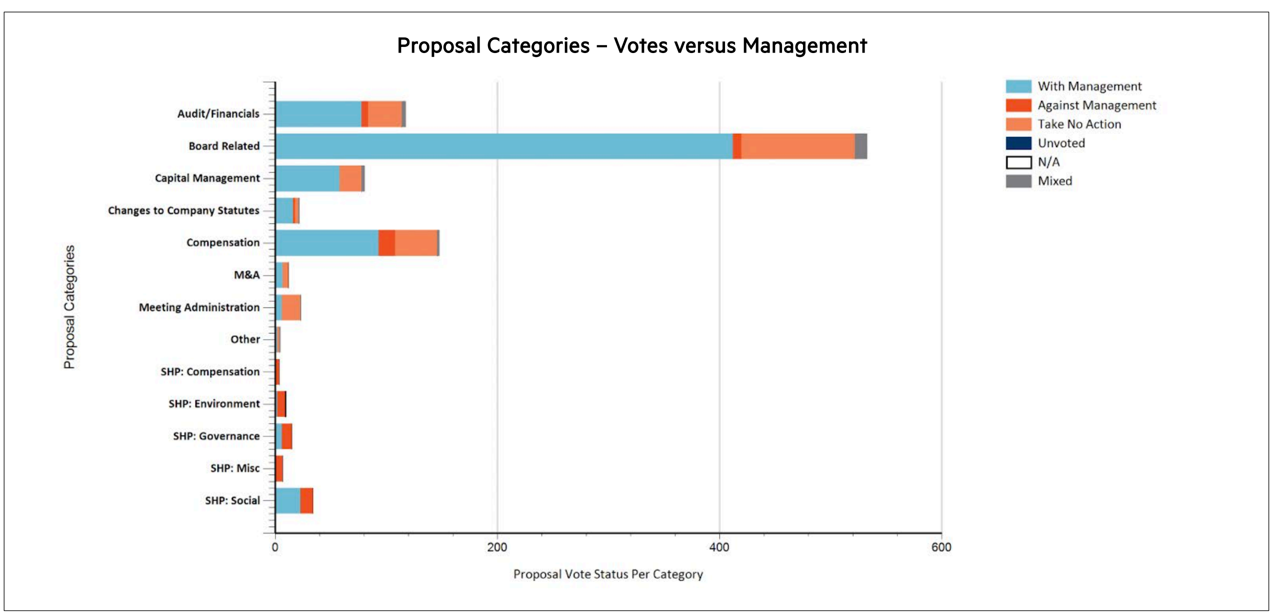


Figure 12. *Terra Alpha's 2022 proxy voting record as compared to management.*

Engagement Summary

Our engagement focus centered on portfolio goals for SBTs and plans. This report highlights our accomplishments in 2022, and the concerns and challenges highlighted here continue to propel our engagement work forward. We are excited for our Engagement Strategy to continue moving us toward greater positive impact for the portfolio and our environment, in corporate communities, and society at-large.

We have highlighted movement forward over the past year in this report, yet we want to note some of the challenges we acknowledge are present and looming and are part of our forward attention.

As noted, water concerns have been something we raised early on with our portfolio companies – and was a topic of one of our early whitepapers – and is an important part of our EP analysis. We plan to focus our direct engagement work more intently on the challenges surrounding water in this coming year.

Another potential area of concern that appeared more often this past year was that companies globally have made **pledges around climate and reducing emissions that they might have a very difficult time upholding**. We became aware of this as we engaged in 2022 particularly with some technology companies and we will be monitoring this closely and pushing for it to be addressed in 2023. Some of the challenges companies are facing come from making pledges that are dependent on necessary changes that are out of their complete control – such as being high energy users, and heavily reliant on utility grid power supplies that need converting to renewable energy for them to meet their pledges. This is not specific to our portfolio only.

