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What Climate Change Means for Investors

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By Thomas H. Stoner Jr. and David Schimel   Oct. 8, 2016 1:05 a.m. ET

Climate change may seem too gradual to be an urgent investment factor. Scientists analyze the impact of a warming planet over centuries. Such a long-term view typically resides outside of most investment outlooks and political discussions. But factors related to climate change—regulation, municipal efforts at adaptation to sea-level rise, and subsidies for renewables, to name a few—are already creating winners and losers.

Examples of potential beneficiaries could be infrastructure companies and renewable-energy companies, while losers could include certain utilities and nuclear-power companies with coastal energy assets.

Oil companies carry risks as governments seek to de-emphasize fossil fuels, as well as legal exposure related to their disclosures of climate-change risks. Some utilities stocks are already under pressure from regulation that would limit the amount of carbon emissions from electricity production.

Four factors underpin the need for investors to adjust allocations today: rising sea levels, more-severe weather, increasing regulations, and legal challenges to corporations.

In the coming years, global sea level will rise; the important question is, “How much?” Flooding and the expense of protecting property will create its own direct investment risks and opportunities, as well as create indirect effects, such as a global consensus among regulators that some of the fossil fuels that underpin the valuation of energy companies must stay in the ground.

INVESTORS CAN EXPECT a global sea-level rise of at least five inches by 2030, since much of the emissions and warming causing that projected rise has already occurred. Beyond 2050, global sea rise forecasts become more uncertain, dependent on the degree to which we curb emissions in the coming years. The higher the emissions, the greater the sea-level rise in the second half of the century.

While a vertical sea-level rise of five inches may not seem like much, it can increase the frequency of flooding and tidal surges that devastate coastal regions. Scientists increasingly view this estimate as being conservative, so investors should keep open minds about rates and sizes.

Estimates of the cost of rising seas are staggering, ranging from $2 trillion to $11 trillion annually by 2100. Without adaptation, we should expect that flooding will cause annual losses of 0.3% to 9.3% of global economic output by the end of this century.

According to the report *Coastal Flood Damage and Adaptation Costs Under 21st Century Sea-Level Rise,* published by the U.S. National Academy of Sciences, U.S. governments (not just federal, but states and municipalities) are already carrying out major infrastructure projects to avoid these losses. The report forecasts annual spending on dikes of $12 billion by 2100.

Residents of coastal areas will see their homes in increasing peril. Cottage industries have emerged to construct elevated housing that is mold resistant and can be powered off the grid.

GOVERNMENT SUBSIDIES are already in place to blunt the impact on coastal populations, although it's unclear if those subsidies can persist or can continue to achieve their intended outcome, as insurance underwriters' actuarial math shifts.

Municipal bond investors will start to assess the viability, or potential futility, of projects in such places as southern Florida, where seawater-pumping infrastructure aims to hold back the ocean. Japan's nuclear accident at Fukushima underscores what is perhaps the most extreme scenario for operators of coastal nuclear-power plants.

Climate change will also increase the number and intensity of rainstorms and droughts, and the risks associated with such events will continue rising. According to Swiss Re,there were 198 natural catastrophes in 2015, the highest ever recorded. Producers of early-warning-systems technology will benefit.

In agriculture and fisheries there will be winners and losers. Increased carbon dioxide helps some crops, but droughts and heat waves damage crop yields. Marine species may shift north as waters warm, and they may be exposed to, or carry, new diseases.

At the Paris climate meeting in late 2015, nearly 200 countries committed to targeting net zero emissions in the second half of the century. Countries promised to manage carbon emissions but offered few specifics. Still, we forecast that under this agreement renewable energy sources such as solar and wind will emerge as clear winners by the mid-2020s. Surprisingly, coal may remain competitive in niche commercial markets if carbon capture and storage is employed.

IN U.S. MARKETS, the fate of stock performance across energy sectors hangs in the balance of the U.S. presidential election. Donald Trump has called climate change a "hoax" and has said, "We are going to cancel the Paris climate agreement," while Hillary Clinton has given climate change a central place in her platform.

Under a Clinton presidency, investors should consider discounting energy assets to reflect exposure to climate regulation. Conventional energy has already taken a hit by political—and even geopolitical—issues such as fossil-fuel divestiture campaigns. That pressure will probably only increase as environmental, social, and governance investing continues to gain adherents. There is also a growing likelihood of actions related to disclosure of risks, such as the climate-change coverup investigation into ExxonMobil.

At Entelligent, we have found a clear trend of superior performance for those companies actively investing in climate-change adaptation and mitigation. It's clear that investors should consider adjusting portfolios to account for these changing realities.

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