CONTROLLED EXTERNAL REGULATORY SUPPLEMENT

EU CBAM 2026

External Supplement Appendix

Regulatory Parameter Versioning, Retrospective Recalculation and Evidence Continuity

A controlled external regulatory reference layer for EMJ.NEXUS evidence infrastructure. This edition governs the use of Commission Implementing Regulation (EU) 2026/1740 and the corrected CBAM default-value regime without amending the canonical 128 MME Mapping.

CONTROLLING RULE CBAM sources may govern external regulatory parameters, calculation inputs, product classification evidence and recalculation triggers. They do not amend EMJ.NEXUS core architecture or transfer legal, customs, verification or declarant authority to EMJ.LIFE.

Control field	Controlled value
Document code	EMJ-EXT-EU-CBAM-2026-APPX
Version / edition	v1.2 | Global enterprise-application edition under Regulation (EU) 2026/1740
Issue date	11 August 2026
Control status	CONTROLLED EXTERNAL REGULATORY SUPPLEMENT - BINDING SOURCE / NON-AUTHORITATIVE APPLICATION
Applies to	IP02, 128 MME Mapping, Evidence Package Specification, DOI Source Data Schema, Enterprise DOI Landing Page Specification and Supply Chain Node Management
Core architecture	UNCHANGED
Permitted effect	Versioned regulatory reference, classification evidence, calculation lineage, impact identification, enterprise evidence readiness and recalculation governance
Prohibited effect	No legal determination, customs classification ruling, verification conclusion, Registry substitution, compliance certification or core-schema change

1. Authority and Non-Amendment Boundary

This Appendix is an external regulatory-source control document. It governs how official CBAM sources, parameter files and correction events are identified, versioned, cited and linked to EMJ.LIFE evidence workflows. It is not EU legislation, a CBAM Registry, a customs ruling, a verifier opinion, a legal interpretation, a Governance Master or a Direct Mapping Guideline.

DECISION BOUNDARY Final legal applicability, tariff classification, origin, embedded-emissions methodology, verification, declaration and certificate-surrender decisions remain with the actors authorized under applicable law. EMJ.LIFE may structure and preserve evidence; it does not make those determinations.

1.1 Controlling source hierarchy

Layer	Source class	Function	Decision authority
A	Regulation (EU) 2023/956 and applicable amending acts	Establish the CBAM, scope, obligations and statutory authority.	EU legislature / competent authorities
B	Implementing Regulations (EU) 2025/2621, 2025/2620 and 2026/1740	Control default values, production-route/benchmark relationships, corrections and calculation rules.	European Commission / applicable authorities
C	Official Commission guidance, Registry logic and information-format datasets	Support operational interpretation and machine use; legal text prevails.	Publisher / Registry operator
D	EMJ.NEXUS constitutional, governance and mapping controls	Control evidence identity, lineage, versioning, routing and claims boundaries.	EMJ.NEXUS
E	This External Supplement Appendix	Controls the external regulatory interface and change-impact protocol.	EMJ.LIFE controlled supplement
F	Declarant, operator, verifier, customs or competent-authority decisions	Approve classification, values, verification, declaration, surrender and enforcement outcomes.	Authorized actor

1.2 Evidence support, not legal determination

The Appendix may establish that a source, parameter version, classification record or calculation event is traceable. Traceability does not by itself establish legal correctness, completeness, admissibility, verification, acceptance by the CBAM Registry or compliance with Regulation (EU) 2023/956.

1.3 Non-amendment statement

- No change to the canonical 38-field Physical Interface.
- No change to the six Governance Masters or six Direct Mapping Guidelines.
- No change to existing 128 MME task identities, points, value factors, weights, RCF, MCP, AEU or NTCC logic.
- No conversion of CBAM values into an EMJ Evidence Tier, entity score, rating, assurance conclusion or public-performance label.
- No automatic legal applicability, CN/TARIC classification, origin, methodology, verification, declaration or certificate-surrender outcome.
- No redistribution of protected or operational datasets beyond applicable rights and permissions.

2. Controlled Source Registry

The legal correction instrument is byte-locked in this edition. Related governing instruments and official information-format resources are registered as authoritative locators; they require separate byte acquisition and manifest entry before their contents are embedded into an operational parameter store.