A related concern is that companies are and may be turning to large offsets rather than reducing their emissions. Separately and almost conversely, we are finding that out of an abundance of caution, some companies have been hesitant to commit to SBTs because they are concerned they cannot uphold all aspects that it entails, and typically this is in the Scope 3 category of measuring impact from the supply chain or customers.

We are conscious of the voice investors can use with our portfolio companies for greater transparency and improvement in DE&I, as well as working to remedy the consequences of climate injustice. Additionally, the significant shift in the number of US companies in our portfolio that disclose their demographics through the EEO-1 is one aspect we will continue to support.

We plan to use our engagement as careful and active stewards of our investments and their impact, and believe it furthers profitable transitions in our portfolio companies and toward a more sustainable economy overall. We are excited and dedicated to our upcoming engagement work, and believe Terra Alpha is poised for even deeper impact in the years to come.

VII. Thought Leadership

Publications Throughout the Year

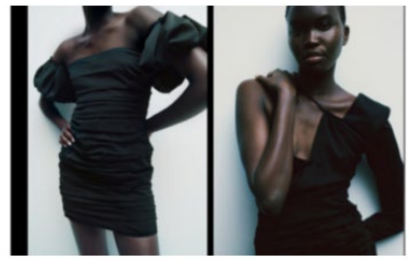
EP Insights

In our EP Insights, we identify meaningful company actions or broader issues that are relevant to the transition to a sustainable economy.

In 2022, we published the following EP Insights:

EP Insight, December 2022 | The Beef Issue

EP Insight, September 2022 | WholeFruit Chocolate



EP Insight, May 2022 | Zara x LanzaTech

Terra Alpha Voices

In November 2020, we launched Terra Alpha Voices, a series of interviews created in partnership with author and photographer KK Ottesen. The purpose of Voices is to share differentiated perspectives about the big issues that are shaping our lives.

In 2022, we published the following Terra Alpha Voices, featuring true thought leaders:

Terra Alpha Voices | Carter Ingram

Executive Director at Pollination

Terra Alpha Voices | David Yeh

Managing Director at CIBC Capital Markets

Terra Alpha Voices | George Serafeim

Professor, Harvard University

Terra Alpha Voices | Callie Broaddus

Founder, Reserva Youth Trust

Collaborating with Affiliated Organizations

We partner with several 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. We enter each partnership with intentionality, as we hold ourselves and these networks to the high standards necessary to create a better world.

Terra Alpha was fortunate to actively contribute to several working groups throughout the year, including:

+ Carbon Disclosure Project's (CDP) Water Champions project
+ Ceres Value Water Finance Initiative
+ Ceres Investor Network's Policy Working Group and Paris Aligned Working Group
+ The Farm Animal Investment Risk & Return (FAIRR) Sustainable Aquaculture Initiative
+ The Forum for Sustainable and Responsible Investment (US SIF) SEC Rulemaking Task Force

Education

Our team has also actively contributed as thought leaders as panelists and speakers at events and on podcasts in 2022. Those events include:

1. Julianna Brunini presented on Net Zero Investing at the Russell Family Foundation's annual retreat.
2. At the CFA Society of Washington DC's 4th Annual ESG Summit, Tim was a panelist for the Asset Manager session while Julianna led a roundtable conversation on Net Zero Investing. Amy Dine represented the firm and introduced the session on regulations.
3. Tim presented our commitment to a SBT for GHG emissions as a Financial Institution on a CDP call aimed at LATAM financial entities (61 banks, asset managers, and others) along with Bancolombia.
4. Tim and Sarah Ladislaw of Rocky Mountain Institute led a lunch discussion at a Capital Group's Strategy Research team's retreat on climate, SBTs, and Net Zero.
5. Tim was a panelist on Sustainable Investing at a Brandeis International Business School Investment Trends seminar along with Priscilla Brown, CEO of Amalgamated Bank, and Aniket Shah, Global Head of ESG and Sustainable Investing at Jeffries.
6. Tim presented to the LA Music Center Foundation's Investment Committee and the Piedmont Environmental Council's Governance Committee on the role of ESG in Investing and the basics of Impact Investing.
7. Tim participated in a consultation session with the CEO of the United Nations Principles for Responsible Investing (UN-PRI) being held at the World Bank in DC.
8. Tim was the keynote speaker at the William & Mary Business School's annual "From DoG Street to Wall" conference about his career and Sustainability.
9. Tim was a virtual panelist with Albright Stonebridge Group at a 27th Conference of the Parties (COP27) panel on Corporate Greenwashing.
10. Tim was part of a three-member panel on Climate and Finance at the DC Club of the Harvard Business School alongside Carter Roberts of the Worldwide Fund for Nature (WWF) and Stacy Swann of Climate Finance Advisors.
11. Tim was interviewed by Sasha Chased on OpenExchange.tv (OETV) on the sustainable investing landscape.
12. Tim was Interviewed by Will Thompson of Middleburg Life – Read the full interview here.
13. Tim was a guest on Investing with Purpose Podcast with EisnerAmper's Elana Margulies-Snyderman of the Eisner Advisory Group.

