

The Role of Insurance in Growing the VCM

Chris Slater is the Founder & CEO of Oka, the Carbon Insurance Company.

Islay Lord develops and underwrites Parhelion's insurance products for the carbon and environmental commodity markets.

Natalia Dorfman is the CEO & Co-founder of Kita Earth, a company providing carbon insurance solutions for climate crisis.



Summary

As part of our series on rebuilding trust in the VCM, we look at the role of insurance, pre, and post-certification, as a tool to mitigate risk and encourage capital deployment.

Watch the full interview [here](#).

With every new interview we conduct at Climate Transformed and every conversation with mission-driven investors, I am more convinced of the disconnect between how capital is allocated, the expected risk-adjusted return on that capital, and the opportunity set at hand. The only practical pathway to achieving our decarbonized and more sustainable global economy objectives is for the \$100 trillion of capital required to build the infrastructure and innovation to produce an acceptable return on that investment. Government will play an enormous role, But there is simply no scope to achieve net zero without the support of the private sector. The profit motive is deemed, in many climate circles, to be a dirty phrase, but it is only with the combination of purpose and profit that we can harness the trillions of dollars per year required for a more sustainable global economy.

Nature-based solutions will play an enormous role in reducing carbon output to net zero by 2050. No man-made technology can come close to the scale and efficiency of forests, oceans, and mangroves. Yet the capital required for reforestation, biodiversity protection, and soil enhancement is lacking. The primary reasons for this boil down to a simple investment narrative of the perceived risk of investing in emerging economies. The Global South has remarkable nature-based assets that can be readily enhanced to set us on a pathway of 10 gigatons of carbon extraction by 2050. The problem is capital allocation. The opportunity in a country like Ghana is enormous, but their recent sovereign default and negotiations with the International Monetary Fund imply that allocating capital for several decades is a nonstarter to any organization using traditional risk metrics. While countries like Brazil, Mexico, and Indonesia are viewed as less risky, they are still defined as emerging markets, and hence the sizable risk premium will be allocated to carbon projects just as they are to equity, debt, and other credit instruments. There are very few investors who will allocate money to the emerging world for several

decades, and while mission-driven investments such as nature-based solutions should be viewed differently than a traditional financial allocation, emerging market risk parameters will hold back the scale of growth in voluntary carbon markets.

There is no all-encompassing solution to this problem, but incrementally, the growth of insurance products is an essential step to the next phase of scaling the VCM. My conversation with Chris Slater, Founder of Oka Carbon Insurance Company; Natalia Dorfman, Founder of Kita; and Islay Lord, an underwriter at Parhelion, drove home the need for off-balance sheet solutions for financing nature-based projects. As Islay said, insurance is no replacement for equity capital, but it allows risk diversification to other financial actors to provide financing and comfort to end investors.

This is not just about EM risk. As Chris described, In the carbon market, delivery risks result in under-delivery or non-delivery of the outcomes. These risks include wildfires in the case of nature-based projects, project insolvency where the developer cannot maintain the level of funding to operate them, or negligence issues.

Natalia gave us a practical example of delivery risk. Corporations are interested in acquiring the carbon credits and are not concerned about the reasons for not receiving them, such as due to wildfire or any other natural catastrophe.

Kita has started figuring out the types of risk-related insurance policies that cover the range of reasons for the non-delivery or under-delivery of the carbon credits. So, Kita has devised various ways to assess the underlying projects to provide performance guarantee type insurance. They assess the likelihood of a project to deliver carbon credits and price it based on that. They insure the carbon credits for under-delivery due to unavoidable loss, such as fire or pests, and can also insure them due to avoidable loss, such as under-delivery due to human error.

They do not cover political risks yet, but Kita is developing such products. Their insurance is structured for the companies that provide upfront investments for young carbon removal projects to secure a supply of credits at a reasonable price. Kita provides risk protection to such early movers in the industry. Products covering political risk will be essential in helping to mitigate the EM risk that is holding back development.

Currently, the registries use buffer pools to protect against traditional risks such as natural disasters. The buffer pool is an effort to provide insurance solutions, but it is inadequate in terms of pricing risk in a way that allows for the types of claims and events that need to be settled. Buyers must set aside 20% of the credits in the buffer pool, which is not an attractive solution. This is another area of inefficiency that is holding back growth.

In the case of a catastrophic event, the developer has to notify the registry for replacement credits to be created and issued. The insurance industry needs to come into the VCM and evolve this element of the market to attract more capital.

"Insurance is no replacement for equity capital, but it allows risk diversification to other financial actors to provide financing and comfort to end investors." – Islay Lord



At Parhelion, they are looking to develop an insurance product to replace the buffer pool contribution for mitigating permanence risks.

Permanence is another issue making risk allocations difficult. Chris points out that no insurance product will be enough to ensure the events happening in the next 100 years. So, we have to ensure carbon credits in smaller steps. We have to reassess our policy as the market evolves. We will have to look at the market from a broader perspective to solve risks associated with permanence. The carbon credits have a 100-year permanence period, while insurance products are offered for 1 to 3 years. So, we have to start with smaller steps, such as the annual renewal of the insurance product. Regarding permanence, corporates will not want their retired credits, or those in the buffer pool, to commingle with the credits generated from different projects. There are different assessments of the qualities of those credits, and in case of a natural catastrophe, a buffer pool pays out. Still, for corporates, this is not a satisfactory way to resolve climate issues or maintain integrity.

Natalia summed it up succinctly. The market needs confidence regarding the project development and the integrity of the standards. Buyers need transparency about retiring credits. Every carbon credit does not have to be insured because the transactions in this space are nuanced, and people will continue managing risks in various ways. However, the introduction of insurance can strengthen the market and provide a sense of confidence.

The growth of insurance will be vital in the context of utilizing multiple balance sheets to mitigate risk. These risks involve the implied emerging market and frontier credit risk of the jurisdictions where the credits are issued and around delivery, performance, permanence, and traditional risks such as natural disasters. Chris began the conversation by pointing out that insurance has been used for hundreds of years as a tool to expand burgeoning industries. It will play a vital role in the expansion of nature-based solutions.