Source ID	Controlled source	Status / date	Appendix role
EU-CBAM-BASE-2023-956	Regulation (EU) 2023/956 establishing CBAM	Governing legal instrument	Statutory scope and authority; official locator reference.
EU-CBAM-AMEND-2025-2083	Regulation (EU) 2025/2083 amending Regulation (EU) 2023/956	Governing legal instrument	Scope and simplification changes; official locator reference.
EU-CBAM-FA-2025-2620	Implementing Regulation (EU) 2025/2620	Governing calculation instrument	Free-allocation adjustment and benchmark relationship.
EU-CBAM-DV-2025-2621	Implementing Regulation (EU) 2025/2621	Corrected base instrument	Default-value establishment; Annexes I and IV replaced by 2026/1740.

Source ID	Controlled source	Status / date	Appendix role
EU-CBAM-CORR-2026-1740	Implementing Regulation (EU) 2026/1740	BYTE-LOCKED | OJ 31 Jul 2026	Replaces Annex I and Annex IV; applies from 1 Jan 2026.
EU-CBAM-XLSX-2026-08-10	Default values definitive period, Excel format	Information only | 10 Aug 2026	Machine-readable convenience copy; legal text prevails.
EU-CBAM-GUIDANCE	Commission CBAM legislation and guidance page	Living official page	Release discovery and operational guidance; not silently versioned.

VERSION LOCK A webpage update or replaced spreadsheet does not silently update this Appendix. Each operational dataset requires acquisition date, file hash, legal relationship, comparison and controlled release.

3. Regulatory Change Event: Regulation (EU) 2026/1740

Commission Implementing Regulation (EU) 2026/1740 was adopted on 20 July 2026 and published in the Official Journal on 31 July 2026. It enters into force on the third day following publication and applies from 1 January 2026. Article 1 replaces Annex I and Annex IV to Implementing Regulation (EU) 2025/2621 in full.

Correction class	Official rationale	Evidence-infrastructure consequence
Production-route indicators	Missing or incorrect indicators prevented correct free-allocation adjustment.	Route indicator and benchmark selection must be versioned and revalidated.
HS/CN/TARIC granularity	Some goods require 8- or 10-digit distinction; route independence must be explicit.	Preserve classification system, code depth, edition and rationale.
Units	Units required legal clarification.	Store value and unit as inseparable parameter attributes.
Country / territory and product values	Recitals 7-11 identify erroneous, omitted or misclassified entries across the complete set listed in section 3.1.	Run a global parameter diff; identify and recalculate every matching default-value event.
Mark-up columns	Pre-calculated annual columns were removed to avoid rounding inconsistency.	Store base total-emissions value and rule; calculate the result as an event.
Precursors	Annex IV values for specified aluminium codes were incorrect.	Trace precursor version and downstream composite-product dependency.
Retroactive application	Corrections apply from 1 January 2026.	Historical outputs require review; old records remain as superseded evidence.

3.1 Complete jurisdiction and product correction set identified in recitals 7-11

The table below records the complete country, territory or residual-category set expressly identified in recitals 7-11. It is presented as a single global correction population; no jurisdiction is assigned priority status by this Appendix.

Country / territory category	Affected CN code(s)	Correction type
Taiwan	7218-7223	Erroneous default values
Other countries and territories	7226 20 00	Erroneous default value
Angola	2601 12 00	Indirect, direct and total-emissions transcription errors
Albania	7202 41	Omitted default values
Gabon	2804 10 00	Omitted default values
Guatemala	7202 60 00	Omitted default values
Liberia	2804 10 00	Omitted default values
New Caledonia	7202 60 00	Omitted default values
Zambia	7202 11	Omitted default values
Zimbabwe	7202 11 and 7202 41	Omitted default values
Tunisia	7615 10 10, 7615 10 30, 7615 10 80 and 7615 20 00	Erroneous CN codes

The correction population also includes cross-jurisdictional production-route indicators, units, country-name normalization, annual mark-up methodology and Annex IV precursor values for CN 7616 99 10 and 7616 99 90. Operational scope must therefore be derived from a full old-versus-current source diff, not only from the expressly named rows above.

