



Terra Alpha Newsletter

Forecast for a sustainable future? Partly sunny, with a chance of severe thunderstorms

As we roll into 2024, the outlook for a timely transition to a healthy and sustainable economy is a mixture of positives and negatives. Certainly, enough sunny days to build the case for eventual success. Yet, there are some storm clouds building that merit attention.

On the positive front:

Thanks to the catalytic funding from the 2022 Inflation Reduction Act, massive amounts of capital are being raised and deployed into innovative cleantech sectors including hydrogen, nuclear energy, low carbon materials, and various carbon capture technologies. Additionally, the growth of renewable power capacity and electric vehicles continues to shift the energy and auto markets, (despite highly publicized setbacks in US offshore wind developments), slowing the rate of use of fossil fuels. And furthermore, a growing number of companies have committed to science-based targets for their greenhouse gas (GHG) emissions, with a record number of companies having made net-zero commitments (2,732) as of year end.

Counteracting the positives:

The growth of corporate/industry lobbying and political attacks against recently enacted or proposed environmental regulations, corporate environmental reporting, and the consideration of environmental, social, or governance insights in investing.

And some very mixed news:

The year ended with the most highly attended Conference of Parties on Climate (COP28) which made enough progress to publicly declare victory while accomplishing very little. (See Terra Alpha Advisor Kathy Baughman McLeod's comments on COP28 below).

On the policy level, there are worrying signs that could lead to very severe setbacks. In both the US and the UK, upcoming general elections hold great importance. In the US, there is little doubt that if the Republican Party were to retake the White House many of the Biden Administration climate

supportive policies and legislative actions could be reversed. In the UK, the Conservative Party's commitment to tackling the risks of climate change are faltering as the economy continues to struggle in the wake of Brexit. On the European continent, the historic climate leadership shown by Germany and France have been diluted by domestic issues and the impacts from the ongoing Russian war in Ukraine.

2024 could prove to be a tipping point in the transition toward a sustainable economy. Much of the recent progress has been and remains dependent on political support of elected officials and voters in upcoming elections. Terra Alpha, in addition to our core role as sustainable investors, will continue to be an active voice for a sustainable planet for society through our thought leadership and policy work.

Sizing Up COP28 – An Era of Equity and Adaptation Beckons

Kathy Baughman McLeod, CEO of [Climate Resilience for All](#) and member of the Terra Alpha Investments Advisory Board, shares her thoughts on COP28.



A Climate Conference in the Grips of a Petro-State

It is hard to celebrate the final COP28 Agreement coming out of the UN Climate Summit that took place in Dubai in December.

The final text calls on parties to be “transitioning away from fossil fuels in energy systems, in a just, orderly, and equitable manner, accelerating action in this critical decade, so as to achieve net zero by 2050 in keeping with the science.”

As a reminder, we’ve known – and have reams of peer-reviewed evidence to support – that fossil fuels in our energy system pose great risks and harm to the earth since the early 19th century. Later, in the 1960s, the oil industry identified and documented evidence of climate change in long-hidden documents that showed that it was warned of “serious worldwide environmental changes” more than 50 years ago.

And for us today, heat season, exacerbated by human-caused climate change, arrives in less than 90 days for more than a billion people. Meek phrases in the COP28 agreement like “transitioning away” from fossil fuels, “accelerating action,” and “net zero by 2050” will do very little to stop miscarriages, a perpetual skin rash, or the income lost due to spoiled produce and melted products for poor women in South Asia exposed to extreme heat while they try to make a living.

As in what may be self-explanatory, the number in “COP28” means that the convention has been meeting to solve climate change for 28 years. Any agreement that fails to lay out a clear plan for cessation of burning fossil fuels categorically fails humanity, our economies, and our societies.

It's Not All Gloomy

The swarm of people at COP28 in Dubai was estimated at more than 100,000. Most of those attendees were not in the main channel of country delegation negotiations and represented all manner of climate-related expertise and organizations making announcements about new technology, new financing, insurance and risk approaches, partnerships, nature-based solutions, and health, food, and agricultural advancements in the face of our climate reality.

Examples include new funding commitments of more than \$650 million from 16 national governments for the newly created Loss and Damage Fund to bring resources from rich, high-emissions countries to relatively climate-blameless, poor nations suffering the physical and financial effects of our hotter world. The key will be for the countries to make good on their pledges – they don't always.

Moreover, a group of high-profile funders, including the Rockefeller Foundation, and health-focused institutions like Wellcome Trust, made a commitment to invest in health systems in vulnerable nations for greater ability to meet the growing needs of climate-impacted populations. There was also a first-ever call to action by philanthropies led by the ClimateWorks Foundation to coordinate a funding strategy for the bulging mandate for adaptation. Hundreds more organizations launched new work of some kind, some significant and substantive, and others more symbolic. My nonprofit organization, Climate Resilience for All, announced a program to partner with 150,000 poor, climate-exposed working women in India and Pakistan to bring income-supporting microinsurance, plus protective gear and an early warning system to reduce the health and livelihood risks and impacts from extreme heat and flooding.

