

Decarbonization and carbon credits: Friends or foes in the energy transition?

Sustainability 101 tells us that decarbonization within the value chain is the gold standard for meeting environmental goals, while investing only in carbon credits is a less effective strategy. The conventional wisdom is to invest in decarbonization strategies first, then turn to carbon credits to offset emissions, and only if necessary.

In fact, per KPMG's 2022 Global Survey of Sustainability Reporting, in a worldwide study of the 100 largest companies across 58 countries, territories and jurisdictions, just 2% intend to rely solely on carbon credits to reach their emissions reduction targets, while nearly 60% intend to use only decarbonization strategies.¹

But in an economy where the world's top companies are racing against the net-zero clock, should purchasing carbon credits — for projects in regenerative agriculture, waste management and, yes, reforestation — play a larger role in a company's decarbonization strategy? Or do the reputational, financial and environmental risks of offsetting outweigh the benefits? It's a tricky question, and we're keen to explore it.

Decarbonize first, offset second

Let's start with the question of why companies choose to buy carbon credits in the first place. If decarbonization is the primary goal, why divert resources elsewhere? Part of the answer has to do with the present-day limitations of decarbonization.

Decarbonization strategies, such as replacing a delivery fleet with electric vehicles, present a more permanent solution for emissions reduction. Emissions reduction within the value chain is also the required method for setting targets in accordance with the Science Based Targets initiative. However, even at its most expeditious pace, decarbonization is a yearslong journey. Doing it right entails an initial carbon baseline assessment, thorough scenario planning and a robust implementation plan. It also requires a significant investment in cutting-edge technology, some of which is still in the research and development phase. For many companies with 2030 deadlines, these time, money and technology constraints are enough to muddle the path to net zero.

As a result, they turn to a supplemental strategy: purchasing carbon credits. By cultivating a forest, for example, companies can enjoy the short- to medium-term benefits of sequestering carbon dioxide from the atmosphere while devoting the bulk of their resources to long-term strategies, such as decarbonizing their operations, physical assets and supply chains. Sounds like a win-win solution, right? Not exactly, as there are

¹ KPMG LLP, "Big Shifts, Small Steps," September 2022, https://kpmg.com/xx/en/home/insights/2022/09/survey-of-sustainability-reporting-2022,html.

several hot-button issues impacting the reputation of carbon credits and, in turn, companies' willingness to purchase them. Let's take a closer look.

Reputational, financial and environmental risks raise the bar on due diligence

- 1. The voluntary carbon market is unregulated, and the quality of the underlying projects varies widely. Not all carbon credits are created equal. A project that removes carbon from the atmosphere is perceived to be of higher quality than one that simply reduces it. The same goes for a project that removes carbon permanently with a low likelihood for reversal. Conceptually, this distinction is relatively straightforward, but in practice, it can be challenging to ensure quality. Carbon credits issued by the leading registries undergo significant scrutiny to solve for this complexity. However, there have been cases where registries have approved underlying projects for carbon credit issuance, but then later found that these projects were of lower quality and less robust than they initially thought. Companies that rely on credits of variable quality to meet net-zero and other climate goals could find themselves facing significant financial, strategic and reputational risks. They would be well-served to identify projects that allow for substantial oversight to help verify that the envisioned carbon reduction or removal is achievable over the project's tenure.
- 2. Carbon credits are cheap today, but stockpiling them in anticipation of future supply constraints may look like greenwashing tomorrow. The pricing of the current carbon credit supply today is largely determined by individual transactions, most within \$5–40 per metric ton of carbon dioxide equivalent (tCO₂e). However, as the quality of offsetting projects increases through improvements in measurement, reporting and verification of projects, as well as through new technologies carbon credits could become more expensive over time. And should the voluntary carbon market undergo significant regulation, which could legitimize the practice in the eyes of investors and standard-setters, prices could rise even further, particularly as companies' 2030 climate commitments come due. While these pricing projections may entice organizations to stockpile cheap credits now, these actions may lose legitimacy down the road. In fact, it could raise more red flags among investors and other key stakeholders if quality concerns become apparent.
- 3. Reputationally, carbon credits do not hold the same weight within the value chain as decarbonization strategies. Perhaps the most vocal criticism of carbon credits is that they are decarbonization lite. Because the purchase of carbon credits is intended to offset a company's unabated emissions, it is often viewed as a bandage, not a cure, for climate-related issues. There are also limits to their efficacy. For example, in the often controversial case of reforestation, there are limits to how much of the Earth's surface can be devoted exclusively to planting, as well as how much capital can go toward those efforts. Taking advantage of carbon credits without them becoming a scapegoat for an underdeveloped decarbonization strategy is a tricky line to toe.² And for those companies that misstep, investors and other stakeholders are quick to cry greenwashing.

