



Thinking Outside the Box

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by Lucas White and Jeremy Grantham
of GMO

KEY POINTS

- We believe the secular growth tailwinds in the climate change sector will provide investors with strong investment opportunities for decades to come.
- In our opinion, a well-designed climate change strategy can provide investors with a variety of benefits, including diversification, protection from climate risk, inflation protection, and the ability to invest in growth-oriented companies at a discount.
- For those considering fossil fuel divestment, clean energy solutions provide indirect exposure to fossil fuel prices.
- A climate change strategy can play an important role in a global equity program, real asset program, ESG portfolio, or as climate risk insurance.

Introduction

Hurricanes, typhoons, droughts, wildfires, and other extreme weather events are causing record damage. Increasingly, climate change is impacting the economy and our daily lives and has come into focus as an existential threat to the world as we know it.¹ We are rapidly approaching a time when the world will be forced to act aggressively in an attempt to overcome decades of inaction. As return-oriented investors, we see this effort providing the backdrop for decades of secular growth in the climate change sector, along with the potential for strong returns.²

Beyond strong returns, we believe a climate change strategy (for our purposes, a strategy investing in the sector) may offer other significant benefits as well. We expect these to include diversification, protection from climate risk, inflation protection, and the potential to buy growth-oriented companies at a discount. However, excitement about these desirable characteristics can be tempered by uncertainty regarding how to position a climate change strategy in the context of a broader portfolio. In this paper, we will explore these benefits in more detail and also discuss how such a strategy may fit into an investment portfolio.

Expected Benefits of a Climate Change Strategy

In our 2017 paper, we made the case that the climate change sector will experience decades of secular growth. The global energy infrastructure is incredibly vast and complex and has been built up over more than 150 years. Transitioning to clean energy will take a tremendous amount of investment and time. Many trillions of dollars will be needed to decarbonize the economy and overhaul our energy grids. Experts project investments in renewables alone to approach \$2 trillion per year by 2050.³

We also made the case that the climate change sector is likely to be relatively inefficient with opportunities to add significant value. Given the secular growth tailwinds and the inefficiencies to be exploited, we believe that investors who do a good job of identifying the winners in the fight against climate change will be handsomely rewarded. In addition to strong returns, we have other expectations for a climate change strategy that are worth considering, as they will better allow us to think about how such a strategy might fit into a broader portfolio.

DIVERSIFICATION

We would expect the drivers of return for a climate change strategy to be quite different from those of the broad equity market. Broad economic profitability and GDP growth will not drive a climate change strategy; the clean energy transition and efforts to decarbonize will. Thus, we expect to see periods where a climate change strategy performs well in a weak market and vice versa.

If we told you we had identified an asset class that provided equity-like returns, perhaps better, in a manner quite different from the broad equity market, you would jump at the opportunity. After all, hedge fund investors typically accept low returns, high fees, and illiquidity in the quest for uncorrelated returns. We believe climate change investors will be able to

enjoy the benefits of diversification without making such sacrifices.

PROTECTION FROM CLIMATE RISK

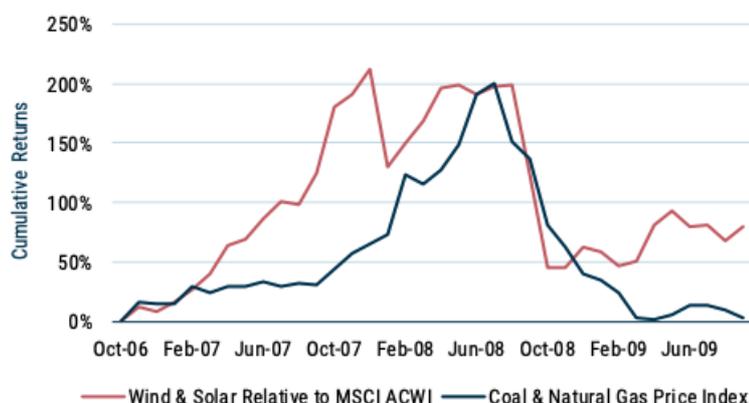
Diversification, in and of itself, is compelling. Diversification that addresses a major risk to the broad economy is even more so. The Trump Administration's Fourth National Climate Assessment concluded that climate change "is expected to cause substantial... damage to the U.S. economy throughout this century." If climate change is a drag on the economy, companies focused on mitigation will see their products and services in high demand. Furthermore, as the world moves to decarbonize, regulation and carbon taxes loom as a risk for virtually all sectors. Green energy industries, however, will uniquely benefit from increased government intervention, not to mention from the ever-improving technology.

