

Navigating Risk in Maritime Book & Claim

A Procurement Strategy Guide for Low-Emission Shipping | Published by Carbon3



Executive Summary

The voluntary book & claim market for maritime decarbonization is gaining significant momentum, driven by new accounting standards, buyers alliances, and corporate Scope 3 targets. The book & claim model successfully bypasses the physical logistical barriers of bunkering and transporting alternative fuels by separating environmental attributes from physical molecules. However, the market is characterized by high complexity, inconsistent guidelines, and divergent additionality frameworks. For corporate buyers, this fragmentation creates a steep learning curve and shifts a substantial due diligence burden onto procurement teams. This briefing evaluates the core market risks, compares major registry frameworks, and outlines how the Carbon3 platform resolves these barriers through an audit-ready, institutional-grade market infrastructure.

Four Core Decision-Making Risks for Buyers

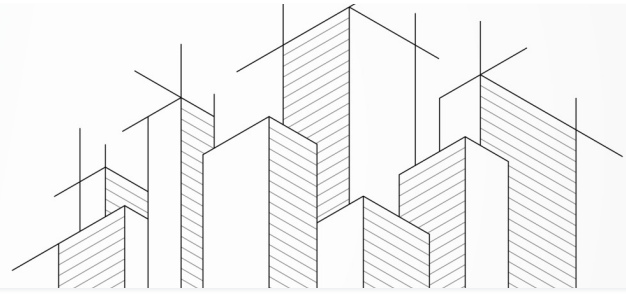
When procuring maritime environmental attributes, sustainability and procurement teams must manage four key categories of risk depending on their chosen compliance path:

- 1. Credibility and Double-Claiming (Greenwashing) Risk:** This occurs when the emissions reduction benefits of alternative fuels are claimed both by the shipowner to meet mandatory regulatory obligations (e.g., the European Union Emissions Trading System or EU ETS) and simultaneously by a voluntary buyer for Scope 3 disclosure. Overlapping claims undermine voluntary additionality and expose corporate buyers to public criticism and audit failures under evolving disclosure laws.
- 2. Cost and Premium Volatility Risk:** Strict additionality frameworks require certificate buyers to avoid regulatory overlap completely. This means buyers cannot benefit from avoided compliance costs passed down by shipping carriers, which results in substantially higher premiums. Conversely, choosing lower-cost certificates that utilize regulatory double-counting increases corporate exposure to greenwashing claims.
- 3. Operational and Administrative Diligence Risk:** Due to market fragmentation, most registries and platforms use a disclosure-only approach. This shifts the entire burden of verifying fuel feedstocks, life cycle assessment (LCA) pathways, and regulatory isolation onto the buyer, demanding extensive internal team hours and specialized expertise.
- 4. Future Compliance and Reporting Policy Mismatch:** The accounting standards landscape is actively evolving. Major bodies like the Science Based Targets initiative (SBTi) recognize market instruments but do not yet prescribe rigid additionality guidelines, while the Greenhouse Gas Protocol (GHGp) is drafting formal Advanced Market Instruments guidelines expected in 2028. Purchasing certificates today that fail to meet future criteria represents a major policy mismatch risk.

The Maritime Additionality Framework Matrix

To help organizations choose an approach that aligns with their risk tolerance and operational capacity, the matrix below evaluates the leading additionality frameworks and registries, highlighting how the Carbon3 platform offers pre-screened security.