All these efforts help – and represent the tireless efforts of people who have dedicated their careers and often their lives to addressing our most existential challenge. So many of the attendees were young people with newfound voices and powerful influence that have accelerated, pushed, and spoken truth to power.

Where are the Women Leaders?

At one of the key opening sessions at COP28, called the World Climate Action Summit, out of the 140 leaders scheduled to speak – only 15 were women.

Despite this fact, a most powerful presence in Dubai, one that I've never experienced in my eight years of participation at COP conferences, was the visible solidarity of women in climate leadership, led by [SHE Changes Climate](#). This leadership was embodied in the confident, clear female voices, including President Mary Robinson, UN Climate Change High-Level Champion Razan Al Mubarak, youth climate activist and poet Ayesha Siddiqi, youth climate justice activist Vanessa Nakate, co-founder of SHE Changes Climate Elise Buckle, and so many more.

Leading as women, with women, and for women was a positive force and permeated many traditional and male-dominated meeting rooms at COP28, giving a sense that climate breakthroughs and a just transition might be possible.

The glow created by this female energy and empowerment was suddenly snuffed out this week when the news of the COP29 host, Azerbaijan, released its planning committee members – the gender make-up: 28 men – 0 women.

If women continue to bring better returns to companies where they serve as board members, have lower country GHG emissions as heads of state versus their male counterparts, and reinvest 90% of their earnings into their communities, then focusing efforts on and engaging women leaders at every level, is the best climate investment we can make for everyone.

We can't wait 27 years for 2050 – we can hardly wait a week.

Terra Alpha Impact

Carbon Disclosure Project's Open Letter to Governments on the Plastics Crisis



At the rate of 11 million metric tons a year, plastic pollution is a major threat to the global ecosystem, communities, and economies. Globally, we do not have the data to understand and robustly track the impacts of plastic's life cycle or its waste implications. Corporations do not have a clear view of

their own plastic use, and many of our plastic products are single-use items that end up spending more time as trash and pollution than in their intended application.

In response, the [UN Environment Programme](#) has drafted its first legally binding, global agreement for countries to prevent plastic waste through circular economy principles. Terra Alpha is pleased to have signed [Carbon Disclosure Project's](#) Open Letter to Governments on the Plastic Crisis' to support the UN Plastics Treaty initiatives and advocate for comprehensive corporate disclosure for plastics-related data, which will help to inform our investment decisions.

[Read the full letter here.](#)

2023 PRI Reporting Cycle Results



The [Principles for Responsible Investment](#) (PRI) is a UN-supported network of investors that is the world’s leading proponent of responsible investment. It works to promote sustainable investment through the incorporation of environmental, social and governance factors into investment decision-making.

The UN PRI recently released the results from the 2023 reporting cycle. Terra Alpha Investments has been a signatory to the UN PRI since 2017, and first reported in 2018. We are pleased to continue to be active signatories of UN PRI, as we have always advocated for greater disclosure of material environmental information and data.

[You can find Terra Alpha’s full Transparency Report here.](#)

Note: The high-level assessment methodology can be found [here](#) and question-level assessment criteria can be found after each indicator in the Investor Reporting Framework, [here](#).

Terra Alpha Engagement on Data Center Expansion

In 2023, largely driven by AI and related technology, we saw a surge in data center construction and processing speed expansion. While many data center operators claim that their facilities are carbon neutral and running on 100% renewable energy, the aggregate energy demand from data centers far outpaces renewable energy supply in many grids thereby creating additional demand for energy produced using fossil fuels.

Terra Alpha is working to gain a deeper understanding of how our portfolio companies are managing their energy consumption and emissions, water consumption and impact, and renewable energy procurement in accordance with their sustainability commitments. Chief Investment Officer, Tim Dunn, Director of Corporate Engagement, Amy Dine, Senior Investment Analyst and Associate Director of Research, Julianna Brunini, and Senior Investment Analyst, Nathaniel Schwartz engaged with portfolio companies that have meaningful exposure to data center expansion and requested more information on how they plan to meet their stated emissions goals despite the more rapid data center capacity growth.

Thought Leadership

Terra Alpha Voices | Dan Sanborn



Terra Alpha Voices highlights thought leaders who inform our investment process, our impact work, and our understanding of current global affairs. This series, created in partnership with author and photographer [KK Ottesen](#), seeks to shed light on the subjects' diverse perspectives rather than their illustrious careers.

In our latest installment, KK sat down with our Portfolio Manager and Director of Research, Dan Sanborn, to discuss his journey to Terra Alpha, thoughts on sustainable investing, and what it's been like to be at the vanguard of using environmental data as part of investment decision making.

