



Carbon Offsets Analytical Report with Cost Benefit Analysis

By Senior Stewards Acting for the Environment

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Introduction

In January 2024, Vassar Byrd, then incoming CEO of Kendal Corporation, asked SSAFE to investigate the use of carbon offsets for corporate travel. Organizations concerned with sustainability and promoting sustainability as a core value must be vigilant about reducing their carbon footprint. In other words, “walk the walk.” Managing Kendal communities across the country requires site visits, yet traveling by air contributes significantly to greenhouse gas emissions. One way to reduce the Kendal Corporation's carbon footprint may be to implement sustainable travel policies including the use of carbon offsets. Determining the value of carbon offsets can be daunting: watchdog organizations report that less-than-honest brokerages engaged in selling credits that exaggerate their environmental benefits.

What are carbon offset credits?

Carbon offsets are tradeable rights or certificates linked to activities that lower the amount of CO₂ in the atmosphere. An organization or individual can pay a fee to a provider, a kind of broker, that can remove a comparable amount of CO₂ from the atmosphere. Purchasing these credits ‘offsets’ the carbon-producing activities of the purchaser.



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Reforestation projects are one common type of carbon offset, as are the construction of renewable energy projects, methane capture, and landfill/waste management. The project itself is granted carbon offsets which it can market to support its activities.

There are two main types of carbon credits: compliance credits and voluntary credits. Compliance credits are used to meet regulatory requirements, while voluntary credits are purchased by individuals and organizations to reduce their carbon footprint. Each credit typically represents one metric ton of carbon dioxide or its equivalent. Each carbon offset credit is associated with the emission reduction from a specific project. You can purchase carbon credits directly from projects, through specialized brokers, or from online retailers. Each option has its advantages and considerations.

Some carbon offset projects offer benefits beyond carbon reduction or are of particular interest to the purchaser, such as supporting renewable energy development or improving local economies.

Findings

Over the past few years, serious questions have arisen about the validity of carbon offsets. Instances reported include land owners taking advantage of the system by selling offsets for doing exactly what they would have done anyway, organizations that claim to “certify” the offsets that have a spotty track record, and brokers who have sold “offsets” that existed only on paper.

Two careful analyses published in 2023 go to the heart of these issues. One is a 13-page [investigative piece in the *New Yorker*](#) (Oct. 23, 2023) by Heidi Blake. Blake has looked at the records and interviewed the participants in a single massive offset project based on protecting forested land in Zimbabwe. She found a web of misinformation, wishful thinking, and graft. The result is that millions of dollars intended for purchasing offsets and supporting indigenous people had been spent on worthless “carbon offset credits”.

The second analysis, by Dr. Joseph Romm of the University of Pennsylvania), showed that the problems of the project profiled in the *New Yorker* piece, far from being an outlier, were typical of many carbon-offset projects. It shows that the vast majority of offsets are worthless, and many have the potential to actually increase global warming. Romm’s paper is long (50 pages) but it is essential reading if you want to understand how far off-course the offset markets have strayed. It can be downloaded free of charge at <https://web.sas.upenn.edu/pcssm/files/2023/06/OffsetPaper7.0-6-27-23-FINAL2.pdf>

It’s not just a question of “bad actors,” as the Romm report makes clear. “One general problem for all nature-based offsets—especially ones involving trees—is that ‘very few nature-based offsets today can promise anything like true permanence because they are reversible at any time,’ as Dr. Mark Trexler explains, “Wildfires, extreme drought, deluges, disease and pests—all of which keep getting worse because of climate change—can, for instance, wipe out part of an existing forest or a plantation of new trees. When that happens, the trees stop absorbing CO₂ and start emitting it—very quickly in the case of wildfires. This has already begun in California forests being preserved as offsets.”



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There are other problems with these nature-based solutions, such as the fact that a tree planted now will not have a significant impact on carbon for a couple of decades (but the credits for planting it are claimed to be offsets for fossil fuels being burned right now).