4. Interpretation and Use Controls

ID	Control	Required interpretation
C01	Legal-source supremacy	Applicable legislation and competent-authority determinations prevail over this Appendix.
C02	Non-amendment	External CBAM content cannot modify canonical MME identity, schema, points, weighting, tier or claims logic.
C03	Legal / information-format separation	Distinguish legally binding annex values from an information-only Excel representation.
C04	Version identity	Record instrument, annex, dataset version, publication date, effective date, acquisition date and hash.
C05	Classification evidence	CN, TARIC, origin and production route require evidence and cannot be inferred from product names alone.
C06	Parameter / rule separation	Store base parameter, unit, applicable rule and calculation event separately.
C07	Actual / default separation	Record the selected value method and supporting authority; do not blend methods without an explicit rule.
C08	Direct / indirect / total separation	Preserve the legal purpose of each emissions value; total emissions control Registry mark-up calculation under the correction.
C09	Benchmark linkage	Production-route and benchmark relationships remain separately traceable.
C10	Precursor lineage	A precursor correction propagates only through documented dependency relationships.
C11	Retroactive impact	Effective date, not discovery date, determines the review population.
C12	No destructive replacement	Prior calculation outputs are retained and marked SUPERSEDED; they are not overwritten or deleted.
C13	Decision-use traceability	Record whether a result entered a quote, declaration, procurement, contract, customer communication or internal decision.
C14	Materiality is not legal validity	A low financial delta does not make an outdated regulatory result current; it may affect review priority only.
C15	Registry boundary	EMJ.NEXUS does not replace CBAM Registry calculations, submissions or authoritative records.
C16	Verifier boundary	Evidence readiness is not verification and does not imply verifier acceptance.
C17	No compliance claim	A traceable package cannot be represented as EU-approved, certified or compliant solely by system output.
C18	Rights and provenance	Preserve official locators and hashes; respect source terms and information-only designations.

5. CBAM Application Crosswalk

The crosswalk identifies evidence activities supported by EMJ.NEXUS. It is not a declaration of legal conformity, equivalence or Commission endorsement.

CBAM object	EMJ.NEXUS capability	Minimum record	Boundary
Country of origin	Entity / product provenance	Origin evidence object, issuer, date and review status.	No customs-origin determination.
CN / TARIC classification	Product classification evidence	Code, code depth, nomenclature version and rationale.	No binding tariff ruling.
Production route	Process / methodology evidence	Route indicator, facility/process evidence and benchmark link.	No automatic route selection.
Actual embedded emissions	Primary calculation evidence	Installation data, method, period, verifier state and lineage.	No verification conclusion.
Default values	Versioned external parameter	Country, code, unit, value type, source version and hash.	No silent parameter replacement.

CBAM object	EMJ.NEXUS capability	Minimum record	Boundary
Direct / indirect / total	Separated emissions attributes	Preserve value role and legal calculation purpose.	No field substitution.
Precursors	Supply-chain node evidence	Precursor origin, code, parameter/method and dependency link.	No assumed upstream completeness.
Free-allocation adjustment	Calculation-rule evidence	Benchmark, route indicator, rule version and execution event.	No Registry substitution.
Annual mark-up	Rule-version execution	Base total-emissions value plus applicable year rule.	No stored opaque final-only value.
Corrected values	Regulatory change event	Affected-key diff, effective date and source relationship.	No deletion of earlier results.
Retrospective application	Impact and recalculation trigger	Query population from 1 January 2026 and review status.	No assumption that publication date limits scope.
Replacement result	Superseded evidence relationship	Old/new result IDs, delta, reviewer and decision-use follow-up.	No history erasure.

