

Market Commentary: Investing at +1.5° C

Adam Bernstein, Impact Analyst Publication: April 30, 2025

Climate, Control, and Capital: Investing for a Resilient World

In the first quarter of 2025, investor attention has been dominated by global politics, macroeconomic uncertainty (tariffs, inflation, employment), and the latest breakthroughs in artificial intelligence. But amid the noise, one critical lens has noticeably dimmed, climate and the broader set of structural investment themes connected to it. We believe this shift in focus is a misstep. Not only because climate is a moral imperative, but also because it remains one of the most investable forces shaping our economy today.

Many view artificial intelligence as the defining growth engine of this decade, and in many ways, it is. But AI cannot scale without the physical infrastructure that supports it. Large Language Models (LLMs) demand massive amounts of clean reliable electricity and cooling. Data centers already consume ~2% of global electricity, a figure projected to triple by 2030, and their water demands are soaring.¹ Microsoft, in partnership with OpenAI, reported a 60% increase in water use since 2020, driven largely by AI infrastructure demands.² These dependencies are not abstract, they are climate-linked. Water systems, grid infrastructure, renewable power, transition metals, and battery storage aren't peripheral, they are foundational.

Investors often assume the highest returns come from first-order innovations like AI itself. But history consistently shows that second-order enablers often outperform. During the internet boom, infrastructure players like Cisco (~4,700%)³ and EMC (~2,400%)⁴ dramatically outpaced dot-com darlings like Pets.com and eToys, which famously went to zero. More recently, as electric vehicles gained traction, lithium producers like Albemarle (~700%)⁵ outperformed automakers. And in the current AI wave, names like Super Micro Computer (~800%),⁶ Vertiv (~400%),⁷ and Cambricon Technologies (~900%),⁸ all second-order infrastructure providers, are beating or matching the returns of AI leaders like Nvidia (~297%).⁹

¹ https://gittermanasset.com/q2-2024-market-outlook-the-addition-economy/

² https://www.statista.com/statistics/1500284/microsoft-water-withdrawals-worldwide/

³ Source: Bloomberg data. Total return performance from 1993-2000.

⁴ Source: Bloomberg data. Total return performance from 1993-2000.

⁵ Source: Bloomberg data. Total return performance from 2010-2022.

⁶ Source: Bloomberg data. Total return performance 2022-2025.

⁷ Source: Bloomberg data. Total return performance 2022-2025.

⁸ Source: Bloomberg data. Total return performance 2022-2025.

⁹ Source: Bloomberg data. Total return performance 2022-2025.

Gitterman Wealth Management, LLC dba Gitterman Asset Management. Services provided by Gitterman Asset Management are provided by Gitterman Wealth Management, LLC. All investment advisory services are offered solely through Gitterman Wealth Management, LLC an independent investment advisory firm registered with the SEC (CRD 153062). Associated persons of Gitterman Wealth Management, LLC are licensed with and offer securities through Vanderbilt Securities, LLC, member FINRA/SIPC, registered with MSRB (CRD 5953). Gitterman Wealth Management, LLC and Vanderbilt Securities, LLC are separate and distinct federally regulated entities. For more information see www.adviserinfo.sec.gov



Climate investments are riding the same dynamic. While attention is fixed on Al's front-end magic, the real opportunity may lie in the enabling layers: renewables, water, metals, and grid tech. These investments aren't moral imperatives or "ESG" boxes to check. They are scalable and essential. And just like the fiber, copper, and semiconductors of past revolutions, climate-linked assets are likely to be among the most durable sources of return this decade.

Where to Focus?

Despite changes in geopolitics and global trade driving a shift in returns from S&P 500 companies (-4.28%),¹⁰ and into European defense (+37.0%),¹¹ commodities (+5.39%),¹² Chinese equities (+5.18%),¹³ and energy (+9.94%),¹⁴ climate oriented-linked assets, like water (+0.01%),¹⁵ net-zero infrastructure (+5.08%),¹⁶ transition metals (+26.7%),¹⁷ and renewable energy (+1.56%)¹⁸ are also out-performing. These aren't long-term "ESG" plays, they are near-term alpha generators fueled by a reordering of production, consumption, and capital markets around resilience, efficiency, and planetary boundaries.

