
Carbon Removal Tracking

➞ COLLECT, STANDARDIZE & SUBMIT DATA WITH
CARBONFUTURE'S DIGITAL TRUST INFRASTRUCTURE



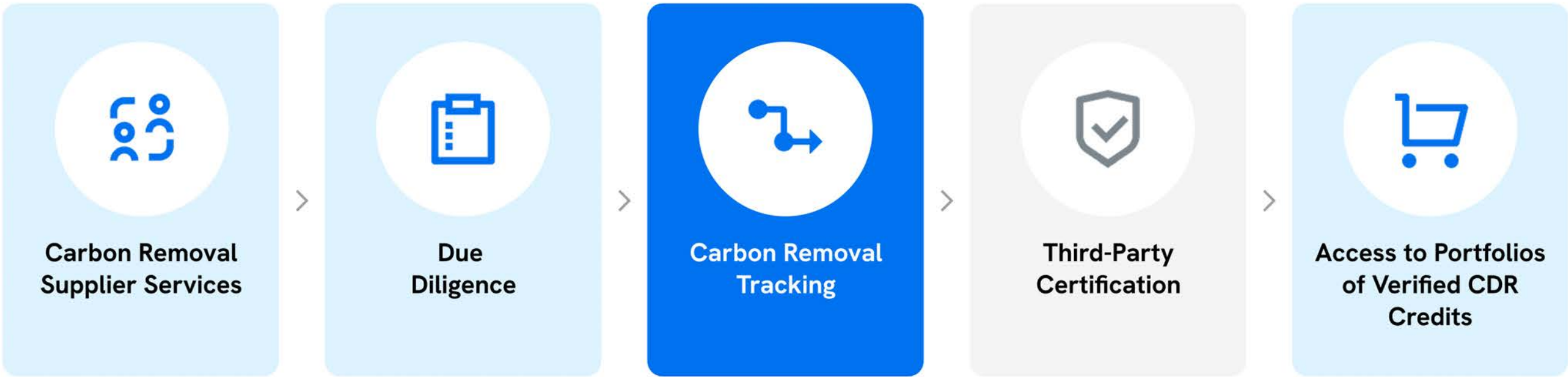
INTRODUCTION

Carbonfuture's digital Trust Infrastructure transforms how carbon removal data is managed—automating data collection, standardizing reporting, and aligning with third-party standards to ensure every carbon removal credit meets the highest bar of integrity.

Our system enables near real-time, end-to-end tracking of carbon removal activities—from carbon capture to durable storage. It flags anomalies early, accelerates third-party review, and creates full transparency and accountability for all stakeholders.

We support suppliers at every stage of their digital journey: whether they’re integrating directly via ERP or IoT systems, using our mobile app, or uploading data through Excel. As a flexible, standard-agnostic system, it makes certification and credit issuance more accessible today while preparing suppliers for future compliance frameworks.

CARBONFUTURE TRUST INFRASTRUCTURE FOR DURABLE CDR



Unlocking Trust and Scale in Carbon Removal

Organizations need high-quality carbon removal credits to reach net-zero goals quickly and confidently.

But today’s carbon removal market is held back by:

