

A large iceberg floating in dark water. The top of the iceberg is white with some texture, and a small piece is breaking off. The interior of the iceberg, visible through a large opening, is a vibrant teal color. The background is a solid dark color.

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Urgent Consideration of Extreme Climate Scenarios for Institutional Investors

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The Earth is experiencing a more rapid warming trend than previously anticipated, a signal emphasized by reputable climate scientists. From a risk management perspective, institutional investors cannot afford to dismiss the implications of this accelerated climate change. Underestimating climate risks inevitably leads to a corresponding underestimation of risks to investment portfolios.

Experts



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The Situation in the Netherlands

Projections by climatologists and scientific institutions not only indicate an alarming global temperature rise but also highlight the considerable and potentially disastrous consequences even in the most optimistic scenarios. The latest warning, presented in the [Emissions Gap Report](#) by the United Nations on November 20, forecasts a doubling of the agreed-upon warming limit set in the 2015 Paris Agreement. This report follows numerous similar publications, including the KNMI's release of [four new climate scenarios](#) tailored to the Dutch context. These scenarios foresee rising temperatures and sea levels due to fossil fuel emissions, accompanied by drier summers and wetter winters, with an increased frequency and duration of heatwaves.

Unprecedented Acceleration of Global Warming

In early November, climate scientist James Hansen published a [study](#) in the Oxford Open Climate Change journal, predicting a breach of the 1.5-degree warming limit before 2030. Hansen's research team suggests that Earth's climate sensitivity is greater than previously thought, influenced by a dual setback: not only do CO2 emissions contribute more to warming than estimated, but measures against air pollution decrease the number of aerosols in the air, diminishing their cooling effect. Additionally, a group of fifty climate scientists, led by Piers Foster of the University of Leeds, concluded that Earth's warming is accelerating at an unprecedented rate, with a temperature increase of 0.2 degrees per decade. Greenhouse gas emissions are at an all-time high and continue to rise each year, according to this group closely associated with the IPCC. These scientists consider the upcoming years critical for limiting global warming.

Risk Underestimation Looms

A continuous stream of scientific publications highlights the underestimation of climate risks. A [report](#) from the Carbon Tracker Initiative, led by economist Steve Keen, concluded that climate change could lead to a profound wealth correction or a Minsky moment. Meanwhile, [an article](#) in the prestigious PNAS, the official journal of the U.S. National Academy of Sciences, asserts that Earth is heading towards a warming between 2.1 and 3.9 degrees by 2100, categorizing climate damage under the domain of 'significant uncertainty,' urging caution and vigilance.



Portfolio Risks and Opportunities

While not all climate scientists predict doom and gloom for the coming decades, the diversity of opinions inherent in scientific debates is apparent. The Inevitable Policy Response (IPR), a reputable consortium established by Principles for Responsible Investment, published a [study update](#) in September anticipating a temperature rise but likely (90% probability) staying below 2 degrees. IPR aims to prepare institutional investors for the risks and opportunities associated with climate change policy. In their recent update, IPR anticipates that tipping points with significant feedback loops are unlikely to occur if the temperature rise remains below 2 degrees.

Encouragement to Consider Extreme Scenarios

In light of the series of reports on global warming, Cardano views this as an encouragement for investors to consider extreme scenarios and account for the potential impacts. The likelihood and magnitude of the consequences of an extreme scenario are highly uncertain. However, contemplating the integration of climate risks into strategic asset allocation and testing portfolio robustness is a prudent preparation for the future. This process unfolds in a two-step approach: firstly, understanding the physical risks based on climate scientists' predictions, such as sea level rise and effects on water availability, agriculture, and migration. This phase also considers climate policies, as expediting the energy transition can significantly reduce these physical risks in the long term. Secondly, economists assess the economic implications, including inflation, interest rates, and employment. Traditionally focused on moderate scenarios with moderate physical risks, economists must now incorporate more extreme physical risks in scenario studies for the long term, undoubtedly leading to more extreme economic consequences.

Failure of Collective Imagination

The financial crisis of 2008 serves as a valuable lesson in underestimating risks and lacking imagination. During a visit to the London School of Economics, the British queen inquired why no one foresaw the crisis. A group of eminent economists responded with a three-page letter, stating that the failure to foresee the timing, extent, and severity of the crisis was primarily a failure of the collective imagination of many intelligent individuals, both nationally and internationally, to understand the risks to the system as a whole.

Unforeseen Second-Order Effects

The 2020 pandemic illustrates that economists often underestimate the second-order effects of a crisis. Halting the production of goods triggered a chain reaction with significant repercussions for the supply chain, product prices, and, consequently, economic factors such as growth, inflation, and interest rates. It is reasonable to anticipate that more extreme climate effects could similarly yield unforeseen second-order effects. Considering these extreme climate scenarios now enables investors to adjust their portfolios more promptly should such scenarios unfold. Developing scenarios and understanding their consequences contributes to timely recognition and management of significant uncertainties and associated risks, including those posed by climate change.

Sustainable Investing as Part of the Solution

The risk of underestimating challenges is ever-present, given the unpredictable nature of the future and the multitude of factors at play, such as aging populations and the development of artificial intelligence. Therefore, it is essential for investors to adopt a broader perspective, including considerations of sustainable investing. This not only contributes to a faster transition to a sustainable society but also, ideally, helps prevent extreme climate change. Simultaneously, sustainable investments tend to be less susceptible to the consequences of climate change, as they are less exposed to companies facing elevated risks due to climate change.

In conclusion, Cardano urges investors to proactively incorporate extreme climate scenarios into their risk management strategies and to evaluate the potential impacts on their investment portfolios. Considering the lessons learned from past crises, a collective effort to anticipate, understand, and address the risks associated with climate change is imperative for safeguarding the long-term sustainability of investment portfolios.