



Are Portfolio Decarbonization and Climate Solutions Investing Money Losers Over the Past Year?

Despite strong energy sector performance, best-in-industry decarbonization and climate solutions investments have exhibited strong returns

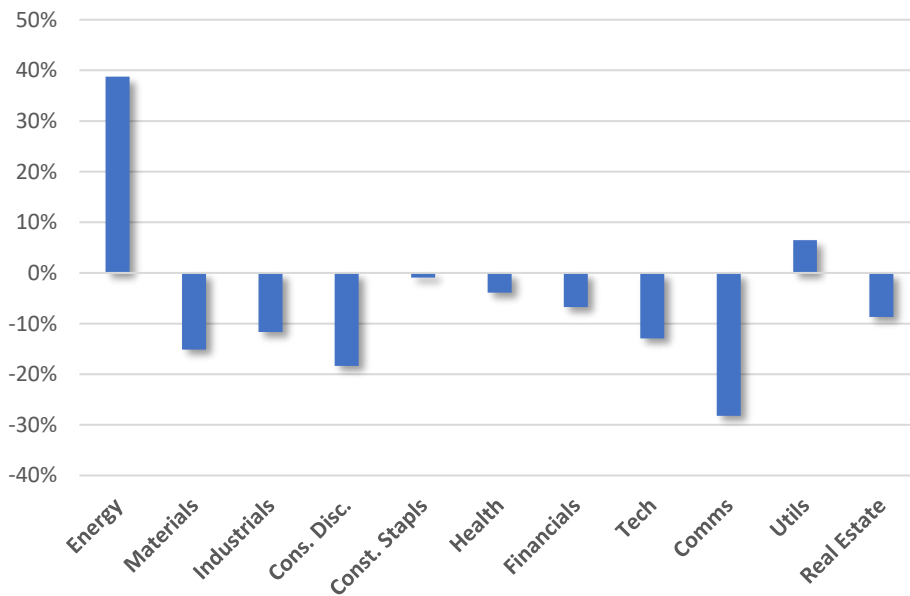
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The last 12 months have seen an extraordinary increase in oil and gas prices, fueled by the war between Russia and Ukraine, and a demand-supply imbalance in these markets. Integrated oil and gas majors, such as Exxon Mobil and Chevron have seen their profits skyrocket, while the energy sector is one of the few sectors that is up, even as the broader MSCI ACWI and S&P 500 are down by over 9% and 6% respectively. Tech-heavy Nasdaq 100 has dropped even further, by more than 10% over the past year.

ACWI Sectors: Trailing 12m Returns

Source: State Street Associates, Refinitiv, S&P TruCost. July 30 2021-July 29 2022



Against this backdrop, many investors who have constructed decarbonized portfolios in order to seek lower exposure to carbon emissions could find themselves underperforming. This is because the combustion of fossil fuels, coal, oil and gas, are the primary contributors to global greenhouse gas emissions, and therefore climate change, and as a result many investors decarbonize portfolios by excluding the energy sector entirely.

However, this is only part of the story. In our previous research, "[Decarbonization Factors](#)," we have shown that decarbonized portfolios could take the form of market-wide ("**Decarbonization (Company)**"), sector-specific ("**Decarbonization (Companies-in-Sector)**"), or industry-specific ("**Decarbonization (Companies-in-Industry)**") optimization. To put it simply, one could lower exposure to carbon emissions by reducing exposure to the most carbon intensive¹ companies independent of the sector they are part of, within each sector, or within each industry. In the second case, the investor still holds energy positions, but those are the most carbon efficient energy companies. In the third case, the investor still holds energy positions and within the energy sector holds the most carbon efficient companies within each industry of the sector, such as oil and gas refineries, integrated oil and gas majors etc. The same applies for other carbon intensive industries, such as mining, chemicals, airlines, cement, or steel.

Why might an investor be better off by holding positions in more carbon efficient companies within each sector or industry? Because although higher oil and gas prices are revenues for many energy companies, at the same time they also represent a direct input into production processes not only for them but for the vast majority of the economy. Therefore, companies that are more carbon efficient could be more cost competitive in an inflationary energy price environment.