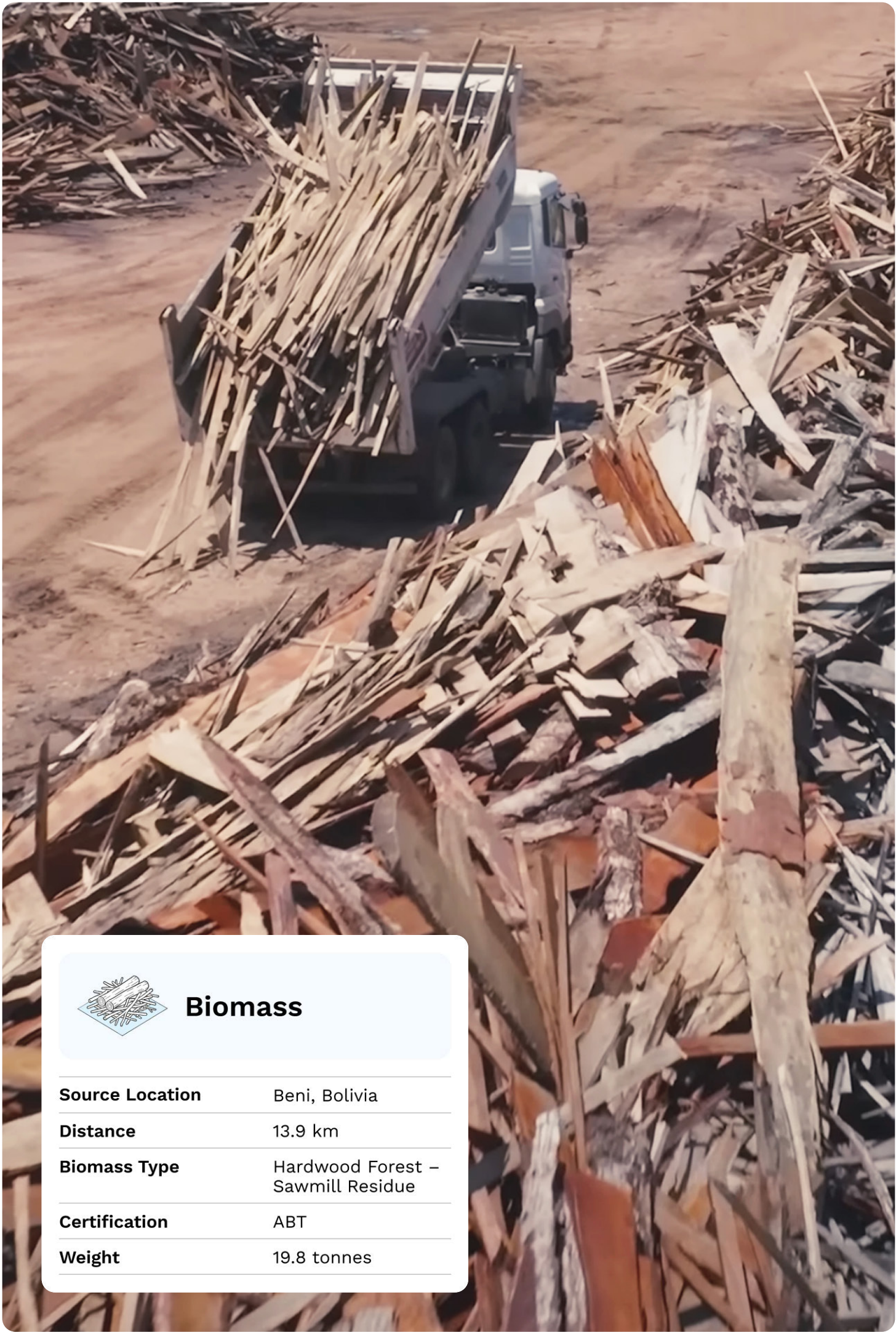
- ➔ Suppliers struggling with manual, fragmented data collection and delays in certification.
- ➔ Buyers facing uncertainty and reputational risk from unverifiable or low-quality credits.
- ➔ Standards and verifiers burdened with inconsistent, incomplete reporting.

With Carbonfuture's Trust Infrastructure:

- ➔ Suppliers get certified faster & connect to top-tier buyers.
- ➔ Buyers gain confidence with fully traceable, independently verified credits.
- ➔ Standards and verifiers access structured, reliable data that reduces workload and speeds up independent review.

THE RESULT

Faster certification for suppliers and stronger confidence for buyers.