VIII. Conclusion

In our work this year, we further integrated more robust Environmental Productivity and Enduring Business Model frameworks with our Engagement Strategy pathway. We used these to broaden and deepen Terra Alpha's positive impact and intention: *to shift the corporate sector to align with a 1.5°C planetary temperature increase, to value human capital as an important business issue, and to be conscientious about the impact of economic growth on our planet's natural resources.*

We moved forward on more portfolio companies with SBTs and plans, defined and engaged on the DE&I areas we know are meaningful to successful companies, and dove deeper into understanding our portfolio's emissions in Scopes 1, 2, and 3. Via our thought leadership work, we advocated for broader change within the capital markets and business community. We used our voice in policy considerations at the SEC, in gatherings with corporate and asset owner leaders, and in the burgeoning global effort to increase disclosure and reporting about climate impacts. We moved forward our engagement strategy to enhance our portfolio companies' abilities to operate within an increasingly resource-constrained world, and for our capital markets more broadly to be active participants in this goal going forward.

Our engagement areas this year will sustain focus into 2023 – net zero emissions, validated SBTs and action plans, and greater DE&I reflected in our own firm and portfolio companies. We foresee deeper understanding of water-related factors, will encourage higher standards and expectations in corporate water management, and will further explore the complexities around the ability to integrate Scope 3 emissions in our investing.

Terra Alpha remains firmly committed to driving the corporate sector to be successful and being aligned with our planet's natural resource boundaries. We are conscious of the meaningful impact corporations play in society and continue our intentional efforts **to catalyze capital markets to enable a sustainable future for all.**

We greatly appreciate the trust our investors have placed in us as a firm and the collaborative support we have received from NGOs, academics, and peer investment firms. We welcome any questions or feedback about this report and our overall impact work.

IX. Appendix

Appendix 1: Calculation of Financed Emissions

Methodology

Terra Alpha's financed emissions calculations are based on the publicly available guidelines in: PCAF (2022). The Global GHG Accounting and Reporting Standard Part A: Financed Emissions. Second Edition.

PCAF is an industry partnership that has developed standardized methodologies for financial firms to measure their financed emissions–e.g.., the emissions associated with their investing and lending activities. The GHG Protocol has reviewed the PCAF Standard to be in conformance with its expectations for reporting Scope 3 – Category 15 (emissions from investing activities).

Definition of "Financed Emissions"

Per page 55 of the PCAF Standard (2022, Second Edition), the financed emissions associated with equity investments are defined as:

$$Financed\ emissions = \sum_{c} Attribution\ factor_c \times Company\ emissions_c$$

$$(with\ c = borrower\ or\ investee\ company)$$

For listed companies:

$$Attribution\ factor_c = \frac{Outstanding\ amount_c}{Enterprise\ Value\ Including\ Cash_c}$$

The "**outstanding amount**" refers to the market value of Terra Alpha's investment in the portfolio company at year-end. As such, the "**attribution factor**" approximates the % of total debt and equity value owned by Terra Alpha at year-end. By multiplying our percentage ownership of each portfolio company by the portfolio **company emissions**, we estimate Terra Alpha's share of its emissions. Summing across all our portfolio company holdings results in our "**financed emissions**" estimate.