Romm does not give any advice on what offsets to buy. He emphasizes the need to **focus resources on reducing your own carbon footprint rather than buying offsets from others**. If an organization still wants to purchase offsets, the main takeaways from Romm's study are:

- **Don't buy plant-based offsets** (forest preservation, tree planting, agricultural changes).
- **Don't buy carbon-capture offsets** (programs using technology to capture carbon from smokestacks or directly from the air).
- **Don't buy offsets originating in another country** (these have almost certainly already been counted by that country, so you can't count them again).

To be valid, offsets need to be **auditable** (assessed each year for the carbon reduction achieved), **durable** (the carbon will stay out of the atmosphere for decades), **additional** (the carbon removal would not have happened without the offset program), and **not double-counted** (two different parties are not claiming the same reduction). There are very few programs offering offsets that meet these criteria.

One possibility: U.S. programs that provide renewable installations for communities that could not otherwise afford them can potentially meet all four of these criteria. The "Finger Lakes Climate Fund recommended below may be such a program.

Carbon Offset Options

A foundational question for the inclusion of offsets as part of a corporate travel policy is, "What is the purpose of purchasing carbon offsets?" If the purpose is to reduce the organization's calculated carbon footprint, then it is imperative to understand that the offsets purchased will probably be counted by the project itself (e.g. double-counted). For example, if Kendal Corporation purchases \$1000 in credits from a sustainable project in a developing country, the question must be asked, "Is the country also going to be counting the same emissions reduction?"

Understanding the legitimacy issues about carbon offsets yet hoping to offer a way to compensate for unavoidable travel, a few offset programs are offered here for consideration. The first, The Finger Lakes Climate Fund, is local to Kendal at Ithaca and is described in a bit more detail.

- 1) **The Finger Lakes Climate Fund** works to promote clean energy projects in the Finger Lakes area while strengthening the regional economy and assisting local families in need. The Climate Fund provides a way for people to support the community while offsetting greenhouse gas emissions from their buildings or travel.
 - a. Carbon offset donations are used for grants to fund energy efficiency projects and renewables that would not otherwise be possible in low-to-moderate income households in the Finger Lakes region. These grants help pay for insulation, air sealing, and energy-efficient heating equipment like heat pumps.



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- b. The Finger Lakes Climate Fund offers carbon offsets for individuals, businesses, non-profits, academic institutions, and special events. For more information on purchasing carbon offsets contact info@fingerlakesclimatefund.org or 607-272-1720.
 - c. The Finger Lakes Climate Fund is a project of Sustainable Finger Lakes a sustainability-focused 501(c)3 nonprofit organization based in Ithaca, NY.
- 2) **Gold Standard** mentioned often in the Romm report, is unique. It went to great lengths to ensure accuracy and oversight within its project portfolio. All credits are now called an “impact claim” or “contribution claim” indicating that the buyer can not claim a reduction in their own emissions.
- 3) **Carbonfund.org** is a non-profit organization that offers some domestic carbon offset projects in renewable energy, energy efficiency, and education. Carbonfund.org reports that it is transparent about its projects, and reports emissions reductions annually. Their website also offers a free calculator that allows you to estimate your carbon footprint and purchase offsets based on your specific emissions.
- 4) **NativeEnergy** is a Vermont-based carbon offset provider specializing in renewable energy projects. They offer a variety of projects, such as wind, solar, and biogas, claiming that all of their projects are verified by third parties. NativeEnergy is unique in offering “help build” projects, which allow individuals and companies to contribute to constructing a new renewable energy project. NativeEnergy also provides detailed reporting on their projects and the emissions reductions achieved.

Suggestion for Kendal Corporation – a better alternative?

Kendal could consider setting up its own program, where carbon consumption is offset by funding appropriate activities at the Affiliates that would not otherwise have funding. This might be done as an expansion of the existing Kendal Charitable Funds.