WHAT

Ensuring Quality & Reliability of Credits with Carbon Removal Tracking

To ensure the effective and trustworthy management of carbon removals such as Biochar Carbon Removal (BCR), BECCS, and DACCS, it is essential to track how certain attributes—such as materials, their location, and ownership—change and cause emissions. Each of these technologies involves a complex series of steps and ownership changes that need to be considered for the greenhouse gas accounting of the process, and defining how much (net) carbon is removed and stored.

Carbon Removal Tracking provides a near-real-time, auditable data trail for every activity along the carbon removal value chain. It captures essential data about the creation of a carbon sink and submits it for third-party validation and verification. The issuance of CDR credits is facilitated by converting a supplier's real-world carbon removal efforts into verified digital records, confirming that these activities align with the criteria of third-party standards, such as Carbon Standards International (CSI), Isometric, or Puro. A complete chain of contracts ensures

that all parties involved are properly recorded. This provides the basis needed to prevent double-counting.

For each unique carbon removal process, Carbonfuture's Carbon Removal Tracking provides:

- ➔ All data required to calculate the net removal value in tCO₂eq, i.e., the gross removal potential and all emissions caused within the activity scope,
- ➔ a closed chain of contracts as the basis to prevent double-counting of carbon removal credits,
- ➔ and a verifiable carbon storage attestation, confirming durable and irreversible carbon storage.

By capturing and linking every activity, Carbon Removal Tracking turns real-world carbon removal efforts into verifiable, high-integrity credits. Whether credits are sold directly through Carbonfuture or via partners, they are always connected to our digital MRV, giving buyers unparalleled visibility into the impact they are investing in. For suppliers, Carbonfuture’s digital MRV system speeds up the third-party verification and certification, accelerates time to credit issuance, and drastically reduces the burden of buyer due diligence. All required data is already captured, eliminating the need for manual collection, spreadsheet tracking, or document sharing. By automating and standardizing reporting, Carbonfuture simplifies compliance with certification standards and buyer requirements.



WHY

A Key Puzzle Piece to Scaling High-Quality Carbon Removal

Carbon Removal Tracking is critical to scaling carbon removal with integrity. It ensures transparency, accountability, and efficiency across the entire carbon removal process.

Enhancing Transparency Through a Comprehensive Chain of Custody

With various stakeholders and shared ownership in carbon removal activities, a detailed carbon chain of custody is essential. Carbon Removal Tracking systematically creates this documentation, offering maximum transparency to all stakeholders while ensuring confidentiality and enterprise-grade data security. This encourages all participants to understand their roles in the value-creation process. By granting users access to detailed activity data, Carbon Removal Tracking fosters inclusivity in value chains and promotes equitable participation.

Ensuring Accountability & Liability

To achieve durable carbon removal, accurate net removal amounts and reduced reversal risks must be demonstrated. Carbon Removal Tracking documents storage locations

and responsible parties for every technique, creating the foundation for liability and ensuring accountability among suppliers, landowners, and credit buyers.

Substantiating Net-Zero Claims with Verified Records

Carbon Removal Tracking creates precise, verifiable records for each individual carbon removal. These records form the basis for issuing carbon removal credits via integration with third-party standards. Without such a system, claims of achieving net zero lack credible, data-based proof.

Simplifying Reporting with Automation

Monetizing carbon removal requires proof of adherence to third-party standards, not just physical delivery. Carbon Removal Tracking provides a user-friendly solution for CDR suppliers to automate the reporting of monitoring parameters for carbon removal accounting and attribute aggregation. This streamlines the process for suppliers to demonstrate that activities were conducted as intended and in adherence to these standards. At the same time, it streamlines data management among CDR suppliers and third-party auditors and standard bodies.

Streamlining Certification & Credit Issuance

Carbonfuture MRV+ goes beyond standard certification processes by leveraging our extensive experience with multiple standards. We've optimized the entire flow of verification, certification, transfer, retirement, and reporting, making it more efficient and reliable. Our advanced digital tools offer suppliers a smoother and more efficient path to achieving certification and selling credits on the carbon removal market.