6. Applicability Classification

State	Meaning	Effect on canonical MME
APPLICABLE	A defined CBAM regulatory use exists and source, parameter, purpose and evidence boundary are identified.	None
CONTEXT-ONLY	The source supports context, terminology or release awareness but does not control the current calculation.	None
NOT-APPLICABLE	No justified CBAM relationship to the evidence object is identified.	None
REVIEW-REQUIRED	Classification, origin, method, parameter, rights, source or decision-use question remains unresolved.	Blocks CBAM supplement use only
RECALCULATION-REQUIRED	A superseding parameter or rule applies to an existing calculation event.	No core change; blocks current-status release
SUPERSEDED	A prior output is retained but replaced by a linked controlled result.	Historical only

6.1 Global correction-population trigger

P0 APPLICATION RULE Any calculation within the retroactive period that uses a parameter, classification or dependency affected by the complete 2026/1740 correction population is REVIEW-REQUIRED until its source version and full lookup key are confirmed. A calculation using a replaced value or rule is RECALCULATION-REQUIRED.

This rule applies consistently across jurisdictions. It does not state that every cost increases or decreases. Direction and magnitude depend on origin, code, product granularity, production route, imported quantity, value method, benchmark relationship and the old/new parameter values.

7. Regulatory Parameter Versioning Protocol

7.1 Five-layer record

Layer	Controlled object	Required linkage
1	Official source	ELI/CELEX or official locator, file identity, hash and legal status.
2	Parameter dataset	Annex/table, country, code, route, value type, unit, effective period and dataset version.
3	Calculation rule	Applicable method, mark-up year, benchmark/free-allocation rule and rule version.
4	Calculation event	Inputs, timestamp, software/process version, actor and output.

Layer	Controlled object	Required linkage
5	Evidence output	Package/result ID, review state, decision use, replacement and disclosure state.

7.2 Minimum parameter key

The minimum deterministic lookup key is not a single CN code. It combines jurisdictional and methodological dimensions:

PARAMETER KEY source_version + effective_period + country_of_origin + CN_or_TARIC_code + code_depth + production_route + emissions_value_type + unit + value_method

7.3 Mandatory controlled fields

Logical group	Illustrative attributes	Function
source_identity	regulatory_instrument; celex_or_eli; source_version; source_url; source_sha256; acquisition_date	Authority, provenance and byte lock
legal_time	publication_date; entry_into_force; effective_from; effective_to; correction_date	Legal time and retroactivity
classification	country_of_origin; nomenclature_version; cn_code; taric_code; code_depth; classification_evidence_id	Product and origin lookup
method_context	value_method; production_route; benchmark_reference; precursor_flag; facility_or_supplier_id	Method and dependency context
parameter_value	direct_emissions; indirect_emissions; total_emissions; unit; parameter_status	Versioned regulatory input
rule_execution	mark_up_year; calculation_rule_version; calculation_timestamp; calculation_engine_version	Reproducible calculation
change_control	supersedes; superseded_by; change_event_id; recalculation_required; impact_query_id	Correction lineage
decision_use	quote_id; declaration_id; procurement_id; communication_id; authorized_actor; follow_up_status	Downstream impact and action boundary

8. Retrospective Impact Identification and Recalculation

The 2026/1740 correction applies from 1 January 2026. The control population is therefore defined by effective application and parameter dependency, not by the date on which EMJ.LIFE or a user downloaded the corrected file.

8.1 Controlled workflow

1. Register the official correction as a Regulatory Change Event and lock its source hash.
2. Diff the replaced and replacement parameter sets at the full parameter-key level.
3. Identify Evidence Units and calculation events that reference an affected old key.
4. Separate actual-value events from default-value events and verify whether the correction is operative.
5. Identify downstream use in quotes, declarations, procurement, contracts, reports and customer communications.
6. Recalculate using the controlled replacement parameter and applicable rule version.
7. Generate a new Evidence Package version and a machine-readable delta record.
8. Mark the prior output SUPERSEDED and link it through superseded_by; do not delete it.
9. Route material or legally significant deltas to an authorized reviewer and document follow-up.
10. Close the impact query only when affected records have a resolved status and retained audit trail.

8.2 Impact query minimum criteria

Query dimension	Required filter / test
Legal time	calculation or reporting period intersects 1 January 2026 onward
Source lineage	references 2025/2621 Annex I or IV, a derived dataset, or an unversioned equivalent
Affected key	country + CN/TARIC + route + emissions type matches correction diff
Value method	default, mixed or unresolved; actual-only records require contextual review where relevant

Query dimension	Required filter / test
Dependency	precursor or benchmark dependency can transmit the change
Decision use	result was released, relied upon or communicated
Status	current, superseded, recalculation required, review required or closed

AUDIT RULE The recalculated value does not replace the historical fact that an earlier decision used an earlier parameter. The system preserves both the corrected current result and the evidence of what was known and used at the time.