INDIRECT EXPOSURE TO FOSSIL FUEL PRICES & INFLATION PROTECTION

Many investors have divested or are considering divestment from fossil fuels. Complicating these decisions is the fact that energy companies have outperformed the broad equity market and provided inflation protection and diversification (e.g., in the 1970s, oil & gas companies were up well over 100% in real terms with the S&P 500 down, a scenario that played out again from 2000 to 2010). Outperformance, diversification, and inflation protection are pretty big things to give up.

Fortunately, by investing in the clean energy solutions that compete with fossil fuels, one can maintain that exposure to traditional energy prices. When fossil fuel prices rise, clean energy solutions become more competitive, and market forces accelerate the transition to them. Of course, the same is true on the downside. This connection between fossil fuel prices and clean energy returns could be seen in 2008 (see Exhibit 1) when oil spiked to \$150 per barrel and coal and natural gas prices also soared. Solar and wind companies performed extremely well leading up to the peak in fossil fuel prices and then collapsed as fossil fuel prices came back down to earth. Another example of the connection between clean energy solutions and fossil fuel prices surfaced in 2015 following a dramatic drop in oil prices. Electric vehicle sales in the U.S., otherwise in the midst of rapid growth, actually fell, as the economics surrounding gasoline improved.

EXHIBIT 1: CLEAN ENERGY SOLUTIONS PROVIDE INDIRECT EXPOSURE TO FOSSIL FUEL PRICES



Source: MSCI, Global Financial Data, GMO

Just as our traditional energy infrastructure relied on fossil fuels, clean energy relies on materials. Transitioning to clean energy simply moves the burden from fossil fuels to copper, lithium, nickel, cobalt, and other materials. Because of the indirect exposure to fossil fuel prices and direct exposure to clean energy materials, agriculture, water, and infrastructure, we believe the climate change sector, as we've defined it, will perform well in certain inflationary environments.

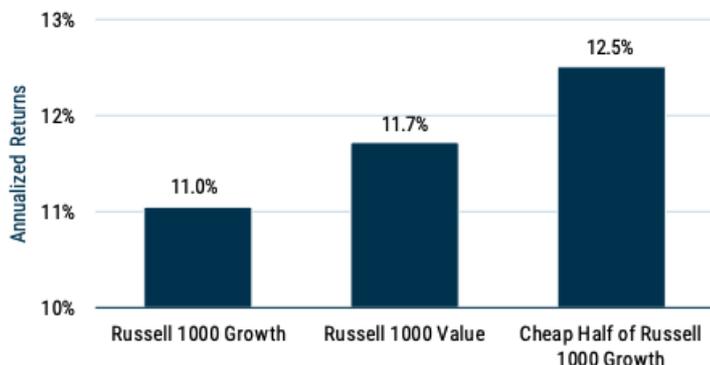
GROWTH AT A DISCOUNT

To this point in the paper, we've focused on the features of generic climate change strategies (to the extent that there are any), but our strategy, more specifically, is to attempt to identify companies that trade at a discount but still benefit from the secular growth tailwinds we've been discussing. Typically, value strategies undergrow the market; after all, the companies are cheap for a reason. What a value investor hopes for is multiple expansion that more than offsets the undergrowth. When investing in a high growth sector of the market like climate change, however, you may be able to buy companies at a discount that are able to grow with, or potentially outgrow, the market. Since inception in April 2017, the earnings growth of the GMO Climate Change Strategy has been higher than the MSCI All Country World Index (ACWI) while consistently trading at a 15-20% discount to ACWI. If we can continue to own a portfolio of companies trading at a discount without sacrificing growth, we believe we can generate strong performance over the long term.

While we're on the topic of a value orientation to a growth universe, we might as well address a widely held misconception. Many investors believe that it's somewhat paradoxical to buy "cheap" stocks in a growth universe. After all, you'll miss out on the Amazons, Netfaxes, and Teslas of the world. However, you'll also miss a lot of high flying companies that end up

destroying a substantial amount of value for their investors. In fact, it turns out that the cheap half of the Russell 1000 Growth Index has outperformed the Russell 1000 Value Index for 40 years since inception in 1978 (see Exhibit 2). Just to rub it in, the cheap half of the Russell 1000 Growth Index outperformed the Value Index by more than Value outperformed Growth!