Note: in previous Impact Reports, Terra Alpha used market capitalization rather than Enterprise Value Including Cash (EVIC) in the denominator. We updated our methodology to align with PCAF's recommendations for our 2022 Impact Report.

Company Emissions: Data Quality & Recency Notes

Terra Alpha collected Scope 1, 2, and 3 data for each of our portfolio companies in order to calculate our financed emissions. In many cases, we used human judgment to choose what we believe to be the best data available for this purpose.

Below is the preferential **data quality hierarchy** we applied during data aggregation. The data quality scores stem from PCAF's guidelines.

+ *First choice*: company-reported emissions with external assurance/verification (data quality score = 1)
+ *Second choice*: company-reported emissions without external assurance/verification (data quality score = 2)
+ *Third choice*: third-party estimated data, sourced from S&P Trucost via the CapitalIQ Pro platform (data quality score = 4).

Use of restated data: Many of our portfolio companies have restated their historical emissions data at one point or another, due to, for example, acquisitions, divestitures, improvements in emissions estimation methodology, or updates to standardized emissions factors used in their calculations. Generally, Terra Alpha utilized the most recently restated data available at the time of our data collection. For example, if Company A's 2021 emissions data appeared in a longitudinal data series with restated 2019 and 2020 emissions, we generally used the 2019 and 2020 restated historical data points for improved year-over-year comparability to 2021.

Time lag: For our 2022 portfolio holdings, the most recently disclosed company emissions data is typically from calendar year 2021 (and in just a few cases, from calendar year 2020). As such, we have marked the 2022 financed emissions disclosure as "preliminary," because we will update it to reflect 2022 calendar year company emissions when such data becomes available.

Mapping of most recently available emissions data for Terra Alpha's financed emissions calculations:

Terra Alpha portfolio composition	**CY 2022 holdings**	CY 2021 holdings	CY 2020 holdings	CY 2019 holdings
Most recent company-reported data available	**CY 2021 emissions data**	CY 2021 emissions data	CY 2020 emissions data	CY 2019 emissions data

Market-based vs. location-based (Scope 2): Terra Alpha used location-based Scope 2 data whenever available. If location-based data was unavailable, market-based Scope 2 data was used instead. Of our 2022 year-end portfolio companies, only 5% required us to use market-based data.

Appendix 2: Calculation of Other Carbon-Related Metrics

Economic Emissions Intensity

The Economic Emissions Intensity calculation divides the financed emissions (as defined in Appendix 1) by our firm's assets under management (in $ millions) as of the end of the reporting year.

Average Carbon Intensity of Holdings

The Average Carbon Intensity of Holdings calculates the arithmetic mean of portfolio companies' carbon intensities. A portfolio company's carbon intensity is its Scope 1 and 2 emissions divided by its annual revenue (in $ millions).

Weighted Average Carbon Intensity (WACI)

The weighted average carbon intensity is calculated via the summation of the product of emissions intensity of each holding, and the end-of-reporting-year weight of the holding within the portfolio. For company emissions, the calculation defaults to using the sum of Scope 1 emissions and location-based Scope 2 emissions for the given year. If location-based Scope 2 emissions data is unavailable, market-based Scope 2 emissions data will be used. If a company is missing the given year's emissions data, then it will use the prior year's emissions data. The emissions data for a company is then divided by the revenue ($ million) value for the reporting year to form an emissions intensity value.

This metric is recommended by the Taskforce on Climate-related Financial Disclosures (TCFD) for asset managers (see Table 3, page 52, in TCFD (2021), Implementing the Recommendations of the Task Force on Climate-related Financial Disclosures).

