NH_3X

METHODOLOGY BRIEF

NH_3X OVERVIEW

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This brief provides a concise overview of the NH_3X benchmark methodology.

Methodology overview

NH_3X is a weekly methodology-based reference price for hydrogen-based, energy-grade ammonia. It is designed to provide a structured and repeatable benchmark reference for a market that remains early-stage, project-led and still limited in transparent price discovery. The benchmark is intended to support comparability, valuation discipline and benchmark-oriented pricing context in an emerging market environment where independent reference structures remain limited.

Market purpose

The market for hydrogen-based, energy-grade ammonia is developing across multiple jurisdictions, corridors and project structures, but still lacks a consistent independent reference point for valuation, comparison and benchmark-oriented pricing discussions. NH_3X was developed to address this gap through a methodology-based weekly reference intended to support greater structure, comparability and pricing transparency for industrial market participants.

Market scope

NH_3X has a global benchmark orientation with primary relevance to GCC, European and Asian market clusters. It focuses on hydrogen-based, energy-grade ammonia used as a decarbonization vector in industrial energy systems, including hydrogen carrier use, reconversion pathways and infrastructure-linked energy applications. Agricultural, fertilizer and urea-related ammonia applications are outside the intended benchmark scope.

Product definition

The benchmark applies to anhydrous liquid ammonia intended for industrial energy use. Benchmark-eligible product is defined as high-purity ammonia used as a hydrogen carrier or synthetic energy vector, supported by documented low-carbon hydrogen origin and recognized certification or traceability logic. Product categories lacking verifiable carbon-intensity documentation, certified origin or auditable lifecycle support are excluded from benchmark eligibility.

Methodology approach

NH_3X is a model-derived, non-traded benchmark built through a documented modular framework. The methodology uses observable, quantifiable and rules-based input elements to produce a weekly reference value. It is structured to support replicability, consistency, traceability and methodological discipline across publication cycles. NH_3X is not designed to represent a traded spot quote or a market-clearing transaction price, but a benchmark-oriented reference for structured market use.

Component structure

NH_3X is built from seven benchmark components covering production cost, logistics and freight, reconversion cost, certification cost, carbon-intensity adjustment, macro regime premium and risk premium. Together, these components form the weekly NH_3X reference output within a fixed methodological structure and reflect the broader infrastructure, certification, carbon and market conditions relevant to energy-grade ammonia.

Assessment framework

NH_3X is assessed on a rolling seven-day basis from Monday 00:00 to Sunday 23:59, Europe/Berlin, and published on Monday at 09:30, Europe/Berlin. Inputs are standardized by timing, unit and currency conventions and are subject to sourcing hierarchy, validation logic and controlled fallback rules where required. This framework is intended to preserve consistency, comparability and methodological control across weekly benchmark cycles.

Intended use

NH_3X is intended to support market participants as a benchmarking reference, a comparison point for market offers, a tool for internal valuation, a shadow benchmark in commercial discussions and a reference input for early contract valuation support. Its role is institutional and comparative rather than speculative or retail-facing.

Governance and publication

NH_3X operates under a documented governance, revision and publication framework with defined methodology authority, controlled versioning and explicit publication rules. Weekly bulletins are published under fixed standards for timing, format and component disclosure. Methodological changes are governed through formal version control and documented revision logic.

Status and access

NH_3X Methodology v1.7 is the active methodology framework linked to Formula Version NH_3X_t v1.3, effective from Calendar Week 13 / 2026. A concise NH_3X Methodology Brief may be provided for market participants seeking an overview of benchmark scope, logic and intended use. Full methodology access remains controlled.