Preserving Integrity Through Independent Incentive Structures

Carbonfuture acts as an intermediary between removal providers and verification organizations, ensuring independent oversight. This tracking relies on a third-party standard to set and uphold benchmarks for turning project efforts into removal certificates. By keeping decision-makers separate from those who benefit, this method avoids conflicts of interest. Thorough data checks (e.g., benchmarking biochar bulk density) and integration with carbon removal facilities and IoT systems, expand data accuracy, protecting the credibility of the entire process.

HOW

Effectively and Diligently Monitoring Carbon Removal

To ensure thorough and careful monitoring of each carbon removal, it's important to create a simplified, functional model that mirrors the actual journey from carbon capture to durable storage. This means setting clear project limits, gathering data regularly with precision for each step in the value chain, and maintaining accuracy. These systematic steps guarantee a reliable conversion of real-world processes into carbon removal certificates and ensure that all the factors needed to calculate the net removal value are considered.

Carbonfuture has developed a digital graph model that is able to capture this complex input data while remaining flexible and ultimately scalable. For each carbon removal credit a buyer purchases from Carbonfuture, our system provides a transparent end-to-end look-through by recording and streamlining the data for every step in the creation of the carbon sink. The tracking graph is the visual representation of this carbon removal data record. Attached to each step is the information required to calculate the net carbon removal, as well as all relevant confirmations of ownership along the chain of custody.