Appendix 3: Environmental Performance Data for TAI Operations

While reducing the emissions associated with our investing activities (our "financed emissions," or "portfolio emissions") is our top priority, it is still necessary to account for and reduce emissions that allow Terra Alpha to effectively function as an investment firm – otherwise known as "operational emissions."

The top two drivers of our firm's operational emissions are electricity consumption (used in our DC office space and when employees work from home) and our business travel. We have identified electricity consumption (Scope 2 emissions) as our top priority for reduction and, in accordance with the SBTi's guidance, set a goal of reducing our absolute emissions 46% by 2030 versus 2019. When our lease came up for renewal in 2022, we decided not to expand our office space, and an important consideration in this decision was space efficiency to avoid increasing our operational emissions. Decarbonization of the local grid and renewable power procurement are our other two main opportunities for achieving our 2030 target.

Although we do not have a formal target regarding business travel emissions, it is our intention to minimize travel-related emissions through thoughtful planning, such as maximizing the number of client or prospect visits per flight or combining work travel with personal travel when feasible.

In preparation for more complete measurement in 2023, the firm developed an emissions reporting system for all business travel. At the conclusion of every business trip by a Terra Alpha team member, a reporting sheet is filled out and is used to compile data for calculation on annual emissions use.

TAI LLC: Operational Greenhouse Gas Emissions Inventory

Tonnes of CO2e	2019	2020	2021	Commentary
Scope 1	0	0	0	Terra Alpha's Scope 1 emissions are negligible
Scope 2* (DC Office), location-based	10.9	8.7	7.8	Decline between 2020 and 2021 driven mainly by the decline in the US Environmental Protection Agency Emissions & Generation Resource Integrated Database (EPA eGRID) emissions factor for the RFC-East region
Scope 2* (Work from Home)	0.3	3.6	1.9	The decrease between 2020 and 2021 was due to a rebound in employee in-office days, as COVID-related restrictions eased
Sub-total: Scope 1 and Scope 2	11.2	12.3	9.7	
Scope 3 Categories 1-14	20.2	2.8	6.2	The increase between 2020 and 2021 was due to a rebound in employee commuting and business travel, as COVID-related restrictions eased
Total: Scopes 1, Scope 2, and Scope 3	31.4	15.1	15.9	

**Our Scope 2 emissions estimate is based on two sub-components: (1) our estimated pro rata share of our office building's electricity consumption, based on The Climate Registry's "area method," and (2) our estimated work-from-home electricity consumption, which is driven by employee-reported remote work days. The Climate Registry's "area method" was determined to be the best Scope 2 estimation methodology for our leasing situation, because we lease and occupy a fraction of one floor in a commercial office building (see General Reporting Protocol, v3, page C-10). In 2022, we revised our calculations for 2019, 2020, and 2021, thanks to additional data obtained from our building manager. This helped improve our estimate by incorporating the overall building occupancy rate into our 2019, 2020, and 2021 emissions estimates.*

Appendix 4: Additional Terra Alpha Portfolio's Environmental Performance Data

TAI Portfolio Impact: Key Performance Indicators

GHG Emissions	2018	2019	2020	2021	2022	Commentary
Percent of invested AUM in companies with SBTi-validated emissions reduction targets (all investment strategies)			43%	61%	69%	*On track to achieve our targets (75% by 2025, 95% by 2030)*
CO_2e emissions from a $1 million investment in Terra Alpha's diversified strategy (tonnes)	18.5	21.0	16.8	14.1	15.3	*Change driven by changes in portfolio composition and changes in portfolio companies' emissions; two-year data lag on average*
YOY Change	*4%*	*13%*	*-20%*	*-16%*	*9%*	

Water	2018	2019	2020	2021	2022	Commentary
Water usage from a $1 million investment in Terra Alpha's diversified strategy (cubic meters)	2,306	1,550	1,713	1,850	2,129	*Change driven by changes in portfolio composition and changes in portfolio companies' water usage; two-year data lag on average*

