

Fraud-Resistant Certification under the IMO

Discussion Note

The Climate Ethanol Alliance (CEA) welcomes the progress achieved in developing the draft Guidelines on Requirements and Procedures for the Recognition of Sustainable Fuel Certification Schemes (SFCS). The guidelines provide a necessary foundation for scheme recognition, auditor and economic-operator requirements, reporting, complaints, review, and the classification of non-conformities. They should be advanced as the basis for completing the IMO's certification architecture.

Recognition procedures are, however, necessary but insufficient. Once a certified greenhouse-gas fuel intensity (GFI) creates surplus units, avoids remedial unit purchases, or qualifies for rewards, a certificate becomes a financial instrument. The system must therefore be designed against deliberate adversaries, not merely clerical error or occasional non-conformity.

CEA supports timely progress on the SFCS guidelines, potentially on an interim basis, with further work to strengthen independent, properly funded investigative and oversight layer within the SFCS Assessment Group (SFCS AG). Claims concerning feedstocks, production facilities, and environmental attributes should be independently substantiated by reliable evidence of feedstock sourcing, production, and chain of custody, including through mass-balance systems, without requiring physical segregation. To safeguard integrity, unsubstantiated claims should be subject to conservative defaults or claim-specific restrictions.

Progress in the Draft SFCS Guidelines - and the Remaining Gap

The draft guidelines usefully address the governance of recognised schemes, requirements for certification bodies, auditors and economic operators, application and recognition procedures, and ongoing monitoring and reporting. Their well-to-tank focus can provide a technically coherent basis for verifying upstream sustainability and GFI claims.

The proposed classification of critical, major, and minor non-conformities is also a useful foundation. Intentional fraud, deliberate misstatement of feedstock or GFI values, and falsification of documents should be treated as critical failures, with prompt publication, suspension, withdrawal, and compliance consequences. Complaint procedures, access to certification information for national authorities, periodic review, and revocation of recognition for systemic failure are all necessary elements.

These mechanisms largely describe what schemes should do after a problem is found. They do not by themselves establish who will discover concealed fraud, compel evidence, reconcile claims across borders and registries, or impose consequences that exceed the expected gain. Reviews based mainly on scheme reporting or complaints, even when combined with five-year recognition cycles, cannot substitute for continuous, risk-based investigation.

Biofuels Fraud: Lessons from RED II for IMO SFCS

Experience under the EU Renewable Energy Directive (RED II) shows how fuel certification can become a high-reward, low-risk opportunity for fraud when verification is weak, responsibility is dispersed, and penalties are absent or delayed. Preferential treatment of waste- and residue-based fuels created strong incentives to relabel non-privileged feedstocks as privileged feedstocks. Certification bodies could approve claims and volumes that public authorities were not equipped or willing to test against physical availability.

The structural problem was not the existence of voluntary certification alone, but the absence of a supervising authority with system-level investigative and enforcement capacity across the supply chain. Where the producing State benefits from exports while compliance losses fall abroad, the IMO cannot assume that every jurisdiction will aggressively police misconduct whose principal victims are foreign shipowners, consumers, and honest producers.

The risk is amplified in maritime transport: volumes are larger, supply chains are longer and global, and the value of compliance claims may be substantial. If opaque supply chains are treated as fully fungible and fully creditworthy, the market will gravitate toward the cheapest certificates rather than the most credible fuels. Systemic fraud would undercut transparent producers, suppress investment in genuine low-GFI capacity, divert resources made available through the IMO Mid-term GHG reduction measure, and erode confidence in the framework.

Five Principal Fraud Pathways

1. FEEDSTOCK SUBSTITUTION

A plant or trader may claim a preferred waste, residue, or low-carbon feedstock while using a cheaper conventional material. Used cooking oil can be mixed with virgin vegetable oil; residues can be relabelled as wastes; crop origin can be misstated; and documentation can be created by entities that never handled the claimed material. Individual records may appear plausible while aggregate certified output exceeds realistic regional availability.

2. ATTRIBUTE MULTIPLICATION

The same low-carbon attribute may be sold twice, issued under two schemes, carried across separate registries, or claimed both under a national programme and for IMO compliance. A physical batch may be sold while an affiliated trader or different auditor recreates an equivalent maritime claim. Without interoperable registries and mandatory retirement, the IMO may reward an emissions reduction that another programme has already purchased.

3. BOUNDARY MANIPULATION

Lifecycle values depend on system boundaries and allocation choices. An operator may omit upstream fertilizer emissions, use an unrepresentative electricity contract, assume implausibly low methane leakage, exclude drying or compression, select a favourable co-product method, or claim avoided emissions that are not additional. These choices can be presented as technical judgments rather than false documents, enabling scheme, auditor, consultant, database, or methodology shopping.

4. PAPER EXPANSION THROUGH TRADING CHAINS

Each additional intermediary creates an opportunity to alter a sustainability declaration, split a batch, aggregate incompatible material, change origin, or replace a certificate number. Fragmented oversight compounds the risk: the flag State sees the bunker document, the auditor sees a client file, the producing State sees a local sale, and no authority sees or reconciles the complete transaction.

5. FALSE PROJECT ADDITIONALITY

A project may seek support from a funding mechanism established under the IMO Mid-term GHG reduction measure for capacity that would have been built anyway, overstate incremental output attributable to support, or continue receiving rewards after subsidised equipment is idle. Existing fuel can be routed through a nominally new facility, while renewable electricity, captured carbon, biomethane, or another environmental attribute may be claimed for the project even though it has already been sold elsewhere.

