

NAUTILUS INNOVATION × DOUBLEHELIX TRACKING TECHNOLOGIES

The Verified Biogenic Carbon Statement

— by Nature's Barcode™

Frequently Asked Questions — for hospitality operators and asset owners

AUDIENCE

Operators · Asset owners · Developers

PREPARED BY

Nautilus Innovation with DoubleHelix

DATE

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THE BASICS

What It Is

Q. What is the Verified Biogenic Carbon Statement?

The timber in your building physically stores carbon — captured by the tree as it grew, locked into the structure for as long as the building stands. A cubic metre of structural timber typically stores biogenic carbon equivalent to around 0.9 tonnes of CO₂; dense tropical hardwoods store considerably more. Across a resort, that adds up to hundreds or thousands of tonnes.

The Verified Biogenic Carbon Statement (VBCS) is the independent document that proves it. It states the stored biogenic carbon — expressed as CO₂ equivalent — in the specific timber delivered to your project, verified by an independent third party, itemised to the actual components installed, and permanently recorded in a public register.

Q. Is this a carbon credit?

No — deliberately not. The statement is a verified factual claim about carbon stored in your building. It is not a tradeable credit, it cannot be sold or double-counted, and it makes no promises about carbon markets.

That boundary is what protects you. Offset and neutrality claims are under intense regulatory and media scrutiny; a verified statement of physical fact is not. You are never claiming to have offset anything — you are stating, with independent verification, what your building actually stores.

Q. How is it different from an EPD or an LCA report?

EPDs describe a product type in general — often on industry-average data — and LCA reports are typically produced once and filed. The VBCS is specific to your shipment and your building: issued per container at dispatch, tied to the components actually installed (structural elements referenced to the building model; other products at batch level), and kept alive through a scannable public record rather than buried in a report.

Q. Who is behind the verification?

The assessment is prepared under ISO 14064 methodology and independently reviewed and countersigned by DoubleHelix Tracking Technologies — a Singapore-based supply chain verification company established in 2006, known for scientific timber traceability including DNA and isotope testing. The statement is carried under Nature's Barcode™, DoubleHelix's established verification brand. Preparation and verification are structurally separated, and the roles are disclosed on the face of every statement.

Q. How do we know a statement is genuine?

Every statement carries a unique number and a QR code that resolves to its live entry in the public register: product, species, origin, volumes, stored carbon, chain-of-custody references, verifier's signature, and date of issue. Anyone — a guest, an auditor, a journalist, a buyer — can scan and check. A claim without a register entry behind it is not a VBCS.

THE VALUE

What It Does for You

Q. What does the operator get from this?

A sustainability story that survives scrutiny. Operational ESG programmes cover energy, water, and waste — but the building itself is usually invisible in the reporting. The VBCS fills that gap with verified, building-specific numbers you can use in:

- ESG disclosures and corporate reporting — embodied and stored carbon data at asset level, independently verified
- Brand and guest communications — a story anchored in checkable fact, not adjectives
- Certification and framework submissions — supporting evidence for sustainability-linked schemes
- Greenwashing defence — when a claim is challenged, the answer is a statement number, not a press release

Q. What does the asset owner get?

Three things, in increasing order of significance:

A verified credential at the point of sale. If the asset has a residential component, a defensible carbon position on the structure is usable in the sales conversation today — tangible, specific, and independently backed.

A permanent data record attached to the asset. The statement and its underlying documentation transfer with the building through refurbishment, refinancing, and sale — verified sustainability data becomes part of the asset's papers, like its title and warranties.

Preserved future value. The documented components retain their identity — species, grading, structural history. That keeps two doors open that demolition normally closes: participation in carbon frameworks if recognised pathways mature, and the residual value of the timber components themselves at end of life, which documented, re-certifiable material commands and undocumented salvage does not.

Q. What does the guest experience look like?

A discreet mark at the building with a scannable code. The guest scans and sees the story of the structure around them — where the timber grew, its certified journey, and the carbon it holds — presented as a verified record, source-map style. It turns the building itself into part of the sustainability experience, with every number checkable.

Q. Can individual villa or residence owners get their own statement?

Yes — because the data is captured at component level, the verified carbon position of an individual villa can be stated for its owner. For branded residences, that is a

closing-table differentiator: the buyer receives the documented carbon position of their own home as part of their purchase records.

Q. Does this help with future carbon markets?

It keeps the option open — honestly stated, no more. Voluntary market methodologies for carbon stored in wood construction exist and are maturing. If a recognised pathway becomes applicable to your asset, the verified, component-level dataset the VBCS creates is exactly what participation would require. Without the statement, that door closes permanently at construction; with it, the choice remains yours. We make no promises about market prices or eligibility — and you should be wary of anyone who does.