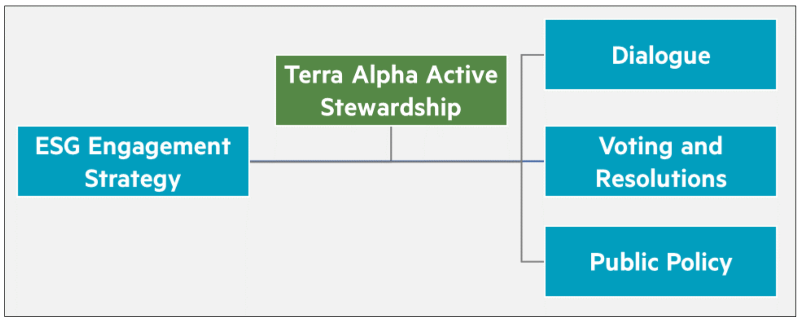
Waste	2018	2019	2020	2021	2022	Commentary
Waste generation from a $1 million investment in Terra Alpha's diversified strategy (tonnes)	5.4	5.5	5.4	2.9	3.5	*Change driven by changes in portfolio composition and changes in portfolio companies' waste generation; two-year data lag on average*

Note: Due to data disclosure limitations, some portfolio footprint measurements include the use of estimated data where corporate-disclosed data is unavailable. Historical data has been updated to reflect restated data provided by companies. 2022 calculations use 2021 environmental data and will be restated when 2022 data becomes available. The metrics provided within this table reflect an equity-only approach to measurement. That is, the percentage of ownership is determined using market capitalization information rather than enterprise value. For more information around our financed emissions (aligned with PCAF methodology), please refer to the section Firm Initiative Update: Our Commitment to Net Zero.

Appendix 5: TAI Engagement Strategy, Escalation Strategy, and Proxy Voting Policy:

Our Terra Alpha Engagement Strategy, a crucial piece of our investment management stewardship, still encompasses our three-pillar approach of direct company dialogue, voting and considering resolutions, and public policy engagement and advocacy:

+ We engage through direct one-on-one and collaborative communication with companies,
+ We vote at annual meetings and consider shareholder resolutions, and
+ We share our views regarding public policy.



As we have articulated previously, our engagement strategy is led by our Director of Corporate Engagement, in collaboration with our Research Analysts, who are in direct contact with their coverage companies. This pairing continues to be a key characteristic of our approach. Our engagement strategy, at its root, reflects our commitment to understanding companies and improving their positive performance as part of our active, patient investment management; it informs and enhances insight into companies, and intends to improve companies' activity as sustainable and successful businesses.

A1. Dialogue

Our most used and preferred pathway in our engagement strategy is direct engagement with companies, which might be specific to one company, as well as a theme across the portfolio. We use our proprietary EP and EBM processes as frameworks for engagement topics, and this year we continued our focus on science-based emissions reductions targets and plans, our net-zero commitment as a firm and how that extends to our portfolio companies, as well as increasing our understanding and expectations around DE&I in our portfolio. We communicated primarily through video meetings and letters in 2022 (which certainly helped our own firm's Scope 3 emissions profile, though this was not a deliberate emissions-reducing strategy set of decisions).

A2. Voting

As we have done since our inception, Terra Alpha voted our shares at shareholder meetings as one of our fiduciary responsibilities and an engagement pathway. We approach voting deliberately according to our proxy voting guidelines. We continued our intense focus on and examination of SBTs, and greater focus on DE&I movement of our portfolio companies. Of note, there are some non-US markets where we are blocked from voting our shares due to custodial constraints; we are investigating how to penetrate those prohibitions in the next proxy seasons.

As a refresher, some excerpts of our voting policy:

+ We recognize the importance of Board diversity and expect Board composition to be one-third female and at least one person of a historically underrepresented demographic or identity group. Therefore, we may vote against proposed board members, particularly nomination committee members, as long as a Board lacks diversity of 3+ female board members and at least one person of a historically underrepresented demographic or identity group on a ten-person board.
+ We will generally vote for implementing SBTs verified by the SBTi and for articulating plans to reach them.
+ We will generally support resolutions that request implementing a reporting line into the C-suite for the lead Sustainability and DE&I role.
+ We will generally vote in favor of resolutions that request disclosure of impacts on forests, soil evaluation, land-use, biodiversity, ocean impacts, or other natural resources as well as resolutions that ask for efforts to create sustainable practices in these areas.