Suppose Kendal Corporation were to calculate the carbon emissions from its flights and other travel in a given year and then, in the following year, were to provide its affiliates with funding for enough solar panels to offset that amount of carbon emissions (by avoiding grid-generated power) over the life of the panels. Or, the funds could be used for the affiliate’s efficiency upgrades, with the same effect. A program like that would meet all four criteria listed above—and it would avoid the messy carbon offset market entirely. An in-house fund would also accelerate the progress of the entire Kendal system toward zero carbon emissions, a clear demonstration of sustainability leadership.

Swarthmore College has a similar in-house style program. It assesses each department a carbon fee of \$11/flight for faculty air travel, raising several hundred thousand dollars annually. The money is used for sustainable projects. Swarthmore does not purchase offsets from outside organizations.



Cost-Benefit Analysis

Benefits

1. **Environmental Impact:** The hoped-for benefit of purchasing carbon offsets is the potential positive impact on the environment. By purchasing carbon credits, an organization can help finance projects that reduce greenhouse gas emissions, such as reforestation, renewable energy, and methane capture projects.
2. **Corporate Responsibility and Leadership:** Using credible carbon offset credits as a small part of a corporate policy positions the organization as a leader by demonstrating a commitment to environmental sustainability. This can improve the organization's reputation among donors, stakeholders, and the community, potentially leading to increased support and funding.
3. **Supporting Local Economies:** Certain carbon offset projects, like those offered by the Finger Lakes Climate Fund, not only address carbon emissions but also support local economies and assist families in need, aligning with many nonprofits' broader social objectives.

Costs

1. **Financial Expense:** The direct cost of purchasing carbon offsets is a primary consideration. An organization considering adding the additional purchase of carbon offset credits to its travel policies will need to balance the financial outlay against other organizational priorities. As outlined in the Romm report, the most credible offsets are expensive because they are forcing the country selling them to “un-count” emission reduction credits, making net zero more difficult and expensive to achieve.
2. **Effectiveness and Integrity Concerns:** As highlighted in our research, the carbon offset market has been criticized for issues related to the effectiveness and integrity of some projects. Investing in offsets that don't deliver the promised environmental benefits can waste funds and damage the nonprofit's reputation.
3. **Potential for Complacency:** There's a risk that relying on carbon credits could lead to complacency in pursuing direct emission reduction strategies within the organization. This could ultimately undermine broader sustainability goals.
4. **Due Diligence Requirements:** To mitigate risks of fraud and ensure the offsets are contributing to genuine emission reductions, nonprofits must invest time and resources in due diligence. This involves researching and verifying projects, which can be resource-intensive.

Sustainable Travel Alternatives & Options

Minimizing Travel: Organizations can adopt policies that encourage or mandate the minimization of travel when possible. For instance, evaluating the necessity of each trip and considering alternatives can significantly reduce the organization's carbon footprint. Encouraging the use of **public transportation, carpooling, or electric vehicles** for necessary travel can further enhance sustainability efforts.



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Opting for Virtual Meetings: The COVID-19 pandemic has demonstrated the effectiveness of virtual platforms in facilitating productive meetings, conferences, and workshops. By making virtual meetings the default option, organizations can drastically cut down on emissions associated with travel. **Investing in high-quality video conferencing technology** improves the experience and effectiveness of remote interactions, making this a more viable and attractive option.

Sustainable Travel Options: When travel is unavoidable, choosing more sustainable travel options can make a difference. This includes selecting **direct flights** to reduce emissions, flying **economy class** (as larger seating configurations in premium classes have a higher per-passenger carbon footprint), and **using airlines that are committed to sustainability practices**. Additionally, opting for **accommodations that have strong sustainability policies** further extends the organization's commitment to environmental stewardship.

In conclusion, carbon offsets are risky. The most effective way to reduce emissions is to reduce travel and find alternatives like video conferencing. If travel is unavoidable, using an in-house offset program may be the most direct and effective option. Until an in-house program can be developed, purchase credits from those few programs with the most rigorous certification. This balanced approach maximizes the environmental benefit, reinforces the organization's commitment to responsible practices, and contributes more effectively to the global fight against climate change.