THE PRACTICALITIES

What It Involves

Q. What does it cost?

A small fraction of the timber package — and a rounding error against the asset. The data capture is embedded in the procurement process, so there is no capex line, no programme impact, and no site activity. Specific commercial terms are confirmed per project; the guiding principle is that the cost should never be the reason to decline, because the value case stands on the immediate deliverables alone.

Q. What do we have to do operationally?

Almost nothing. The work happens upstream — at the manufacturer and at dispatch — inside the procurement chain Nautilus already manages. Your decision is simply to include the statement in the project. Reporting outputs are delivered to your sustainability and communications teams in usable form.

Q. Can we add this later, after the building is finished?

No — and this is the one time-critical fact in the whole conversation. The verification window sits at dispatch, when the chain of custody is intact: species, origin, volumes, and documents are live and checkable. Once containers have shipped and the documentation has scattered across the supply chain, a credible statement cannot be reconstructed. The building will still store the carbon — but the ability to claim it, prove

it, and preserve its future value is lost. The decision is only available while the timber is moving.

Q. Does it affect the design or the construction programme?

No. The statement documents what is being built; it changes nothing about how. Where the design already uses demountable timber detailing, the statement additionally records the disassembly and reuse potential — value that is otherwise invisible — but it imposes no design requirements.

Q. What happens if the asset is sold, rebranded, or refurbished?

The register entry is permanent and the statement transfers with the asset. Ownership and operator changes do not break the record — that permanence is the point. At refurbishment or end of life, the documented component identities are what allow re-certification and reuse, extending both the carbon story and the material value into the next chapter.

Q. What may we actually say in public?

Cleared claim language accompanies every statement — a headline form ("This building stores X tonnes of CO₂ equivalent in verified timber — Statement No. XXXX"), a stakeholder form for reports, and a technical form for auditors. Equally important is what the statement does not support: "carbon neutral", "zero carbon", "offset", and "climate positive" are not claims this instrument makes, and we advise against using them alongside it. The discipline is the protection.

END OF LIFE — THE LONG GAME

Extending the Stored Carbon Beyond the First Building

Q. What happens to the stored carbon when the building reaches end of life?

Hospitality assets are typically repositioned or rebuilt on a 20–25 year cycle — but the timber doesn't stop storing carbon when the building comes down. If the components are reused as intended — a beam serving again as a beam, a panel as a panel — the carbon remains locked in, and the storage runway extends through the component's second life, and potentially a third.

The alternative is what happens today without documentation: structural timber leaves demolition as waste or woodchip, the storage ends, and the claim dies with it. The difference between those two outcomes is not the timber — it is the paperwork.

Q. How does the VBCS make reuse actually possible?

Before any structural component can be reused on another project, an engineer must be able to review and approve it. That review needs evidence, not assumptions: what the component is, how it was manufactured, what standards it was produced to, how it tested, what it carried, and how it was maintained.

This is exactly what the VBCS tokenises alongside the stored carbon. Each component's digital record binds together:

- **The stored biogenic carbon** — the verified tCO₂e figure for that component
- **Manufacturing compliance data** — production standards, factory control records, certifications
- **Testing records** — witnessed batch tests, grading, treatment documentation
- **The structural engineer's endorsement** — approved calculations and as-built records against the installed components
- **Component identity and service history** — the individual reference for every element, with inspection records maintained over the building's life

A future engineer opens the component's record and finds the complete evidence base needed to re-certify it for use as intended on the next project. Without that record, reuse is practically impossible — no responsible engineer approves an undocumented structural member. With it, the component arrives at end of life pre-graded and approvable.

Q. Why does this matter to us now, at construction?

Because the record can only be created now. The manufacturing data, test records, and engineering endorsements exist at the point of production and installation — they cannot be recovered from a twenty-five-year-old building. Capturing them today is what turns your end-of-life event from a demolition cost into two preserved assets: the continuing carbon storage, and structural components with documented, re-certifiable value in a market where reclaimed timber already commands a premium — for material with far weaker documentation than yours will have.

For the operator, the story compounds too: a building whose components are designed and documented to live again is circularity in substance, not in slogan — verified, component by component.

IN SUMMARY

The Value in One Paragraph

Your building already stores the carbon. The Verified Biogenic Carbon Statement is the independent proof that lets you claim it — in your reporting, your brand, your sales suite, and your asset papers — with every number checkable by anyone, forever. It costs a rounding error, changes nothing about how you build or operate, and it tokenises each component's stored carbon together with the manufacturing and engineering evidence a future engineer needs to approve its reuse — extending the carbon storage, and the material's value, beyond the life of the first building. It is only available while the timber is shipping. The claim is defensible because it promises nothing it cannot prove.

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Commercial in confidence. The Verified Biogenic Carbon Statement is a verified factual claim regarding stored biogenic carbon in delivered product; it is not a carbon credit or tradeable instrument.