A3. Public Policy Advocacy

We continue to be sure to advocate in the public policy and regulatory arena for public decisions that advance better practices for all companies and our society. Communicating on our own continues to be one path taken, yet broader policy issues are often where collaborating and joining forces with peers has made the most sense for Terra Alpha and been more effective than anything we could have accomplished by going at something alone.

B. Company Engagement Escalation Policy

We are active investors, and strive to be patient long-term investors, and are believers that engagement can bring about useful change. We can always sell a company if our engagement escalation rises to an unsatisfactory end, or of course if we do not feel an issue warrants escalation in the first place. We put our escalation policy into practice in 2022 in a number of instances, and **used all instruments from our engagement strategy toolkit** and escalation strategy pathway:

Escalation Strategy pathway:

+ Engagement begins with the Terra Alpha analyst who covers the company, and often the Director of Corporate Engagement, reaching out to speak via the Investor Relations team.
+ If this is not successful, we may escalate by writing to the CEO and/or the lead independent director on the board – documenting and articulating our concerns and interest – and expect to engage in dialogue at the C-Suite level, and possibly with Board members.
+ Correspondence would include the Terra Alpha Chief Investment Officer and could include them in the dialogue.
+ With little feedback through these mechanisms, we would consider initiating and filing a shareholder resolution, as a means to engage with a company. The decision to file a resolution is not one we rise to without exploring and persisting in dialogue engagement efforts first. We reach a decision to file a resolution when we are met with unsatisfactory communication on an important topic.

C. Proxy Voting Policy

Proxy Voting Principles

Terra Alpha Investments proxy voting is guided by our mission, vision, investment process, and engagement strategy. We believe good stewardship practices for the environment, society, and in corporate governance, are necessary to run a successful and sustainable business.

We expect companies to demonstrate ethical corporate governance practices and structures.

In principle, we support transparency and greater disclosure.

We expect companies to understand their natural resource uses and impacts, and to consider our planet's changing climate and natural resource limits in their business decisions. We are striving to achieve net zero emissions for all our assets under management no later than 2050, and support efforts generally that forward that goal.

We support overall ethical operational practices, including in supply chains, and recognize the important positive contributions diversity, equity, and inclusion foster for an enduring business.

Terra Alpha views proxy voting as part of our fiduciary responsibility, and an integral component in our firm's engagement strategy.

Proxy Voting Policy – how we vote:

ENVIRONMENT

Climate:

+ We will generally vote in favor of resolutions that request disclosure of material environmental data and information, greater efficiency of natural resources use, and/or efforts and progress towards reducing emissions and the impact on natural resources.
+ We will generally vote for implementing science-based targets verified by the Science Based Targets initiative and for articulating plans to reach them.
+ We will generally support resolutions asking for reports confirming that companies have evaluated risks from climate change.

Water:

+ We will generally vote in favor of proposals that request water auditing or risk assessments, that companies report water use and risks, and/or that companies disclose programs to mitigate risks from water use or lack of access.
+ We are proponents for conservation / greater efficiency of use of water and will generally support resolutions that request plans to achieve greater efficiency.
+ We will generally vote in favor of resolutions that request disclosure of science-based targets (and plans to achieve them) around water usage, as this area evolves.

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 and specifically virgin materials.
- We will generally support resolutions asking for assessment and/or disclosure of waste streams.
- We will generally support resolutions asking for assessment and/or disclosure on the circularity of products produced.
- We will generally support resolutions that ask for the reduction of the use and production of petroleum-based products.

Other natural resources:

- We will generally vote in favor of resolutions that request disclosure of impacts on forests, soil evaluation, land-use, biodiversity, ocean impacts, or other natural resources as well as resolutions that ask for efforts to create sustainable practices in these areas.