Accountability and Enforcement Through the SFCS AG

For the IMO Mid-term GHG reduction measure, including the Net-Zero Framework, to maintain environmental integrity and market credibility, accountability must be a core regulatory function. The SFCS AG should not be limited to reviewing applications and periodic reports. It should be constituted as a permanent, operationally independent IMO body with a clear investigative and oversight mandate, protected resources, access to specialist expertise, and authority to initiate and coordinate risk-based reviews, identify potential fraud and systemic certification failures, request the information necessary to assess compliance with the IMO Mid-term GHG reduction measure, and determine certification consequences.

The strengthened SFCS AG should be responsible for:

- overseeing IMO-recognised SFCS and testing whether their controls work in practice;
- initiating and coordinating risk-based reviews, including targeted audits and investigations across fuel supply chains, with a focus on high-risk pathways and jurisdictions;
- reconciling certified output with relevant production and supply-chain evidence through certification bodies and, where necessary, competent national authorities;;
- maintaining or supervising interoperable registries with unique identifiers and mandatory retirement of environmental attributes;
- requesting recognised schemes and economic operators to provide information and records necessary and proportionate to assess compliance, and conditioning recognition or eligibility on cooperation with audits and inspections conducted under the applicable legal framework;
- cooperating with and referring matters to the competent flag State, port State or national authorities where sovereign powers are required, including compulsory production of records, inspection of facilities, freezing of proceeds, or civil or criminal enforcement; those authorities should exercise such powers under their domestic law and report relevant outcomes back to the SFCS AG;
- identifying potential fraud, gross negligence, reckless certification, and systemic certification failures; and

- issuing or recommending corrective, compliance, recognition, and punitive measures under the authority conferred by the IMO Mid-term GHG reduction measure and its implementing instruments.

DIRECT AND PROTECTED RESOURCING

The SFCS AG must have sufficient, continuous and protected funding to perform its investigative and oversight function independently. This should be provided through a ring-fenced allocation from the economic mechanism adopted as part of the IMO Mid-term GHG reduction measure administered transparently and independently of the entities subject to oversight.

VERIFICATION ARCHITECTURE

Eligibility for verified treatment should depend on the maturity of the underlying certification, audit and regulatory framework, not a pathway's maritime trading history. A pathway new to ship bunkering should remain eligible where a mature, independently audited system, such as Brazil's RenovaBio/ANP framework or the U.S. Renewable Fuel Standard, provides sufficient assurance over feedstocks, production facilities, GHG attributes and chain of custody.

Pathway-specific claims may be verified through the IMO-recognised certification architecture or another established regulatory or certification system providing equivalent assurance. Where a claim cannot be adequately substantiated through either route, conservative default values or restrictions on the affected claim should apply, with an opportunity to provide further evidence or take corrective action.

High-value pathways should undergo unannounced inspections and forensic mass-balance audits. Auditors should be rotated or independently assigned and funded, with schemes and auditors facing de-recognition, exclusion or liability for reckless certification.

SANCTIONS AND COMPLIANCE CONSEQUENCES

Where fraud, material misrepresentation, or gross certification error is established through the strengthened SFCS AG process:

- affected fuel volumes should be disallowed for IMO compliance purposes;
- the lifecycle GHG intensity of fraudulent fuel should be deemed 200 gCO₂e/MJ for compliance calculations;
- affected units and rewards should be cancelled or repaid, with a multiplier sufficient to remove the expected gain from fraud;
- the producer, trader, scheme, certification body, and responsible auditor should face proportionate multi-year exclusion where culpable;
- recognised schemes responsible for systemic failures should face suspension or withdrawal of recognition;
- decisions should be published and appropriate cases referred to national civil or criminal authorities; and
- ships that relied in good faith on a facially valid certificate should have a defined cure process, without allowing the commercial chain to retain fraudulent proceeds.

Consequences should not be defeated by a bare claim of lack of knowledge. Compliance responsibility must remain with regulated entities, while culpability, available cure, and recovery along the commercial chain are addressed through clear rules.

Support for Timely Progress and Further Improvement

CEA welcomes the substantial work undertaken to develop the draft SFCS guidelines and supports their use as the basis for completing the IMO certification framework. Recognition rules, mass-balance accounting, non-conformity classifications, complaints, reporting, and review procedures are important building blocks. Their timely development can give the fuel supply chain a clearer basis on which to prepare.

CEA suggests progressing the SFCS guidelines on an interim basis, with closing the enforcement gap addressed in the next stage of work. This should include strengthening the SFCS AG as an independent, properly funded investigative and oversight layer, working with Member States and competent national authorities where sovereign enforcement powers are required. It should be supported by evidence-based verification that accommodates mass balance without requiring physical segregation, interoperable registries and a verification approach that recognises mature, independently audited regulatory or certification systems where they provide equivalent assurance. Penalties should exceed the expected gain from fraud. These safeguards should be designed into the IMO Mid-term GHG reduction measure before high-value compliance claims become systemic.

The lesson from RED II is clear: **credibility must be designed in - or it will be priced out.** Certification can support the IMO Mid-term GHG reduction measure, but certification without effective enforcement would expose honest producers and genuine decarbonisation investment to a global market in counterfeit carbon performance.