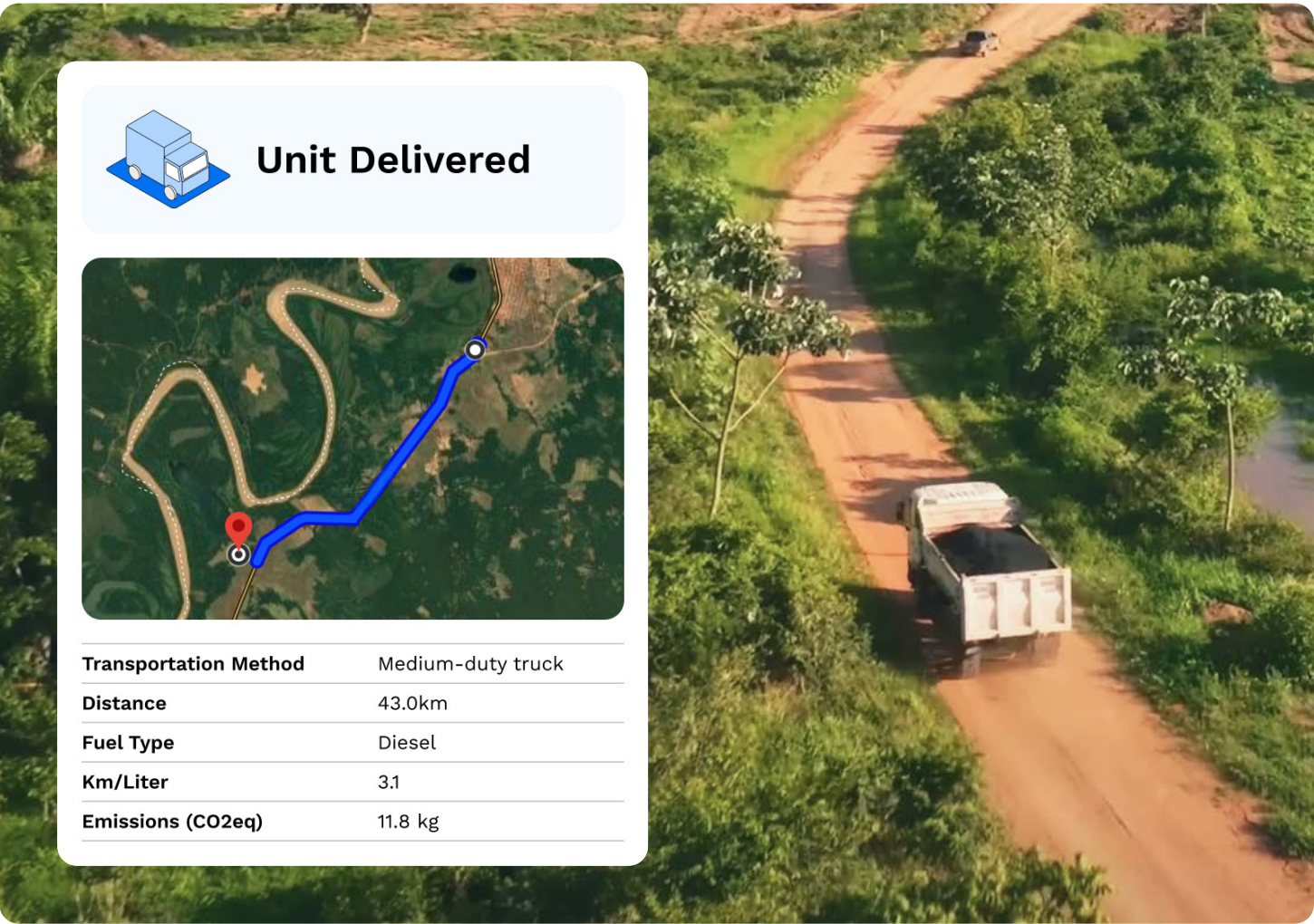


Repackage Unit

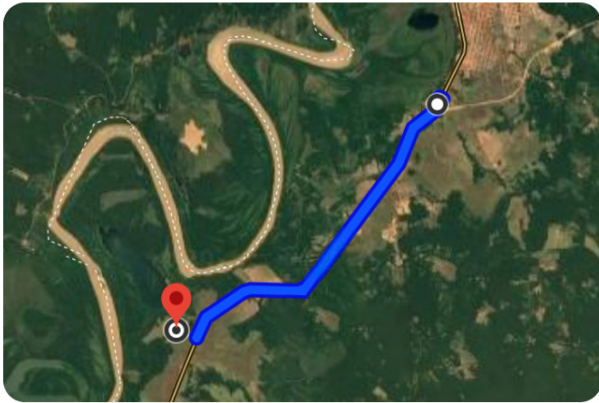
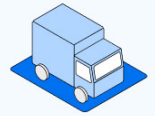


Previous ID	DALP3439
New Packaging ID	PLEX7321
Unit Status	Ready for Delivery
Repackaging date	July 27, 2025
Gross Weight	3.0 tonnes