Still, the disconnect between headlines and fundamentals is growing. The Earth has now crossed 1.5°C of warming. The U.S. has exited the Paris Agreement. Europe is wavering on regulatory enforcement. Corporate sustainability goals are being quietly shelved. And investments in low-carbon solutions, once the darlings of growth portfolios, have flatlined. But this is not a one-sided story. While the West retreats, others advance. China's green industrial transition is accelerating. Japan has committed to a trillion-dollar clean energy investment program. The Middle East is deploying renewables at an exponential clip.

It's complicated. Signals are mixed. So where does that leave investors and corporates trying to navigate this new landscape? Where should time, capital, and attention be allocated? And do we need new investment narratives that reflect today's political and economic realities?

A New Investment Narrative: From Market Efficiency to Systemic Resilience

For decades, investors operated under a core assumption: markets allocate capital best when left to their own devices. But that premise, like the post-Cold War consensus it rested on, is unraveling. The world is no longer optimizing for efficiency. It is optimizing for resilience, control,

¹⁰ Morningstar Direct data. Total Return QI 2025 SPY

¹¹ Morningstar Direct data. Total Return QI 2025 EUAD

¹² Morningstar Direct data. Total Return Q1 2025 DBA

¹³ Morningstar Direct data. Total Return Q1 2025 EWH

¹⁴ Morningstar Direct data. Total Return Q1 2025 XLE

¹⁵ Morningstar Direct data. Total Return Q1 2025 WAM Global Water Net Return

¹⁶ Morningstar Direct data. Total Return Q1 2025 KBI Sustainable Infrastructure Net Return

¹⁷ Morningstar Direct data. Total Return Q1 2025 DBP

¹⁸ Morningstar Direct data. Total Return Q1 2025 FAN



ASSET MANAGEMENT

and security. And this shift is not cyclical. It's a paradigm change. We are entering an era of security-driven industrial policy, a world where national interests shape capital flows more than cost curves or consumer demand, and that means investment themes must evolve accordingly. The traditional lenses of globalization, comparative advantages, and free trade are being replaced with geopolitical realignment, domestic capacity-building, and industrial policy activism. From the CHIPS Act to the Inflation Reduction Act in the U.S., from Europe's Green Deal to China's Five-Year Plans, governments are no longer passive referees. They are market participants and, in many sectors, they are the market makers. Where historically, we looked to private equity and venture capital for high returns, today, state-backed investments are now driving the best opportunities.

Thematic Investing: The Rise of Second-Order Resilience

In this reordered landscape, climate-linked infrastructure is no longer a side story. It is the connective tissue between macro forces, AI, energy security, geopolitical risk, and industrial strategy. The world's largest economies are now competing for control over the enablers of technological autonomy and a low-carbon energy system to support it: transition metals, power grids, battery tech, and water systems. And just as the internet created fortunes through websites, routers, and fiber-optic cables, the climate transition will generate fortunes through its various sub-themes.

China as a Case Study in Industrial Strategy

No country better exemplifies the shift from market-driven capitalism to state-led industrial strategy than China. While still the world's largest carbon emitter, China is also the undisputed leader in renewable energy manufacturing. This duality is not a contradiction, it's strategy. Over the last two decades, China has treated clean energy as a matter of national security. Through coordinated state policy, it subsidized solar production, built out upstream supply chains, and scaled domestic demand. The results are staggering: Chinese firms now produce over 80% of the world's solar panels and dominate key clean tech supply chains, from batteries to rare earths.

This isn't market evolution, its industrial policy executed at scale. By aggressively driving down costs, China made green technology cheaper globally while rendering Western competitors unviable. The U.S. and Europe, constrained by market orthodoxy and slower policy responses, saw their clean tech industries hollowed out. Innovation existed, but without the political will or state scaffolding to scale. At the same time, China expanded coal to meet near-term demand but used that window to build the world's largest ultra-high-voltage grid. This infrastructure enables long-distance wind and solar delivery and positions the country for a rapid pivot once energy security is assured.