What would it take to rewrite the carbon credits narrative?

So, we find ourselves at an impasse. On its own, decarbonization has near-term constraints. But adding carbon credits into the mix brings a host of financial, reputational and environmental concerns. These issues will certainly not be solved overnight, but we see a couple of potential starting points:

² Simon Weaver and Bridget Beals, "Solution or Scapegoat? Can Carbon Offsetting Solve Our Climate Crisis?," *KPMG UK Blog*, February 12, 2021, https://kpmg.com/uk/en/blogs/home/posts/2021/02/solution-or-scapegoat-can-offsetting-solve-our-climate-crisis.html.

1. Widespread disclosures of carbon credits, in conjunction with ESG reporting: Investors crave rigorous, timely and comparable ESG data from companies that they can use to drive decision-making. Unsurprisingly, when widespread reporting occurs, we see a sizeable boost in data quality, both financial and non-financial. This fall, the U.S. Securities and Exchange Commission (SEC) is expected to release its landmark climate rule, which could include provisions that public companies disclose details about any carbon credits, renewable energy certificates (RECs) or internal carbon pricing used to reach transition goals or targets.³ This would be a game changer for the offsetting conversation. Companies would be publicly accountable for the quality of credits they purchase, and it would be more evident where credits fit into their decarbonization plans.

It's worth noting here that RECs are another top-of-mind element of the decarbonization conversation. Like carbon credits, RECs counterbalance a company's greenhouse gas (GHG) emissions, but do so by allowing the purchaser to lay claim to a certain amount of electricity generated from renewable resources, reducing reported Scope 2 emissions. While solving some of the permanence challenges associated with carbon credits, RECs have their own trip wires, particularly around pricing, greenwashing and regulatory scrutiny.

2. More precise accounting principles: Ultimately, if carbon credits are to play a critical role in companies' transition planning, they will need to know that their investments will pay off financially and in permanently reduced or removed carbon. This requires a standard method of financial and GHG accounting, along with the tools and guidance to report in a transparent, rigorous and comparable way. For each dollar you spend planting trees, what type of environmental return on investment can you expect? How do variables such as species, soil health, elevation, latitude, precipitation and access to sunlight impact that return? And once all those trees are converted into carbon credits and accounted for, how do you attest and assure that work?

We could get more and more granular. But in short, before carbon credits can truly take off, finance professionals will need to learn how to measure the impact of carbon on the financial statements and track the reductions in GHG emissions. Fortunately, several frameworks for carbon-credit-generating projects are already addressing these questions, creating a potential baseline for further guidance in the future.

Carbon credits as one piece of the decarbonization puzzle

As we transition to a low-carbon economy, the primary goal is to decarbonize, and it always will be. However, at present, there are simply too many near-term constraints and long-term unknowns with decarbonization alone to write off alternatives completely. There is work to be done to enhance the reputation and viability of carbon credits, but with greater transparency, rigor and regulation, it's worth entertaining the idea that they could be a suitable complement to decarbonization in the near term. After all, net-zero deadlines are just around the corner, and it's in our best interests to consider every possible strategy to meet emissions reduction commitments.

³ KPMG LLP, "SEC Proposes Climate Reporting and Assurance Rules," March 2022, https://frv.kpmg.us/reference-library/2022/sec-proposes-climate-reporting-requirements.html.

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