"I've been very fortunate to love what I do, love the people I get to do it with, and feel like we're actually making a difference day-to-day. That is a privilege. Being able to take risks, finding other passionate people – I don't want to even say like-minded, or people that agree with you, because it's good to be in an environment where there is disagreement; that often leads to some of the greatest innovations."
– Dan Sanborn

[Read the full Terra Alpha Voices here.](#)

EP Insight | Wind-Assisted Cargo Ships



In our latest EP Insight, Terra Alpha highlights wind-assisted cargo ships: an innovation that could help the shipping industry reduce their carbon emissions.

This technology could be a turning point for the maritime industry, as harnessing the wind's power rather than relying solely on the ship's engine is estimated to reduce a ship's lifetime emissions by 30%.

[Read the full EP Insight here.](#)

Team Updates

Our Summer 2023 Interns Share their Experiences



Sydney Olorode

What was your biggest takeaway from your internship at Terra Alpha?

The most profound takeaway I had was that it is entirely possible to achieve superior financial returns while investing in the best sustainable actors in our economy. The fusion of capitalism and sustainability is reshaping the financial landscape because stakeholders, from shareholders to communities, expect companies to spearhead global decarbonization.

Every industry is on the cusp of transformation in the race to a net-zero world. The automotive sector's shift to electric is likely just a glimpse of what is to come. The quest to decarbonize diverse sectors alongside institutions aligning their portfolios with core values presents a monumental investment opportunity. Those adaptive to change will thrive, while others risk obsolescence. As capital seeks transformative ideas, businesses must strategize for a net-zero economy.

Is there anything else you would like future applicants to know about Terra Alpha?

During my time at Terra Alpha, the team frequently underscored the significance of assessing all substantive risks when making an investment decision. Neglecting resource constraints, geological data, and climate data can lead to an incomplete risk assessment in investment decisions. As an equity manager in an ever-evolving climate, incorporating these elements is paramount to not only making the most informed investment decisions for one's clients' returns, but also decisions that align with institutional investor's core values. Terra Alpha's Environmental Productivity framework stands out for its rigor. It seamlessly integrates various scientific disciplines to inform a comprehensive and well-rounded investment decision. The internship program not only developed my skills as a traditional equity research analyst but also equipped me with the expertise to assess public equities in a transitioning global economy.



Abdul Abiru

How did your experience at Terra Alpha influence your understanding of sustainable investing?

My experience at Terra Alpha helped me realize that sustainable investing is not as unstructured as it seems. I feel like when I thought about sustainable investing, I thought mainly about venture capital and nascent climate technology. While these could fall under sustainable investing, there are many established companies that contribute to making the world a more sustainable place. At the end of the day, sustainable investing is just a label, and to really understand what the firm is doing, you have to dig into

their strategy and how they define things.

How would you describe the learning environment and culture at Terra Alpha?

The learning environment at Terra Alpha was awesome. One of Terra Alpha's biggest strengths is its small size which allows members of its team to meet and chat on a regular basis. Learning also took place in different settings and was not always focused on investing. Besides weekly team meetings, I could always ask anyone about anything on my own time. We often ate lunch together and it was a good time to get to know members of the team and have conversations about their personal and professional experiences which made adjusting to living in a new city and a new work environment a lot easier.

[Read Sydney and Abdul's full Intern Profiles here.](#)

Other Updates

- The Terra Alpha team spent two days at the Airlie Center in a rural community on the outskirts of DC for our annual team retreat. The retreat provided us with the opportunity to focus on our purpose of enabling a sustainable planet for society, while reconnecting with nature, sharing ideas and reflecting on 2023, and setting our priorities for 2024.
- Emily Hiltz, Manager of Business Development, has relocated to Cincinnati and will work fully remote.

Resources

- Advisory Board Member David Yeh was a guest on [Catalyst with Shayle Kann's podcast](#) where he discussed FOAK (First of A Kind) financing as one of the biggest climate solutions.
- The [World Resources Institute](#) (WRI) released a helpful article on "7 Things to Know About Carbon Capture, Utilization and Sequestration," found [here](#).
- The [US Sustainable Investment Forum](#) (US SIF) policy team monitors activities at the federal government level that impact the field of sustainable investing. Their 2023 Federal Policy update '2023 in Federal Policy: "Anti-ESG" Flurry Was All Talk and No Walk' can be found [here](#).



About Terra Alpha

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 investing thinking. Our rigorous and proprietary Environmental Productivity (EP) analysis values our planet's natural resources and sits at the center of our investment process. Our unique combination of quantitative and qualitative analysis helps us identify companies with the optimal combination of enduring business models and superior EP; which we believe is the primary driver as we seek to deliver superior long-term investment returns for our investors.

Contact

info@terraalphainvestments.com