Framework / Registry	Additionality Assessment Method	Diligence Burden	Key Risk to Buyer	Key Benefit to Buyer
AIM Platform	Uses a structured decision tree at the intervention level to evaluate if regulatory drivers are compatible with voluntary claims.	Framework-defined via decision tree.	May conflict with carrier-specific operations or registry rules.	Clear, objective logical flow for determining regulatory compatibility.
RSB Book & Claim	Categorizes regulatory contexts to provide transparency, but does not prescribe strict inclusion or exclusion rules.	Shifted fully to the buyer to assess categorized contexts.	High administrative burden to independently evaluate disclosures.	Maximizes market flexibility and fits diverse procurement options.
Smart Freight Centre (SFC)	Categorizes regulatory scenarios and outlines how suppliers must demonstrate additionality under each case.	Shared (suppliers demonstrate; buyers verify).	Older versions (e.g., 2023) risk becoming outdated as updated frameworks emerge in 2027.	Provides transport-specific guidance tailored to logistics accounting.
SBTi Net-Zero Standard 2.0	Acknowledges environmental certificates but does not provide explicit rules for defining additionality.	Fully shifted to the corporate buyer.	High future policy risk; certificates may fail to qualify under finalized 2028 rules.	Authoritative backing of certificates as science-based tools.
Katalist	Screens certificates upfront against the additionality criteria outlined by the Global Maritime Forum.	Registry-managed (pre-screened assets).	Pre-screening narrows the available pool of certificates.	Lowest buyer-side diligence burden; high baseline credibility.
123Carbon	Employs a disclosure-based approach, showing regulatory conditions but leaving eligibility open.	Fully shifted to buyers and suppliers.	High risk of purchasing low-additionality credits without heavy vetting.	Maximizes market flexibility and available certificate volume.
Carbon3 (C3)	Mandates third-party verification (DNV GL and ISO 14064-2) and strict additionality testing prior to credit issuance.	Platform-managed (pre-screened prior to issuance).	Strict upfront vetting may restrict instant credit supply; market trading introduces price volatility.	High credibility and liquidity. Allocation-aware accounting prevents double-counting, backed by a tamper-evident audit trail.



Carbon3: The Infrastructure for Scope 3 Decarbonization

While traditional offsets sit outside the corporate value chain and static bilateral contracts are highly illiquid, Carbon3 offers a new paradigm. We transform Scope 3 emissions reductions, measured in tCO₂e, into tradable, shareable financial assets. Our infrastructure shifts decarbonization from an unrecoverable administrative expense to a strategic capital asset.

Most maritime certificates traded today are environmental attribute certificates (EACs): the attribute is split from the fuel, but nothing requires the buyer to sit in the chain that burned it. An inset credit adds exactly that constraint — the reduction stays inside the buyer's own value chain, so it works against the Scope 3 inventory itself rather than as a separate claim parked beside it. That boundary is also what makes the additionality question answerable: C3 knows which voyage, which fuel batch, and which regulatory claim was already made against it before a credit is ever issued.

Feature	Traditional Offsets	Bilateral Scope 3 Agreements	Carbon3 Platform
Asset Type	External (avoidance or offsets outside value chain)	Internal (static reporting within value chain)	Internal (allocatable, tradable, within value chain)
Liquidity	High (commodity markets)	None (illiquid bilateral contracts)	Market-enabled (liquid platform)
Benefit Sharing	None	Fixed, often opaque	Dynamic, allocation-based
Issuance Time	12 to 18 months	Varies, highly inconsistent	Targeted in weeks, not months
Security	Standard registry records	Contract records and emails	Tamper-evident audit trail on ledger

About Carbon3 (C3)

Carbon3 turns verified supply chain emissions cuts into tradable inset credits. A shipper switching to lower-emission fuel produces a credit that can be priced, split between partners, and reported against — an asset, not a sunk cost.

Mapped against the four risks on page one, here is what that changes for a buyer:

- 01 Double-claiming.** Every credit clears third-party verification (DNV GL, ISO 14064-2) before issuance, and allocation-aware accounting stops the same reduction being counted twice.
- 02 Cost volatility.** Because credits are shareable, the cost of the underlying fuel switch is split across the supply chain instead of loaded onto one buyer's premium.
- 03 Diligence burden.** Verification happens before a credit ever reaches the market — buyers inherit a pre-screened asset, not a pile of disclosures to check themselves.
- 04 Policy mismatch.** Credits are built on standards already in force — SBTi, the GHG Protocol, ISO 14064 — so they're positioned to hold up as frameworks like GHGp's 2028 guidance get finalized.

More at carbon3.net.