9. Calculation Architecture: Base Value, Rule and Result

Regulation (EU) 2026/1740 removes pre-calculated annual mark-up columns from Annexes I and IV to avoid rounding inconsistency. The final marked-up default value is calculated in the CBAM Registry using total emissions. Accordingly, EMJ.NEXUS must avoid treating an opaque final number as the primary regulatory parameter.

Object	Stored as	Control rule
Base default value	Versioned regulatory parameter	Preserve total emissions and unit from the controlled source.
Annual mark-up	Versioned calculation rule	Keep year and rule separate from the base parameter.
Free-allocation adjustment	Separate rule execution	Link benchmark and route evidence to the calculation event.
Final result	Derived calculation output	Store reproducible inputs, rule version, timestamp and output.
Registry result	External authoritative operational result	Link where available; do not claim system equivalence.

9.1 Prohibited storage patterns

- A final marked-up value without its base total-emissions value and rule version.
- A product description without CN/TARIC code, nomenclature version and classification evidence.
- A calculation result without parameter version, effective period and timestamp.
- A corrected result that overwrites or deletes the earlier result.
- A spreadsheet import that is treated as legally controlling without the governing regulation relationship.

10. Document-Specific Application

The Appendix is referenced, not embedded. Insertions create a controlled external-regulatory interface without changing the authority of existing EMJ.NEXUS publications or specifications.

Controlled object	Permitted insertion	Prohibited effect	Control
IP02 - Mechanical Mapping Engine	External-source identity, semantic discovery, classification evidence, parameter version and impact-query initiation.	No deterministic legal mapping, Physical Interface change, framework route or compliance conclusion.	10.64969/ip.mme.2026.v2
128 MME Mapping	CBAM Task Tag / regulatory use-case reference and evidence issue routing.	No tenth core framework, mapping rewrite, score or point change.	Canonical mapping unchanged
Evidence Package Specification	Source, parameter, calculation, delta, review and supersession records.	No Registry declaration, verifier opinion or legal certification.	Enterprise protected package
DOI Source Data Schema	Source and event lineage; hash and replacement relationships.	No disclosure of protected commercial data by default.	Versioned source metadata
Enterprise DOI Landing Page Specification	Regulatory basis, package version, calculation status, last review and current/superseded state.	No public supplier, volume, facility, value or cost data unless authorized.	Public status layer only
Supply Chain Node Management	Precursor, supplier, installation and dependency evidence.	No assumed completeness or attribution across unverified nodes.	Controlled enterprise node layer

11. Enterprise Use of the 128 MME Mapping for CBAM Evidence Readiness

An enterprise does not use the 128 MME Mapping as a substitute CBAM rulebook or declaration engine. It uses the Mapping to convert recurring governance, operational, emissions, value-chain, control and review activities into identified tasks and evidence objects. This External Supplement then attaches CBAM-specific legal sources, classification attributes, regulatory parameters, calculation events and authority boundaries to those controlled records.

OPERATING PRINCIPLE 128 MME supplies the enterprise task-and-evidence architecture. The CBAM External Supplement supplies the regulatory application layer. Together they support CBAM evidence readiness; neither system output nor mapping coverage by itself establishes legal compliance.

11.1 Two-layer enterprise application model

Layer	Enterprise function	Controlled output	What it does not determine
Canonical 128 MME	Assigns task identity; routes governance, operational, emissions, supply-chain, control and review evidence; preserves actor, time, source and lineage.	Task record and Evidence Unit linked to the applicable canonical mapping context.	CBAM legal applicability, tariff classification, embedded-emissions value or declaration acceptance.
CBAM External Supplement	Adds legal instrument, CN/TARIC and origin evidence, production route, actual/default method, parameter version, calculation rule, verification state and change status.	CBAM application record and protected enterprise Evidence Package.	A binding customs ruling, verifier opinion, Registry decision or competent-authority determination.
Authorized enterprise / external actor	Reviews unresolved classifications and methods; approves controlled release; performs or accepts legally assigned actions.	Reviewed calculation, verification input, declaration-support record and documented disposition.	Authority outside the actor's legal role.

