

Voluntary Carbon Offsets: A Good Idea Gone Bad?

Martin Wahl

A Good Idea Once Upon a Time?

The idea, back in 1988, seemed good: Applied Energy Services working with World Resources Institute created the first documented carbon offset program in the U.S. by planting 52 million trees in Guatemala to offset carbon emissions from a coal-fired plant it was developing in Connecticut. Mark Trexler developed the methodology of the program; it was the first reforestation carbon offset project.

In the thirty-five years since then, things have changed, and not all for the better. Rights to carbon offsets in units of one metric ton of CO₂ or greenhouse gas (GHG) equivalent, can be purchased by entities to offset, or reduce, carbon emissions they generate. For some background on carbon offset credits and their market, see the box below.

So, What Went Wrong?

Back in 1988 the commercial technology to build a renewable power plant was not available, so reforestation offsets seemed the next best thing.

Some projects issuing carbon offsets today are renewable power generation plants claiming to offset carbon emissions by avoiding construction of GHG-emitting plant. Today, most renewable energy projects rarely need the additional funds that offsets generate, because wind and solar are now the cheapest sources of new energy in most of the world.¹

In addition to renewable power generation projects, most carbon offsets are now derived from reforestation projects themselves, which have come under scrutiny for being hard to evaluate due to:

- “Leakage,” where the protection of one forest simply causes deforestation to happen elsewhere.
- “Additionality,” where for example, a project would not provide additional carbon storage if it protects a forest that was never in danger of being cut down.



Carbon offsets can be purchased by entities to reduce the carbon emissions they generate. Care must be taken to verify the validity of a carbon offset program. (blogs.lse.ac.uk)

A National Resources Defense Council report details these issues.

Stonyfield Farm of Londonderry, NH in 1997 was the first corporation to use acquired offsets to achieve carbon neutrality.² Since then, many corporations and other entities have announced carbon-neutral programs, some claiming they already are. Some of the offsets being purchased are from questionable sources, most recently those Qatar bought in order to claim the 2022 FIFA World Cup “carbon neutral.” They were acquired from Qatari-owned Global Carbon Council (GCC) whose program standards have been questioned. The claims for the 2022 Beijing Winter Olympics have also been questioned. The voluntary carbon market, valued at nearly \$2 billion in 2021, is subject to deceptive practices. In fact, as pointed out in a report by the Center for American Progress, “(l)ow-quality offsets may be worse for the climate than no offsets at all.”

From a strategic, global standpoint, using carbon offset credits as a means to reduce GHG emissions in the long term is questionable. Mark Trexler, the “father” of carbon offsets, makes clear in an interview with Bloomberg that, “Originally, offsets were

meant to go away, but are now entrenched. An offset market depends on the supply of carbon to offset, so if CO₂ emissions are actually reduced, the market ends. Carbon offset is grasping at a straw when policies are not changed to actually reduce CO₂ emissions.”

Another structural issue with carbon offsets is that it represents a conflict of objectives; the carbon offset market has two

goals, potentially in conflict:

- To mitigate climate change by reducing overall carbon emissions.
- To reduce costs to companies for complying with carbon-reduction objectives or rules.

Seeking the lowest cost usually wins out, leading to a “race to the bottom,” as companies acquire lower-cost offsets issued by less costly projects that potentially aren’t as rigorously vetted as others. A January 2023 Guardian exposé article presented results of an investigation into Verra, the world’s leading standard for the voluntary carbon offsets market, showing that 94% of rainforest carbon offsets were “worthless.” Worse, some projects have been discovered to have human rights violations associated with them.

Because the carbon registries are paid by the projects applying for carbon offset registration, their standards have often


been found to be low. The Grantham Research Institute on Climate Change found egregious examples, including wind farm projects in India where at least 52% of the carbon offsets were for projects that would have likely been built anyway.

United Airlines CEO Scott Kirby has said in many interviews that carbon offsets are not a meaningful way to achieve “100% green” operations because most offset projects are about planting trees, susceptible to the Additionality and Leakage flaws explained above. – Accordingly, United is investing in sustainable aviation fuel to achieve their goal of going 100% green by 2050.

Hope for the Future?

In response to the Guardian’s January 2023 article, Verra, after initially responding with a refutation of the Guardian’s data, techniques and sources, has announced it is replacing its rainforest offsets program in 2025. As other greenwashing scandals come to light, some offset buyers are becoming concerned about their image, and governments are being asked to crack down on the market for carbon offsets and draw up new rules for its oversight.

Until the voluntary markets become more reliable and verifiable, instead of buying carbon offset credits from a vending machine at the airport, consumers should consider putting their money towards the purchase of replacement appliances (heat pump hot water and space heaters to replace gas are most effective for GHG reduction) or a zero-emission vehicle.

Footnotes: ¹ Note that hydroelectric plants, while they do not emit GHGs, are not considered a “renewable” producer. ² In 2019 Stonyfield committed to reduce its carbon output by 30% under the auspices of The Science Based Targets initiative (STBI). 

WHAT IS THE CARBON OFFSET MARKET?

A carbon offset credit is tradeable instrument certified to represent an emission reduction by a project of one metric ton of CO₂, or an equivalent amount of other greenhouse gas (GHG).

- Projects meeting a standard organization’s requirements issue carbon credits.
- Purchasers of carbon offset credits retire them to claim the emission reductions

There are two types of carbon markets, mandatory and voluntary.

- Mandatory markets are created and regulated by national, regional, or international carbon reduction programs. California’s Cap & Trade Program and the Regional Greenhouse Gas Initiative (for power plants in eleven Eastern states, including NY, VT, NH and ME) are examples. Mandatory market carbon credits are sold only to emitters that must comply with their standards; not on the open market.
- Voluntary markets function outside compliance markets and enable companies and individuals to purchase carbon offsets on a voluntary basis with no intended use for compliance purposes. The value of the voluntary carbon market is around \$2 billion.

Key criteria to evaluate the legitimacy of carbon offset projects include:

- Additionality – a project that without

carbon offset sales wouldn’t have happened.

- Permanence – The carbon reduction must last a long time, and not be easily reversed.
- Leakage – The emissions will not be moved somewhere else.

Each of these criteria have lengthy explanations and examples, and are hard to verify on a continuing basis.

Participants in the voluntary carbon market include:


- The project developer who applies for the credit(s) EG:

- A renewable energy project.
- Reforestation project.

The organizations promulgating the programs, EG:

- Verra: The Verified Carbon Standard (VCS).
- The Gold Standard (GS).
- Climate Action Reserve (CAR).
- American Carbon Registry (ACR).

These organizations maintain registries of approved third party verifiers/validators who assess project compliance with their programs.

- Carbon credit exchanges and brokers link offset providers and purchasers.
- Purchasers who retire the credits to support their GHG reduction goals. 



PawPrint & mail
30 YEARS
DESIGN | PRINT | MAIL | PROMO



Catamount
marketing & promo

WE DO OUR PART

- 100% LED Lighted Facility
- Can Print on Recycled Paper
- Eco-Friendly & Recycled Promotional Products
- Donate Unused Paper to Nonprofits or Repurpose into Notepads
- Support Energy Focused Companies

Learn how we make promo and direct mail easy and efficient!

802-865-2872 | paw-prints.com

printcare@paw-prints.com