

# Carbon Markets Q&A

Carbon markets are complicated and they evoke many concerns and opinions that also come with addressing climate change. Ultimately, the climate crisis can only be solved by reducing fossil fuel use, but forests also have a role to play in helping address these challenges. We sat down with Vermont Conservation Director, Jim Shallow, to help shed some light on what carbon markets are and what they are not.



## **So how does the carbon stored in nature become a carbon credit?**

The common “currency” in carbon markets is a carbon credit. Carbon credits are measurable, verifiable emission reductions from certified projects. These projects reduce, remove, and/or or avoid greenhouse gas (GHG) emissions. A carbon credit represents one metric ton of carbon dioxide that has been removed from or not emitted into the atmosphere. When we decided to enroll our Burnt Mountain project into the American Carbon Registry (ACR) carbon program, we had to go through a robust process to determine the amount of carbon that our management would additionally store on our land.

Foresters conducted a carbon inventory over the course of several weeks by establishing a grid of permanent inventory plots on our land. At each inventory plot they measured the species, size and growth rates of the trees in the canopy and understory. This information was used to determine how much carbon in metric tons the trees are storing. All this information was then audited by an independent third party to certify our results. Once the carbon registry reviewed and approved the project, our project was considered viable and carbon credits were issued.

## **Who is going to buy the carbon credits generated in Vermont?**

It is important to emphasize that you can't buy your way out of polluting. Carbon credits alone do not provide a solution to our climate crisis. They only work as a part of a comprehensive emissions reduction plan that looks at all aspects of a business' operations and supply chains. That is why carbon credits are meant to be sold to businesses like Stio, a Wyoming-based outdoor gear company, who has implemented significant emission reduction measures to meet the goal of carbon neutrality. Stio designed low-impact shipping and packaging solutions and incorporated renewable energy to run corporate offices and retail stores. For the impact Stio couldn't eliminate, they purchased carbon credits from our Burnt Mountain project which is also an investment in the forests that benefit both our human and natural communities. TNC believes that purchasing carbon credits alone is not a sufficient commitment by businesses to the environment. Using carbon credits as offsets must be a small part of a larger sustainability effort by businesses making operational, production, and service changes to reduce their greenhouse gas emissions. These businesses should also be vocal advocates for changing policies and addressing climate change at a society-wide level.

## **How is more carbon being captured if TNC had already conserved these lands or was planning on conserving the lands?**

This question speaks to the important concept of additionality. By enrolling land into a carbon project, the project needs to demonstrate that the change in activity resulted in emission reductions or removal above and beyond what might otherwise have occurred in the absence of the incentive provided by the carbon markets. This typically involves a new, long-term commitment to carbon storage, and can play out in several ways.

In the case of our acquisition of Burnt Mountain, the carbon revenue was needed for the project to become viable. Conserving over 5,000 acres is a very expensive proposition and philanthropic dollars often cannot cover these costs. Therefore, the carbon revenue was critical to the success of protecting a large swath of connected forest that had previously been harvested aggressively for years. Now it would be able to grow undisturbed in perpetuity, capturing more carbon as the trees grow.

In other cases, the forest management regime on the land changes to allow for more sustainable practices and greater forest growth. I think there is a perception that conservation means “no-touch” but many conserved lands have forest management plans that allow varying degrees of harvesting. If the harvesting regime changes to capture more growth even on lands that were conserved years ago, this also supports the concept of additionally.

## **How is the carbon revenue going to be used?**

The carbon revenue is going to be able to spur more conservation actions. The fact of the matter is that all the private funding needed to protect both people and nature from environmental degradation doesn't exist. For the first time in a century, Vermont's forests are declining. Fragmentation is cutting up parcels and making our forests more vulnerable to disease, invasive plants, and development. As the impacts of climate change increase and our species abundance continues to decrease, we have a responsibility to secure nature's safety net in the face of a radically changing landscape. Carbon revenue can be an important piece of the puzzle that helps us build on the philanthropic support of our members to protect all that we love about Vermont.

## **Any final thoughts on carbon markets that you would like to share?**

I think it is important for people to know that voluntary carbon markets emerged as a way to try to address climate change issues due to a lack of meaningful policy progress to reduce our dependency on fossil fuels and lower society's carbon emissions. Businesses can be important drivers in influencing the changes that need to happen. For emissions reductions pledges to be real, companies should first set greenhouse gas emission reduction targets consistent with achieving net-zero emissions by 2050 and develop strategies that prioritize offsets only after introducing practices and changes to avoid, minimize, rectify and reduce emissions internally. Only if some emissions remain after those reductions are underway should businesses examine how offsets may increase their ambitious targets.

**Like any new tool or technology, we are learning more with each project and engagement. As a science-based organization, TNC is committed to the development of new, scientifically rigorous methodologies to scale the urgent need to mitigate climate. We also support ongoing improvements of existing carbon market standards as science progresses. We also invite anyone to reach out to us with their questions and we plan on hosting carbon webinars at regular intervals to help people understand the role of carbon markets and how we are using them in Vermont. If you have more questions, please contact [vermont@tnc.org](mailto:vermont@tnc.org).**