11.2 Enterprise CBAM evidence workflow

The enterprise should activate CBAM as a regulatory use-case tag across the relevant canonical tasks, rather than create a parallel CBAM task universe. Each stage below reuses existing task identity and evidence controls, then adds the minimum CBAM-specific application record.

Stage	128 MME-enabled enterprise activity	CBAM extension applied	Controlled result
1. Applicability intake	Identify entity, product, transaction, importer/operator role and responsible owner.	Product scope; origin; CN/TARIC candidate; reporting period; unresolved legal questions.	APPLICABLE, NOT-APPLICABLE or REVIEW-REQUIRED intake record.
2. Boundary and classification	Collect product, installation, process and organizational-boundary evidence; route review ownership.	Code depth and nomenclature version; origin evidence; production route; installation and operator identifiers.	Reviewed classification-and-boundary record; no inferred customs ruling.
3. Supplier and precursor evidence	Issue supplier tasks; connect facility, precursor, quantity, period and source records through controlled supply-chain nodes.	Supplier/operator data request; precursor dependency; data period; completeness and exception state.	Traceable supplier and precursor evidence population.
4. Emissions method and data	Capture activity data, emissions factors, measurement/calculation method, actor, timestamp and source lineage.	Actual/default selection; direct, indirect and total emissions; unit; methodology and verifier state.	Method-specific calculation input set with controlled limitations.
5. Calculation and adjustment	Execute a reproducible calculation event under assigned control and approval tasks.	Parameter version; rule version; mark-up year; benchmark/free-allocation relationship; engine/process version.	Versioned calculation output reproducible from source, parameter, rule and event.
6. Internal control and review	Apply ownership, segregation, exception, change-approval and evidence-quality tasks; close or escalate gaps.	Applicability state; reviewer; review date; unresolved issue; release gate.	Review-ready package with failures blocked or explicitly qualified.
7. Verification and declaration support	Assemble evidence requested by authorized verifiers, declarants or responsible functions; retain submission and response lineage.	Verifier status; Registry/declaration reference where available; authorized actor and decision-use link.	Protected Evidence Package supporting external processes without replacing them.
8. Monitoring and recalculation	Monitor source changes; identify dependent tasks, calculations and decisions; re-open affected records.	Change event; affected key; impact query; recalculation status; supersedes/superseded_by.	Current and historical results linked through a non-destructive audit trail.

11.3 How the canonical mapping contexts contribute

The canonical contexts do not become CBAM provisions and are not asserted as legally equivalent to CBAM requirements. They provide reusable evidence routes that reduce duplicate collection and connect CBAM work to the enterprise's existing sustainability and control architecture.

Canonical context	Reusable contribution to CBAM evidence readiness	Application boundary
ISSB S1	Governance ownership, risk processes, controls, data responsibility and decision-use context.	Does not determine customs or CBAM applicability.
ISSB S2	Climate metrics, GHG data governance, methodology, targets and transition-related evidence.	Corporate climate disclosure is not automatically product embedded-emissions evidence.
SASB / SICS	Industry and activity context for routing sector-relevant operational evidence and responsible business units.	Industry classification is not CN/TARIC classification.
GRI	Emissions, energy, procurement, value-chain and impact-related source records and management-process evidence.	Impact reporting does not replace CBAM calculation rules.
ESRS	Climate, value-chain, policy, action, metric, control and reporting-boundary evidence, including data-gap governance.	ESRS disclosure coverage is not proof of CBAM conformity.
TNFD	Nature-related dependencies and contextual risk evidence where relevant to enterprise decisions.	Normally contextual; it is not a CBAM calculation basis.
TISFD	Social and inequality-related value-chain context, responsibility and affected-stakeholder evidence where relevant.	Context-only unless a defined enterprise control use exists.
COSO	Control environment, ownership, risk assessment, control activity, information flow, monitoring and remediation.	Internal-control evidence does not equal verifier or authority acceptance.
Scope 3	Supplier engagement, value-chain boundaries, activity data, allocation logic and upstream dependency evidence.	Scope 3 category accounting is not identical to CBAM embedded-emissions methodology.
SDGs	Strategic and communication context for wider sustainability objectives.	Context-only; no CBAM legal or calculation effect.

