Scientists grade climate risk for investors

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A new report by CICERO Climate Finance identifies the biggest risks of climate change for investors. The report finds that some impacts are already happening earlier than anticipated and new ones are expected in the time horizon used by investors.

"Our Shades of Climate Risk help investors to calculate and avoid possible climate costs in the next decades. We assess, based on the latest scientific literature, which impacts and policies have a high probability of affecting investments in a particular region and flag those that require immediate attention from investors," said Kristin Halvorsen, director of CICERO and former Minister of Finance in Norway.

CICERO, the Centre for International Climate Research, a non-profit interdisciplinary research institute, compiled the report using expertise from climate science, finance, economics, and policy.

The report shades climate risks red, orange or yellow, reflecting whether impacts are observed and likely to increase (red), are expected in the next decade (orange), or by mid-century (yellow).

Across the globe, scientists observe physical impacts that they had originally anticipated over a much longer time horizon.

"Investors in energy infrastructure or real estate at the US Gulf Coast are already seeing the consequences of sea level rise. In combination with sinking land and extreme weather events, this could cause considerable damage," climate scientist Borgar Aamaas said.

Production processes, markets and supply chains are also at risk of abrupt physical changes.

In addition, investors face transition risk from rapid changes in climate and energy policies, a shift to low-carbon technologies, and litigation risks.

Scenarios for stress testing

The report also provides guidance on which scenarios investors should use to stress test their portfolios for climate risk, as recommended by the Task Force on Climate-Related Financial Disclosure.

"Our assessment, based on the current climate policies and pledges, is that keeping global average warming below 2°C is not likely," said Glen Peters, senior researcher at CICERO.

"We recommend investors to stress test across various scenarios, including both high-end scenarios with catastrophic changes resulting from weaker than expected policies and low-end scenarios with ambitious policies but high transition risks," Peters added.

Look beyond emissions

CICERO calls for an increased awareness of climate risk, applying a broad definition:

"Many companies use carbon foot printing to account for climate risk. But this does not show how well a company can adapt to future risks, nor does it account for the risk of physical climate change impacts," said Christa Clapp, head of CICERO Climate Finance.

"The challenge is moving from the traditional framing of how a company is impacting the climate through greenhouse gas emissions, to how climate and related policies can impact a company," added climate finance expert Harald Lund.

More information: The report is available online: cicero.uio.no/file/93/Shades %20of%20Climate%20Risk_final-01022017.pdf/download

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