

IMO Net-Zero Framework: Pathway to an (imperfect) compromise in December

With the resumed extraordinary session of the IMO Marine Environment Protection Committee (MEPC) due in December, the debate has shifted from whether a global framework should exist to what shape it takes. The meeting is a key moment in this complex technical and political process, where countries' interests diverge and the devil is in the details.

To get a view of the direction, HySights spoke to Rafik Ammar, Policy Director of the e-NG Coalition and Coordinator of the Future Fuels for Maritime Alliance.

Three sticking points

Ammar identifies three unresolved issues, in order of difficulty: the economic element (a Fund, a Facility, or no financial mechanism at all); the trajectory, where a softer start has been broadly accepted but its pairing with a 2040 checkpoint remains open; and the incentive for zero and near-zero (ZNZ) fuels, which could be a monetary reward, a multiplier, or both. Several delegations oppose a centralised fund held by the IMO; some argue that MARPOL Annex VI was designed for technical rules, and that an economic element would require a separate convention.

Alternatives include a Facility managed by an existing international financial institution, and Japan's direct contribution scheme run through IMO-accredited bodies. Ammar's test for any model is whether the reward is "predictable, multi-year and assignable in a fuel supply contract".

The September report describes the two revenue-generating compliance options as requiring "significant work and deliberation", and for the first time lists a



Rafik Ammar | Policy Director of the e-NG Coalition and Coordinator of the Future Fuels for Maritime Alliance

technical-only approach. The guidelines (certification, chain of custody and the reward modules) and the life cycle assessment (LCA) framework were deferred in full to the intersessional working group in November, one week before MEPC 85.

Ammar nonetheless sees a willingness to land somewhere, as having nothing would cost more in terms of resources, energy and climate than having an imperfect solution. MEPC 84 deferred the

framework rather than weakening it, and the November submissions from the UAE, Iran, Japan, Korea, and Norway are "the papers of a negotiation looking for a landing zone". He expects December to produce agreement on a revised text rather than a clean final adoption.

The fund and the two tiers

Under the approved text, ships whose fuel intensity falls between the stricter direct compliance target and the less stringent base target pay US\$100/t (Tier 1), while deficits beyond the base target are priced at US\$380/t (Tier 2). Ammar expects the two-tier structure to survive, but the gap between the targets is negotiable. "The gap between the two targets is the revenue dial," he said. Norway's submission notes that the direct compliance target sits 13 percentage points above the base target and generates roughly US\$10 to 15 billion a year; halving the gap would roughly halve the revenue.

Without revenue, the trajectory, Tier 2, and surplus unit (SU) trading would still function, but the SU price would be set by the cheapest compliant fuel, currently biofuels and bio-LNG, leaving no first-mover premium for e-fuels. "A technical-only framework leads to a different destination, not a slower route to the same one," he said.

Timing adds pressure. Under the acceptance procedure, a December 2026 adoption would mean entry into force in spring 2028 at the earliest, and a slip into 2027 would push first compliance to 2029 or 2030. The 2050 goal is not expected to move, but each year lost at the start steepens the curve at the end. The e-NG Coalition supports a softer start only if it is paired with a 2040 checkpoint written into the text now.

Multipliers and rewards

The approved ZNZ thresholds are 19 gCO₂eq/MJ or below until the end of 2034 and 14 gCO₂eq/MJ from 2035. A multiplier would give ships extra compliance

credit, in the form of additional surplus units, for the emissions they avoid by using ZNZ fuels, either instead of or alongside a monetary reward. China, the world's largest shipbuilder and a beneficiary of a single global rulebook, revived the multiplier concept in September, as an alternative or a complement to a monetary reward.

Some delegations have objected that a multiplier cannot replace a monetary reward: as a substitute for the economic element, it would remove the revenue that funds both ZNZ rewards and support for a just and equitable transition (JET) for developing countries. Ammar's concern is that a multiplier helps shipowners comply without helping producers finance supply. "Flexibility is not finance," he said. The e-NG Coalition supports a multiplier as a complement, with caps, review, and a sunset date, but not as a substitute.

To date, there is no decision to scrap negative values for clean fuels. A bracketed sentence in the draft reward module would count values below zero as zero for reward purposes, following the CORSIA precedent; fuels above zero would still be rewarded on the full distance to the 93.3 gCO₂eq/MJ reference value. The sentence remains in brackets, to be settled by the working group and MEPC once the methodology for avoided emissions is agreed.

Fuel groups and "commercially viable" fuels

Two concepts could weaken the distinction between fossil and renewable fuels. The first concerns availability. Ideas circulating in the negotiation would assess availability by "fuel group", placing fossil LNG, bio-LNG and e-LNG in one category, while a separate proposal would delete the carbon source indicator from the Fuel Lifecycle Label, making them indistinguishable. Ammar regards the US as credible on the molecule: its paper ISWG-GHG 22/4 argues that avoided manure methane can be counted within the well-to-tank methodology. It is not yet credible on

market design: the test is whether it supports keeping renewable and fossil methane distinguishable.

The second concerns affordability. The proposal from Argentina, Liberia, and Panama sets the target using only "commercially viable" fuels: no more than 15% above the price of very low sulphur fuel oil, at least 5% market share, plus port coverage and scalability tests. Modelling by the e-NG Coalition finds that at 2026 prices LNG fails the affordability test (at about +45% per GJ), leaving a target that stays above the 2008 reference level through 2050. At 2025 prices LNG qualifies, mainly because of boil-off gas on LNG carriers, but the target still reaches only about 6.5% below 2008 by 2050, against 65% by 2040 for the base target in the approved text. E-fuels never qualify.

Support for the proposal is limited, but it shows that the concept is migrating: Korea's latest paper applies it to the base target only, while keeping the direct compliance target above it. "LNG can be a bridge, but a bridge needs a far bank: a 2040 trajectory, a ZNZ reward, and renewable methane kept distinguishable. Without those three, it is a pier, not a bridge," Ammar said.

A reason for careful optimism is US engagement on the technical file. Its paper on avoided manure methane, and earlier work on regional approaches to land-use change, reflect strong domestic interest in renewable natural gas and crop-based fuels. But it is too early to cheer: a proposal to remove the carbon source indicator from the Fuel Lifecycle Label (ISWG-GHG 22/4/1) would erase the distinction between fossil and renewable molecules, in a framework whose effectiveness lies in the details.

On certification, the draft guidelines retain mass balance. For renewable methane, which reaches ships through gas grids, four parameters will decide whether

it can be certified at all: the balancing period, the geographic boundary, recognition of interconnected infrastructure and virtual liquefaction.

What to watch in December

Ammar expects the outcome to turn on four questions: the width of the gap between the two tiers, whether a 2040 checkpoint is written into the text, whether the ZNZ incentive remains a reward, and whether renewable methane stays distinguishable from its fossil equivalent. For clean fuel producers, the answers will determine whether the framework creates a premium that supports final investment decisions, or a compliance market priced at the cheapest fuel.

For further insights on how the IMO Net-Zero Framework outcome shapes clean fuel investment, including project bankability, FID readiness, and offtake opportunities for e-fuels and bio-LNG: contact@hysights.com