The contrast is stark. The U.S. is a leader in semiconductors and AI, but is bottlenecked by outdated grid infrastructure and regulatory fragmentation. Europe, squeezed between U.S. subsidies and Chinese state planning, remains dependent on imported energy and raw materials, leaving its industries exposed.

This global asymmetry reveals a deeper truth: climate and technology are no longer just market sectors; they are theaters of strategic competition. And that means investing in climate-linked infrastructure isn't just about long-term growth, it's about understanding where industrial power is concentrating, and why. For forward-looking investors, the opportunity lies not only in breakthrough innovation, but in the second-order systems that enable it: power grids, supply chains, raw materials, and water infrastructure. In this new industrial age, these are the foundations of economic security and the next great sources of alpha. As the world scrambles to adapt, investors are rethinking what resilience looks like in portfolio construction. Today's alpha is being driven less by what's new, and more by what's necessary. And this brings us to one of the most underappreciated, yet vital, asset classes in this new paradigm: water.

Water: The Purest Expression of the Addition Economy

Among the many second-order investment themes gaining relevance, water stands out as one of the most urgent and investable. Scarcity is no longer a future concern, it's a present constraint reshaping capital flows, operating models, and national security priorities. In a world driven by electrification, AI, reindustrialization, and climate volatility, water has become both a limiting factor and a strategic asset.

Demand for water is projected to exceed supply by 40% by 2030.¹⁹ This is not only due to population growth and urbanization, but because the technologies shaping our future, such as semiconductors, data centers, and battery gigafactories, are extremely water-intensive. From Taiwan Semiconductor Manufacturing Company's (TSMC's) multi-billion-dollar investments in water recycling, to Nestlé and McDonald's overhauling agricultural sourcing, water is now mission-critical infrastructure.

And yet, the systems underpinning water access remain outdated, underfunded, and underappreciated by markets. The opportunity lies in modernization: layering smart infrastructure and industrial-scale solutions onto legacy pipes, reservoirs, and treatment systems. It's not a transition play; it's a scale and resilience play.

Unlike many climate-linked sectors, water is politically uncontroversial. There is no "anti-water" constituency. Whether driven by PFAS regulations, rising insurance costs, or basic survival,

¹⁹ https://sustainablemarketstrategies.com/en/publication/liquid-gold-water-utilities-as-a-safe-haven-for-sustainability-investors/

Gitterman Wealth Management, LLC dba Gitterman Asset Management. Services provided by Gitterman Asset Management are provided by Gitterman Wealth Management, LLC. All investment advisory services are offered solely through Gitterman Wealth Management, LLC an independent investment advisory firm registered with the SEC (CRD 153062). Associated persons of Gitterman Wealth Management, LLC are licensed with and offer securities through Vanderbilt Securities, LLC, member FINRA/SIPC, registered with MSRB (CRD 5953). Gitterman Wealth Management, LLC and Vanderbilt Securities, LLC are separate and distinct federally regulated entities. For more information <u>see www.adviserinfo.sec.gov</u>



governments and corporations are being forced to act, and investors are taking notice. Waterfocused funds have grown 34% since 2020, while utilities with regulated pricing power and stable dividends are seeing increased demand in today's stagflationary environment.²⁰

Why Water Fits the Framework

Water hits every theme outlined in this paper:

- **Climate adaptation**: From desalination and purification to flood prevention and smart metering, water technologies are critical tools for adapting to a changing climate.
- **Security-driven industrial policy**: As countries reindustrialize, water is central to production resilience, particularly in chipmaking, agriculture, and textiles.
- Infrastructure scale and durability: U.S. water utilities offer the defensive cash flows and cost-pass-through capabilities that make them ideal in today's rate and inflation environment.
- **Second-order enablers**: Just as data centers need energy, they also need water. The fastest-growing AI workloads require massive cooling systems, making water supply a fundamental constraint on digital scale.