EXHIBIT 2: VALUE WORKS WELL IN GROWTH UNIVERSES TOO!



Data is from 1978-2018 | Source: Russell, GMO

Portfolio Fit

The prospects for strong returns, diversification, and inflation protection are exciting, but how does a climate change strategy fit into a broader portfolio? After all, very few investors have a climate change bucket! There are a few different ways of framing this sort of allocation. Our favorite framing is to position as a global equity alpha play with diversification benefits. We believe there's money to be made in this sector. What more do you need?

POTENTIAL PORTFOLIO FITS

GLOBAL EQUITY ALPHA	REAL ASSETS
ESG, IMPACT, OR SUSTAINABILITY	INSURANCE AGAINST CLIMATE RISK

Outside of global equities, the most natural home for a climate change strategy for many portfolios may be in the real assets allocation. There's also a growing trend toward making specific allocations to ESG, impact, and sustainable investments.⁴ Clearly, a climate change strategy would be a candidate for these types of allocations or for investors who favor thematic investing more generally.

Perhaps the most interesting framing, however, may be to think of this type of strategy as insurance. As already discussed, the experts expect climate change to have a major impact on the economy. Even with the uncertainty surrounding such projections, one must acknowledge that there's a significant risk that climate change will have a considerable, unpleasant economic impact. It seems reasonable to think that investors would want to protect themselves from this risk, and investing in a climate change strategy would be a good start.

Conclusions

Allocating to a climate change strategy is not standard operating procedure for investors, but for those willing to think outside the box, we expect the rewards to be significant. Not only should investors be intrigued by the potential for returns, diversification, and inflation protection, but a well-designed climate change strategy should also help protect a portfolio from a major risk to the economy. There are a variety of ways that such a strategy could fit into a portfolio. It's up to investors to figure out how a climate change strategy fits into their particular investment process, but we expect it will be worth the effort.

¹ Jeremy Grantham, "The Race of Our Lives Revisited" August 2018, the Intergovernmental Panel on Climate Change's October 2018 Report, the Fourth National Climate Assessment, and "The Global Risks Report 2019" from the World Economic Forum.

² A couple years ago, we wrote about the prospects for strong returns in the climate change sector (Lucas White and Jeremy Grantham, "The Good Thing About Climate Change: Opportunities", August 2017). The climate change sector, as we define it, is comprised of companies focused on mitigating greenhouse gas emissions or helping the world adapt to the consequences of climate change. Examples of relevant industries include: solar, wind, batteries & storage, electric grid, energy efficiency, agriculture, and water. In addition, we consider some less obvious propositions - for instance, fish farming and energy-efficient air conditioning.

³ DNV GL, a leading Norwegian energy consulting firm.

⁴ In making impact investments in particular, many large asset owners have decided to focus on private allocations. A public equity strategy can be a liquid, low fee complement with other attractive features as well. For more on the benefits of public vs. private equity approaches to the climate change sector, see “The Good Thing About Climate Change: Opportunities”, August 2017.

Lucas White

Mr. White is the portfolio manager for the Climate Change and Resources Strategies. He is a member of GMO’s Focused Equity team and a partner of the firm. Previously at GMO, he was engaged in portfolio management for the Global Equity team, including responsibilities for the Quality, Tactical Opportunities, and U.S. Growth Strategies. Prior to joining GMO in 2006, he worked at Standish Mellon Asset Management and MFS. Mr. White earned his B.A. in Economics and Psychology from Duke University. He is a CFA charterholder.

Jeremy Grantham

Mr. Grantham co-founded GMO in 1977 and is a member of GMO’s Asset Allocation team, serving as the firm’s chief investment strategist. He is a member of the GMO Board of Directors and has also served on the investment boards of several non-profit organizations. Prior to GMO’s founding, Mr. Grantham was co-founder of Batterymarch Financial Management in 1969 where he recommended commercial indexing in 1971, one of several claims to being first. He began his investment career as an economist with Royal Dutch Shell. Mr. Grantham earned his undergraduate degree from the University of Sheffield (U.K.) and an M.B.A. from Harvard Business School. He is a member of the Academy of Arts and Sciences, holds a CBE from the UK and is a recipient of the Carnegie Medal for Philanthropy.

Disclaimer

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