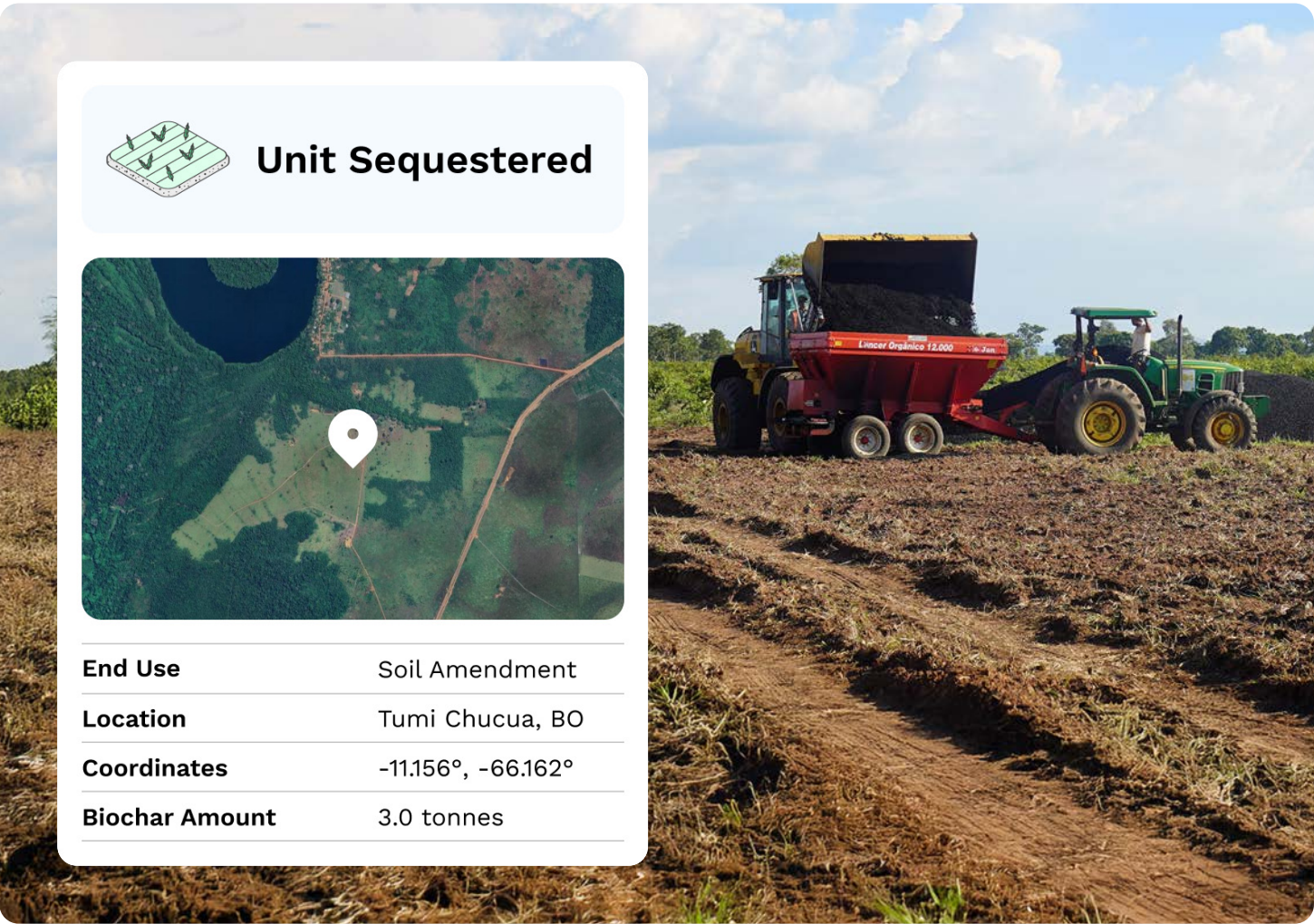
Providing transparency for how the carbon sink potential was established, in addition to confirming the durable and irreversible carbon storage, is what makes the environmental impact of the resulting carbon credit tangible and trustworthy. A closed chain of contracts provides the basis to prevent double-counting and enforce liability.




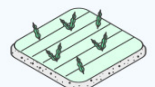
Unit Delivered



Transportation Method	Medium-duty truck
Distance	43.0km
Fuel Type	Diesel
Km/Liter	3.1
Emissions (CO2eq)	11.8 kg



Unit Sequestered



End Use	Soil Amendment
Location	Tumi Chucua, BO
Coordinates	-11.156°, -66.162°
Biochar Amount	3.0 tonnes

CONCLUSION

By meticulously tracking the complete carbon removal journey, Carbon Removal Tracking ensures transparency of carbon removal activities and supports net-zero claims with accurate records of long-term storage, accountability, and value creation.

For suppliers:

It reduces manual work, simplifies compliance with third-party standards, and builds trust with buyers.