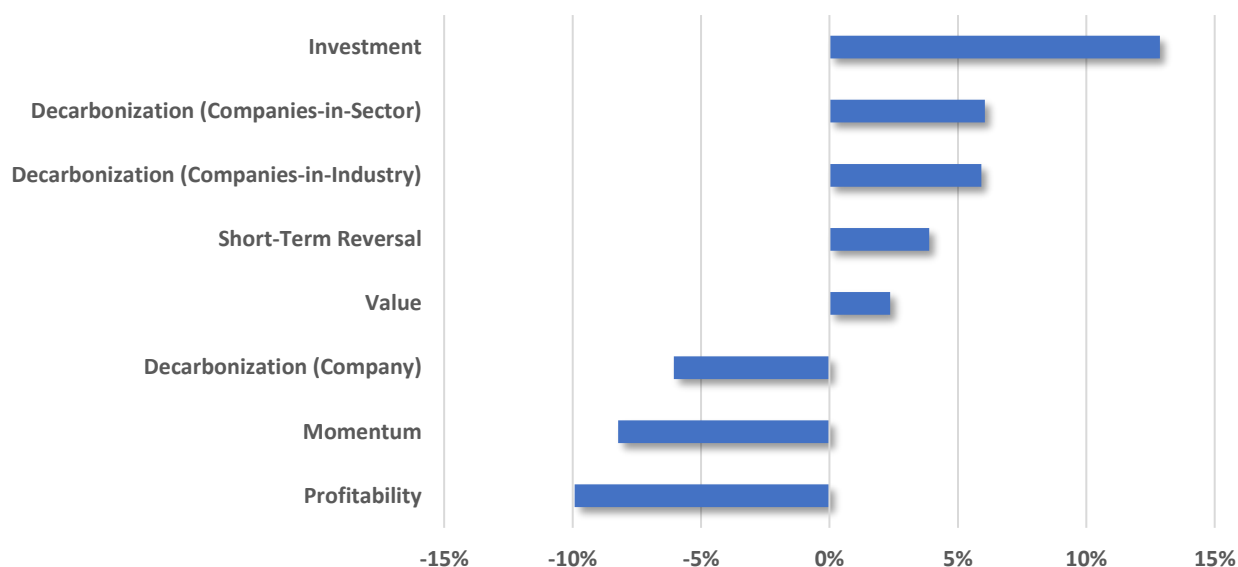
The figure below shows 12-month trailing performance of decarbonization factors (available at State Street's [Insights](#) portal) and for comparative purposes the performance of other widely used factors in US markets. Profitability and momentum have performed very poorly, losing 10% and 8% respectively, even lagging the performance of a market-wide decarbonization factor (down ~6%). In contrast, within-sector or industry decarbonization factors are both *up* by ~6%. The 12% spread between decarbonization factors is a stark example of how much difference, the way that an investor might implement decarbonization, might make in the realized returns of the portfolio. For a comparative view, the within sector and industry decarbonization factors have outpaced both the value and short-term reversal factors, up by ~ 2 and 3%, and only lag the investment factor, which has delivered a blowout performance of ~12%. Similar results can be found in the European markets, where

¹ We define carbon intensity as scope 1+scope 2 carbon emissions scaled by revenue.

a market-wide decarbonization factor is down ~3% while the within-sector factor is up 2% and the within-industry factor is up ~4%. Again, we observe a very meaningful spread of 6-7% across decarbonization factors.

US Equity Factor Trailing 12m Returns

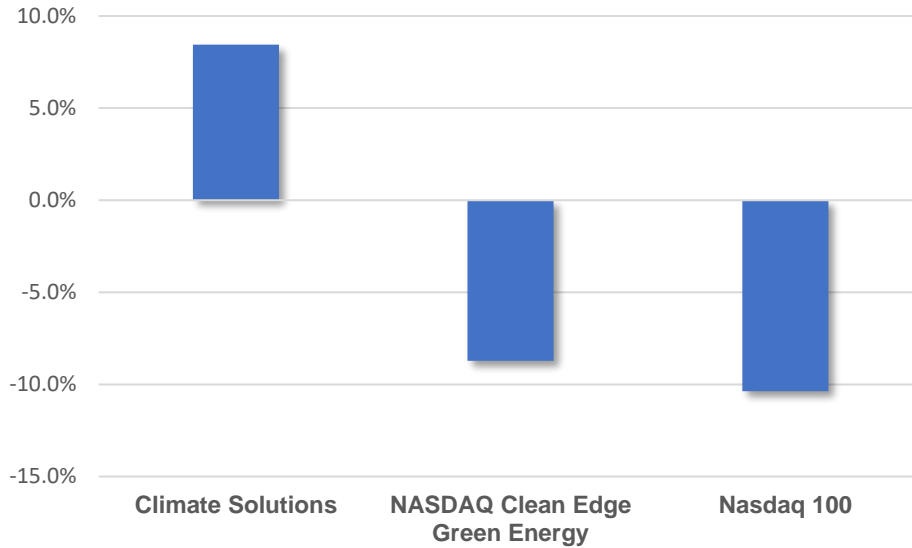
Source: State Street Associates, Refinitiv, S&P TruCost. July 30 2021-July 29 2022



Finally, we note that for long-term investors, short-term performance dynamics might be less important. Rather, understanding the long-term trajectory of economies and the opportunity set that is being created by innovation is far more important. Previously, in our “[Climate Solutions Investments](#)” paper we mapped the opportunity set in public markets to invest in companies that provide solutions to other companies or consumers to decarbonize through channels such as: renewable energy, battery storage, electric vehicles, low carbon food and agriculture, and industrial materials. Trillions will need to be invested in climate solutions over the next few decades for the world to decarbonize and avert the most catastrophic consequences of climate change, implying huge economic potential for these companies. Regulatory actions, such as the Inflation Reduction Act of 2022, are likely to also create tailwinds for such climate solutions businesses. We documented that this climate solutions portfolio is exposed to growth and innovative companies. Given the poor stock performance of growth and innovative companies in the last few months it is worth revisiting the performance of this portfolio. For comparative purposes, we show the performance of the growth oriented Nasdaq 100 and the Nasdaq clean energy index, a pure-play climate solutions energy index, over the past year. We find the climate solutions portfolio has earned over an 8% return over this challenging period, while both the NASDAQ 100 and NASDAQ clean energy portfolios have experienced losses of over 10% and 8% respectively.

Climate Solutions: Comparative Returns

Source: State Street Associates, Refinitiv. July 30 2021-July 29 2022



We conclude that, while the energy sector has had a banner year and any strategy that entirely avoided the sector would have struggled, this does not mean that decarbonization as an investment concept was doomed to failure, even in a fossil-fuel friendly year. Targeted decarbonization and investing in forward-looking carbon solutions were both strategies that performed well.

References:

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