SOCIETY

Diversity, Equity, & Inclusion:

- We will likely support resolutions that encourage reporting on and creating greater gender/identity and racial diversity in senior management levels, and throughout an organization. (We recognize that it is not legal to collect this data in all countries).
- We will generally support resolutions asking for the EEO-1 report to be disclosed for US operations.
- We will generally support resolutions requesting disclosure of employee turnover rates, promotion rates, and pay parity, all by gender/identity and/or racial breakdowns. (We recognize that it is not legal to collect this data in all countries).
- We will generally support resolutions requesting a racial equity audit by a third party. (We recognize that it is not legal to collect this data in all countries).
- We recognize the importance of Board diversity and expect Board composition to be one-third female and at least one person of a historically underrepresented demographic or identity group. Therefore, we may vote against proposed board members, particularly nomination committee members, as long as a Board lacks diversity of three+ female board members and at least one person of a historically underrepresented demographic or identity group on a ten-person board.

Employee / Human Capital Wellbeing:

- We will generally support Paid Parental Leave proposals, especially of four or more weeks for US companies or operations.
- We will generally support resolutions requesting adoption and disclosure of policies to protect workforce safety and wellbeing.

GOVERNANCE

Shareholder rights:

- We are not in favor of special voting classes of shares, nor limits on small shareholders' rights.

CEO compensation:

+ We are increasingly concerned with the overall level of CEO compensation, particularly at US based companies.
+ We support transparency on pay and the opportunity for shareholders to have "say on pay". We will, if circumstances require, vote against excessive compensation packages. We may vote against particularly excessive CEO compensation packages and/or boards that support such packages.
+ We are increasingly concerned with the overall level of CEO compensation, particularly at US-based companies.

Political activity:

+ We will generally vote for resolutions requesting reasonable disclosure and transparency of political contributions, lobbying, and trade association support, including membership.

Reporting lines:

+ We will generally vote for resolutions that request implementing a reporting line into the C-suite for the lead Sustainability and DE&I role.

Auditor:

+ Unless there is concern regarding financial accounts fraud, we generally support the auditing firm re-appointment. However, CFA Institute and UK practice suggests new appointments every 10-20 years.

Board Independence:

+ We will generally support resolutions on separation of the CEO and Chairperson of the Board roles.
+ We support Independent Board members as Chairs of Board Committees and may generally vote against board members where this practice is not in place. (We use the CFA Institute definition of an Independent Board member: *Independent non-executive directors should not have been connected to a director, chief executive, or substantial shareowner of the issuer within the preceding five years.*)

Number of Boards Served:

+ A sitting executive of a public company should serve on no more than two public boards including the one being voted upon. A non-executive Board member should serve on up to four public boards total.

Appendix 6: The Terra Alpha Investor Climate Action Plan

The Investor Climate Action Plan (ICAP) is a standalone document that directly lays out our climate-related investment strategy actions.

Terra Alpha has deliberately included climate considerations in our investment management and we incorporate it throughout our operations.

Statement on Fossil Fuel Investing

Terra Alpha Investments supports a rapid transition to a low-carbon economy. Our firm is a signatory of the Net Zero Asset Managers initiative (NZAM), through which we have committed to manage 100% of our assets under management in line with a 1.5°C temperature rise limit, based on a SBTs initiative methodology. We have set firm-wide science-based targets for our own operations.

Terra Alpha has never invested in a company whose principal business is extracting, processing, or refining coal, tar sands, oil, or natural gas, because we believe such businesses will face considerable challenges in the transition to a low-carbon economy. We will not invest in companies that are expanding thermal coal production. We have and will consider investing in companies with legacy fossil fuel-dependent businesses, if they have a credible, time-bound plan to decarbonize their operations and products in line with 1.5°C pathways. Our investment strategies actively seek to identify companies across the broader economy that are working to significantly reduce their dependence on fossil fuels and/or enabling the low-carbon transition, amongst other factors.