

Opinion: Investors must adjust their portfolios now for a changing climate

By [Thomas Stoner Jr.](#) and [David Schimel](#)

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Two critical factors to weigh now are rising sea levels and increasing regulations

Constellation Brands was mistakenly included among the companies with energy assets. The article has now been corrected.



Global sea levels could rise at least 5.5 inches by 2030.

Scientists discussing climate change often talk about the impact of a warming planet over the next 100 years. For investors, however, winners and losers are already emerging as a result of “sea changes,” including actual rising sea levels and uncertain, shifting regulations.

Across the country, discourse within the boardroom over climate change is rapidly accelerating from how to mitigate its effects to adapting to its consequences, from rising sea levels to more extreme weather.

Investors — climate change skeptics included — would be smart to look at their portfolios through the lens of these changes.

Even a diversified portfolio is at risk in ways that are only now becoming apparent. For instance, the utilities sector has traditionally been used as a stabilizer for a portfolio in down markets, given utility stocks’ low correlation with economic activity. But the latest U.S. Environmental Protection Agency rules moving through the courts could disrupt the classic utility model, bringing in competitive forces and introducing new technologies.

For an investor whose equity portfolio tracks the S&P 500 [SPX](#), [+0.43%](#) some 10% is invested in the utilities and energy sectors combined — both segments directly exposed to regulation tied to climate change.

In addition to these direct effects, there are generalized macroeconomic effects from droughts and wildfires, and effects on other sectors such as agriculture and reinsurance to consider. Even municipal bonds in coastal regions will be tied to climate change adaptation.

Two critical factors that underpin the need for investors to adjust allocations today are rising sea levels and increasing regulations.

Rising global sea levels

In the coming years, global sea levels will rise noticeably. Flooding and the expense of protecting property will spur tightening global climate-change regulations, and could eventually foment global consensus among regulators that some of the fossil fuels that underpin the valuation of energy companies must stay in the ground.

According to our analysis, investors can expect a global sea-level rise of at least 14 centimeters (5.5 inches) by 2030, since much of the emissions and warming causing that projected rise has already occurred.

Beyond 2050, global sea-rise forecasts become uncertain because we don’t know how much future emissions will be curbed. The higher the emissions, the greater the sea-level rise.

While a vertical sea-level rise of 14 cm may not seem overwhelming, coastal impact can be devastating as a result of flooding and tidal surges. Scientists increasingly view this estimate as being conservative, so investors should keep in mind this number could grow as scientific findings about melting polar ice are solidified.

Estimates of the cost of rising seas are staggering, ranging from \$2 trillion to \$11 trillion annually by 2100. According to the report "[Coastal Flood Damage and Adaptation Costs under 21st Century Sea-level Rise](#)" published by the Proceedings of the National Academy of Sciences of the United States of America, flooding by the end of this century will cause annual losses of 0.3% to 9.3% of global economic output, without adaptation. Governments (federal, state and municipal) will choose adaptation to avoid those losses. For example, the report forecasts annual spending on dikes of \$12 billion to 71 billion by 2100.

A rise in sea level will benefit infrastructure service companies. Potential winners among infrastructure companies could include such firms as Alcoa Inc. [AA, -2.34%](#) Emerson Electric Co. [EMR, +0.14%](#) Fluor Corp. [FLR, +0.58%](#) and Jacobs Engineering Group Inc. [JEC, +0.61%](#)

Municipal bond investors will need 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.

In addition to major infrastructure projects, entire cottage industries have emerged in coastal regions to construct elevated housing that is mold-resistant and can be powered off the grid.

Rising sea-level forecasts also suggest coastal oil refineries and nuclear power plants could be at risk when adaptation costs exceed the benefits of continued operation. Potential losers with significant coastal exposure to energy assets could include such firms as Entergy Corp. [ETR, -0.56%](#) Dominion Resources Inc. [D, -0.57%](#) Exelon Corp. [EXC, -1.22%](#) and Public Service Enterprise Group Inc. [PEG, +0.19%](#)

Changing regulations

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 renewable energy sources such as solar and wind will emerge as clear winners by the mid-2020s. And, surprisingly, coal could remain competitive in niche commercial markets if carbon capture and storage is employed.

Oil companies carry risks as governments seek to de-emphasize fossil fuels as well as legal exposures related to their disclosures of climate change risks, as evidenced by the [climate-change coverup investigation into Exxon Mobil Corp. XOM, +1.74%](#)

In the utility sector, clear winners and losers are emerging. Already, some utilities are positioned better than others if President Obama's Clean Power Plan stands up to legal challenges and is eventually supported by the next White House.

Consequentially, investors should consider discounting energy assets to reflect exposure to climate risk and regulation and explore alternative investments that might thrive under new regulations. Conventional energy has already taken a hit by political – and even geopolitical – issues such as fossil fuel divestiture campaigns. That pressure will likely only increase.

Smart investors will adjust portfolios now to account for these changing realities of the coming years.

Thomas H. Stoner Jr., CEO of Entelligent, a company that tracks alternative energy markets, and the author of "Small Change, Big Gains: Reactions of an Energy Entrepreneur." David Schimel is Chairman of Entelligent and Senior Research Scientist at Jet Propulsion Lab, NASA. He is also a recipient of the Nobel Peace Prize for his work on the Intergovernmental Panel on Climate Change Report.