CarbonBetter

2026

Intro to Carbon Offset Registries

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About CarbonBetter

Founded in 2012, CarbonBetter is a trusted sustainability partner for public and private companies across industries, including events, food and beverages, and beyond. We help align what's good for the planet with what's good for business, from sustainability strategy, regulatory compliance, decarbonization, and carbon markets.

How We Can Help with Carbon Offsets

Personalized offset portfolios built around each client's industry, risk profile, and sustainability goals.
End-to-end support for project developers, from generating carbon credits to go-to-market strategies that maximize value.
One partner for the full decarbonization roadmap, carbon accounting, verification, offset procurement, and net zero strategy under one roof.
Over 1M+ carbon credits transacted, guiding buyers through offset and clean energy procurement to reach carbon neutrality and net zero targets

Introduction

Carbon offsets are a tool for businesses and individuals that have made a commitment to reduce their footprint or reach net-zero emissions. One carbon offset represents a metric ton of avoided or captured carbon dioxide that companies and individuals can purchase to meet their environmental goals. Carbon offset registries play a critical role in this market and issue credits based on defined certification protocols, keep track of available offsets in the marketplace, and when offsets are purchased, registries are responsible for tracking the retirement of credits to ensure there is no double counting and that no two purchasers claim the same verified carbon reduction or removal.

Ultimately, carbon offset registries play a critical role in ensuring that a carbon offset is legitimate and that once its environmental benefit is claimed, it is retired from the market. While this sounds like a straightforward task, complexities abound.

The State of the Carbon Markets

The voluntary carbon market seems to be at a crucial transition point. Unified and consistent efforts toward higher quality (better Measurement, Reporting, and Verification “MRV”, and industry standard definitions of quality) are countering skepticism about credit quality. Increasing investment and need for climate tech advancement is positioned against slow demand growth. Since businesses can rarely eliminate emissions entirely, carbon offsets offer a practical way to address what's left while companies keep working to decarbonize.

What Do Carbon Offset Registries Do?

Carbon offset registries are the middleman that keeps the carbon market honest. They develop standards for projects, verify that emissions reductions actually happened, and ensure no credit gets claimed twice.

The project developer identifies an opportunity to reduce or remove carbon through reforestation, clean energy, or methane capture.

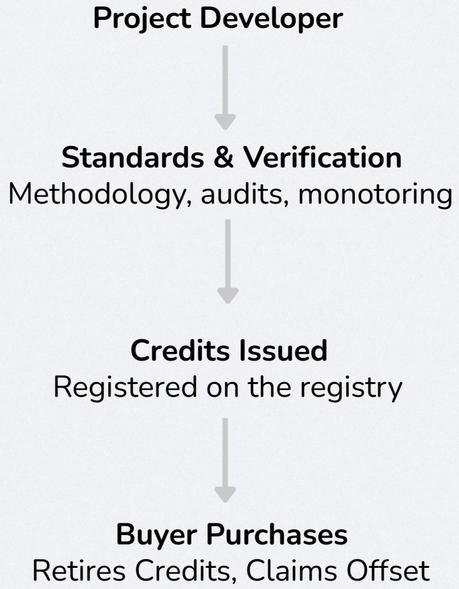
The registry checks the project against its standards, monitors that the work is actually happening, verifies the results through independent third parties, and maintains a transparent record of every credit from creation to retirement.

Certified Credit is what comes out the other end: a single credit representing one metric ton of verified carbon dioxide reduction or removal, ready to be sold and retired by a buyer.

Registries track owners, assign serial numbers, and maintain a public ledger. When you buy a credit, the registry retires it so no one else can claim it. One metric ton of carbon reduction = one credit, retired once.

How the carbon market works

Registry verification process



How Carbon Credits Are Created

Carbon credits are born through a standardized process designed to ensure every credit represents real, verified emissions reductions or removals.

A project developer identifies an opportunity to reduce or remove carbon, whether that's reforestation, renewable energy, methane capture, or industrial efficiency. They document the project using an approved methodology that specifies how emissions will be measured, monitored, and verified.

The project goes through independent third-party audits and monitoring protocols. Registries (like Verra, Gold Standard, or American Carbon Registry) act as the verifier, ensuring the project meets strict standards for methodology, documentation, and verification requirements. Once verified, the registry issues credits, each representing one metric ton of CO2 equivalent avoided or removed. These credits are registered, tracked, and made available for purchase.

The buyer then retires the credit on the registry, removing it from circulation and claiming the environmental impact.

What makes this process rigorous is the transparency and traceability built in at every step. Registries maintain detailed records, enforce third-party validation, and ensure no double counting occurs. This verification infrastructure is what gives carbon credits credibility in the market.

What Happens When a Carbon Offset Project Fails?

Sometimes a project fails to deliver the carbon savings that were expected.

Here is an example. One popular category of projects are called “nature-based” and are related to forests. Trees are carbon-capturing powerhouses because they store carbon in their trunks and branches as they grow, so they offer an ideal carbon sequestration solution.

