

Climate Change Risk

Today's world is facing an emerging set of risks: Covid-19 pandemic and the shift to online workspaces made cybersecurity risk an even more urgent matter, Russia-Ukraine war highlighted the importance of geopolitical risks. In addition, occurring climate events are becoming more dangerous threats to the world by the day, hence the importance of tackling the climate change risk.

The climate change risk would lead to irreversible catastrophic effects making the planet uninhabitable. The consequences of the worsening global warming conditions have been clearly observed during 2022 all over the world: drought rivers across the US, China, and Europe considered as the worst drought season in 500 years, floodings in Pakistan and USA, in addition to numerous wildfires in Spain and Portugal.

The first initiative to mitigate this risk was implemented since 1972 by the United Nations under the Environment Programme (UNEP) taking several approaches to encourage reducing this climate change: this includes funding programs for private sector and developing countries permitting them to adopt climate friendly behavior.

Nowadays the economic recession following the COVID-19 pandemic and the Russia-Ukraine war have shifted the market priorities to survival mode making the climate change risk a secondary priority. Having said that, Covid pandemic is almost at its end, the current war would ultimately be over however the implications of the climate risk would mean losing our habitat.



To stop this from happening, if not in our lifetime but for the sake of future generations, a formalized set of rules and procedures should be put in place. We have standards for solvency, anti-money laundering, counter-terrorist financing... but not for combatting climate changes at worldwide scale.

The development of such standards and control measures requires a region-

specific risk assessment divided into three parts: the risk factors, incidents, and the systemic risk.

Risk Factors

Two main players are contributing to the climate change risk as risk factors: greenhouse gas emissions and deforestation.

Greenhouse gas are the carbon dioxide and nitrous oxide generated in most of our everyday tasks: transportation, industries, and any other electricity-based activity. Ultimately, we should switch from such harmful energy sources to a greener approach using wind power, solar power, or any other renewable energy. It is worth noting that today only 30% of produced electricity is generated based on such ecofriendly systems.

One natural way to combat these types of gas is through the photosynthesis cycle however deforestation limits nature's ability to reduce greenhouse gas: approximately 12 million hectares are destroyed every year.

The most efficient way to mitigate the climate change risk is to control the emissions. During the last decade, developed countries were able to reduce their CO₂ emissions mainly through subsidizing renewable energy programs and public transport, as well as through implementing environmental-related policies such as Corporate Average Fuel Economy (CAFE) standards by the Environmental Protection Agency (EPA) in the United States.

Risk managers are recommended to start the climate change business risk assessment through identifying the risk factors mainly causing emissions and deforestation at their corporate/sector levels. Having trends of CO₂ emissions along with the risk factors can play an important role in predicting the potential climate dynamics in the future.

Incidents

Having pointed out the risk factors, the second step would be to list all the different incidents that could take place.

The consequences of the climate change are numerous, and some are irreversible: The planet's overall temperature has been incrementally increasing for the last century exposing it to new potential risks and amplifying the magnitude of others: As an instance, the drought risk has emerged during the last two years and been considered by governments as a major risk for the healthiness of people, agriculture, and economies across the world.

Risk managers should benefit from historical events to link their CO₂ emission and specific conditions to the set of incidents that might occur. Once both risks and

potential incidents are listed and classified, an adequate business continuity plan can be adopted tailor made to fit the frequency and severity of each potential event.

Systemic Risk

Systemic risk arises when an incident triggers another seemingly unrelated incident. Climate change had proven to be impactful on multiple aspects of our lives: climate change would affect our health dragging a major impact on the health systems, climate change could imper several industries impacting the markets and international trading activities, it can impact the financial system as proven by the recent pandemic... These are few examples on how a climate risk could develop into a bigger more impactful type of risk.

Based on the above, Risk managers should consider one last component in their risk assessment which is the correlation among the climate change risk and all other potential risks: the systemic risk evaluation.

ESG Compliance

As the world continues to face the ever-changing realities of an ongoing pandemic, geopolitical instability and economic uncertainty, companies and investors have much to consider when it comes to Environmental and Social issues. The momentum around responsible investing presents both challenges and opportunities for companies in order to proactively mitigate risk and capitalize on an Environmental, Social and Governance (ESG) strategy. The rise of environmental issues including Climate Change, energy use, waste and pollution require responsible compliance by companies in order to meet the best standards and reporting requirements of investors, board members and regulators. International regulators, particularly in the UK, EU and US, are becoming increasingly concerned with ESG by creating mandatory reporting requirements to actively ensure corporations incorporate ESG into core decision making.

To conclude, Climate change risk is an eminent matter that should be addressed with the highest priority. Where applicable, local regulators should start setting the procedures for a better risk framework and where not applicable, each entity should take upon itself the duty to be socially responsible by creating its own set of rules and procedures permitting it to minimize the harmful implications on our climate.

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