The Investment Opportunity²¹

The water investment universe is broad and growing. According to Sustainable Market Strategies, U.S. water utilities like American Water Works and SJW Group offer both regulated pricing power and strong M&A pipelines. The U.S. water infrastructure market is expected to reach \$109 billion by 2028, and the desalination market alone could grow to \$50 billion by 2032. Meanwhile, global AUM in water-themed funds has grown over 34% since 2020, totaling nearly \$94 billion.

Water utilities also shine in today's economic environment. They offer stable, dividend-yielding cash flows and the ability to recover infrastructure investments through regulated rate increases. In a stagflationary world, this makes them uniquely positioned to outperform more cyclical sectors. And as detailed in Bloomberg's "Liquid Gold" report, their fragmented market structure presents significant upside via consolidation and regional diversification, especially in the U.S., where M&A activity remains strong.

²⁰ Bloomberg Intelligence Q1 2025 Water Webinar.

²¹ Bloomberg Intelligence Q1 2025 Water Webinar.

Gitterman Wealth Management, LLC dba Gitterman Asset Management. Services provided by Gitterman Asset Management are provided by Gitterman Wealth Management, LLC. All investment advisory services are offered solely through Gitterman Wealth Management, LLC an independent investment advisory firm registered with the SEC (CRD 153062). Associated persons of Gitterman Wealth Management, LLC are licensed with and offer securities through Vanderbilt Securities, LLC, member FINRA/SIPC, registered with MSRB (CRD 5953). Gitterman Wealth Management, LLC and Vanderbilt Securities, LLC are separate and distinct federally regulated entities. For more information <u>see www.adviserinfo.sec.gov</u>



The New Foundations of Alpha

This is a pivotal moment for investors. For the last two decades, growth was synonymous with digital scale, platform dominance, and financial engineering. Today, the center of gravity is shifting to physical infrastructure, security-driven industrial policy, and to the real-world enablers of resilience.

Themes like water, transition metals, power grids, and distributed storage aren't simply "ESG" checkboxes, they are the backbone of an emerging economic order. They reflect a future where geopolitical stability, supply chain control, and planetary constraints will shape value creation just as much as consumer trends or quarterly earnings.

The winners of this new era won't be defined solely by innovation at the surface, but by control of what sits underneath: the systems that scale, connect, and endure. For investors willing to look past short-term noise and into structural demand, the opportunities are not just intact, they're accelerating.



Disclosures

This document does not constitute advice or a recommendation or offer to sell or a solicitation to deal in any security or financial product. It is provided for information purposes only and on the understanding that the recipient has sufficient knowledge and experience to be able to understand and make their own evaluation of the proposals and services described herein, any risks associated therewith and any related legal, tax, accounting or other material considerations. To the extent that the reader has any questions regarding the applicability of any specific issue discussed above to their specific portfolio or situation, prospective investors are encouraged to contact Gitterman Wealth Management or consult with the professional advisor of their choosing.

Certain information contained herein has been obtained from third party sources and such information has not been independently verified by Gitterman Wealth Management. No representation, warranty, or undertaking, expressed or implied, is given to the accuracy or completeness of such information by Gitterman Wealth Management or any other person. While such sources are believed to be reliable, Gitterman Wealth Management does not assume any responsibility for the accuracy or completeness of such information. Gitterman Wealth Management does not undertake any obligation to update the information contained herein as of any future date.

Except where otherwise indicated, the information contained in this presentation is based on matters as they exist as of the date of preparation of such material and not as of the date of distribution or any future date. Recipients should not rely on this material in making any future investment decision.

This presentation is confidential, is intended only for the person to whom it has been directly provided and under no circumstances may a copy be shown, copied, transmitted or otherwise be given to any person other than the authorized recipient without the prior written consent of Gitterman Wealth Management.

Certain information contained herein constitutes "forward-looking statements," which can be identified by the use of forward-looking terminology such as "may," "will," "should," "expect," "anticipate," "project," "estimate," "intend," "continue," or "believe," or the negatives thereof or other variations thereon or comparable terminology. Due to various risks and uncertainties, actual events, results or actual performance may differ materially from those reflected or contemplated in such forward-looking statements. Nothing contained herein may be relied upon as a guarantee, promise, assurance or a representation as to the future.