But what happens when a project area that has issued and retired credits is burned to the ground, releasing all of the stored carbon in the plant mass with it?

When project developers sell credits, they are either encouraged or required (depending on the methodology and registry used) to allocate a percentage of their issued credits to the registry as a buffer pool rather than selling the credits.

This acts as a form of insurance: if a forest project fails or a forest burns down, the registry can deliver credits from the buffer pool to buyers of the failed credits.

Of course, non-forest projects are also subject to unforeseen circumstances that might prevent their ability to deliver on their carbon claims, so it’s important for organizations to understand the buffer pool backup plan if a project fails so you aren’t scrambling to replace credits that no longer represent a metric ton of carbon emissions.

A more recently developed mechanism with broader applicability is formal project specific insurance from providers like Kita and Oka that protect against risks like invalidation, reversal, or fraud. The mechanisms of premium and payout for the contracts differ between insurers, but these offerings are emerging to support the market and make it less risky.

Other Carbon Offset Considerations

While carbon offsets provide a practical solution to companies and individuals working to meet their environmental goals, knowing the project type which aligns with your story, the methodology used by the developer, the credentials of the developer and finally which registry you go with are important.

There are many carbon offset registries and they have each created their own methods to certify, issue, and retire offsets, which means the space is fragmented, with no primary accounting system for all available offsets. Without a single source of truth for retirements, it can be difficult to ensure that every offset is retired accurately.

With many registries come many certification standards and labels, and not all are created equal, so registration alone is not enough to know you're truly offsetting a metric ton of carbon. In addition, credits with older vintages may have been certified using methodologies that have since been improved.

The Core Carbon Principles Label (CCP)

A Quality Benchmark Across Registries

Since 2023, the Integrity Council for the Voluntary Carbon Market (ICVCM) has been assessing registries and methodologies against the Core Carbon Principles (CCPs), a shared quality standard that cuts through fragmentation in the carbon market. The CCP framework organizes quality into three pillars:

Governance: Effective oversight, tracking, transparency, and independent third-party validation. Most of this is intuitive, you want clear rules, oversight, and verification.

Emission Impact: This is where the technical definitions matter.

Here are the key ones:

- **Additonality** - Would this project have happened anyway without carbon market funding? If yes, the offset doesn't count.
- **Permanence** - Will the emissions reductions or removals last, or could they be reversed?
- **Robust Quantification** - Are the actual emission reductions measured accurately, not estimated?
- **No Double Counting** - The same credit can't be claimed by both the project developer and the buyer.

Sustainable Development: Projects should deliver real community and environmental benefits beyond carbon, and contribute meaningfully to net-zero transitions.

As of mid-2026, most major registries, Verra, Gold Standard, ACR, are CCP-Eligible, and 40+ methodologies across forestry, methane, and removals have earned CCP-Approved status. These labels command real price premiums because they signal genuine due diligence to buyers.

Major Registries in the Voluntary Carbon Offset Market

- *American Carbon Registry*
- *Climate Action Reserve*
- *Gold Standard Impact Registry*
- *Verified Carbon Standard (Verra)*
- *Plan Vivo*
- *Puro.Earth*

Registry comparison, including current CCP status (Last Updated July 2026)

Registry	Focus areas	CCP-Eligible?	Buy directly?
Verra (VCS)	REDD+(Reducing Emissions from Deforestation and Forest Degradation), IFM (Improved Forest Management), Renewable energy: largest volume globally	Yes	No - via marketplace/broker
Gold Standard	Community-focused, renewable energy, cookstoves	Yes	Yes, via Gold Standard Marketplace
American Carbon Registry (ACR)	US forestry (IFM), methane	Yes	No
Climate Action Reserve (CAR)	US-focused, forestry, ODS (Ozone-depleting substances)	Yes	No
Plan Vivo	Smallholder/community forestry	Not yet assessed	No
Puro.Earth	Engineered removals (biochar, DAC (Direct Air Capture))	Yes	No

Getting the Right Help

If figuring out whether a carbon offset is legitimate seems like a lot of work, that's because it is. Most businesses don't have the expertise in-house to navigate the carbon markets efficiently and successfully. Carbon offset buyers need to consider and balance trade-offs regarding the price per metric ton, verification standard, vintage, additionality, leakage, quantification methodologies, geography, technology, impact on local communities, whether the project has created broader environmental damage, and other factors.

CarbonBetter® shortcuts this carbon offset buying process by providing clients with instant access to fully vetted carbon offsets through our Certified Offset Portfolios in addition to directly sourcing credits to meet specific needs and goals. Our portfolios are built around proven technologies, verified additionality, minimal leakage, vintage, and impactful co-benefits, and align with the Integrity Council for the Voluntary Carbon Market's Core Carbon Principles. CBCO Portfolio buyers also receive ready-to-use marketing materials to share their sustainability story and impact with customers, team members, and other stakeholders. Contact us to learn more.

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