For buyers:

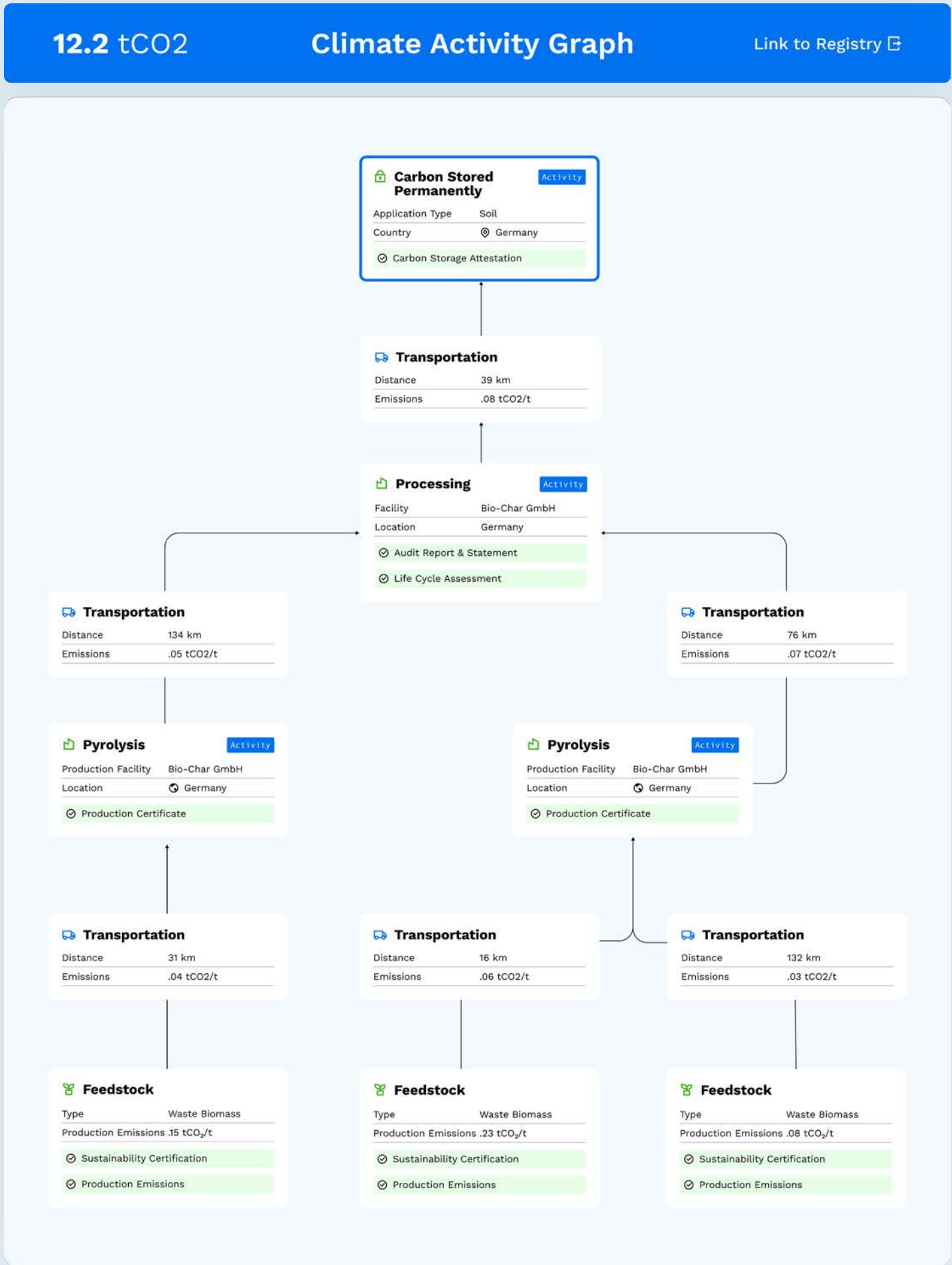
It provides full traceability and audit-ready proof of impact, substantiating net-zero claims.

For the carbon market:

It creates a scalable trust infrastructure that supports durable carbon removal at climate-relevant scale.

THE RESULT

Faster certification for suppliers, stronger confidence for buyers, and a reliable foundation for scaling high-quality carbon removal.





See how Carbonfuture can simplify
your project tracking from day one
and accelerate your path to certified
carbon removal credits.

Contact Us for a Demo

carbonfuture.earth