11.4 Requirement-to-evidence control chain

For every defined CBAM use case, the enterprise must be able to traverse the complete relationship below. A task marked complete without the linked CBAM application attributes is not sufficient for CBAM evidence readiness.

Control link	Required relationship
Regulatory requirement	Specific instrument, provision, annex/table and effective period.
Enterprise obligation owner	Responsible entity, function, actor and authorization boundary.
128 MME task	Canonical task identity and mapped governance/operational context.
Evidence Unit	Source object, actor, timestamp, period, scope, lineage and review state.
CBAM application record	Origin, CN/TARIC, route, method, parameter, rule, calculation and legal-status attributes.
Control and verification state	Reviewer, exception, limitation, verifier/Registry reference and release gate.
Evidence Package output	Current result, supporting records, version, hash and protected-access status.
Change relationship	Affected-key query, recalculation and non-destructive supersession history.

11.5 What the enterprise can demonstrate

- Which controlled tasks and responsible actors produced the evidence used for a CBAM calculation.
- Which product, origin, classification, installation, production-route and precursor records support the calculation boundary.
- Whether actual data or a legally controlled default value was used, under which source and parameter version.
- How direct, indirect and total emissions inputs, benchmark relationships and calculation rules produced the recorded output.
- Which internal reviews, exceptions, limitations and verifier interactions remain open or complete.
- Which prior calculations, packages, quotes, declarations or decisions are affected when an official source changes.

EVIDENCE-READINESS CLAIM A conforming implementation may state that CBAM-related evidence is identified, versioned, traceable, reviewable and assembled for authorized use. It must not state that 128 MME mapping coverage alone makes the enterprise, product, calculation or declaration CBAM-compliant.

11.6 Minimum external-supplement record

- Task ID, evidence object ID and controlled document revision.
- CBAM source ID, legal instrument, edition, official locator, acquisition date and SHA-256.
- Legal dates: publication, entry into force, effective from and supersession relationship.
- Country of origin, CN/TARIC code, code depth, nomenclature version and classification evidence.
- Production route, benchmark reference, precursor dependency and method selection.
- Direct, indirect and total emissions values with units and source purpose.
- Parameter version, calculation rule version, calculation timestamp and output ID.
- Applicability state, recalculation state, reviewer, review date and limitations.
- Decision-use links and authorized follow-up where an earlier result was relied upon.
- Explicit assertion that canonical mapping, tier, scoring, assurance and claims fields are unchanged.

NO-DEFAULT INFERENCE Absence of a CBAM match does not prove non-applicability. Presence of a code or default value does not prove legal classification, origin, methodology, verification, declaration accuracy or compliance.

12. Logical Control Extension Schema

The fields below are logical controls. They may be serialized in an approved extension container or referenced evidence object. They are not new physical columns and do not change the canonical 38-field Physical Interface.

Logical group	Illustrative controlled attributes	Function
source_identity	cbam_source_id; instrument; celex_eli; edition; sha256; url; access_date	Source authority and version lock
regulatory_time	publication_date; entry_into_force; effective_from; effective_to; correction_date	Legal time model
applicability	applicability_state; reason; reviewer; review_date; unresolved_issue	Use governance
product_context	product_id; origin; cn_code; taric_code; code_depth; nomenclature_version	Classification evidence
process_context	installation_id; supplier_id; production_route; precursor_id; value_method	Operational boundary
parameter_context	parameter_version; direct; indirect; total; unit; source_table_locator	External parameter
calculation_context	rule_version; mark_up_year; benchmark_ref; timestamp; engine_version; output_id	Reproducible event
change_context	change_event_id; affected_key; impact_query_id; recalculation_status; supersedes; superseded_by	Correction and replacement
decision_boundary	authorized_actor; verifier_status; registry_reference; decision_use; claims_status; limitations	Authority and release boundary

12.1 Physical-interface rule

- Store canonical evidence identity, actor, timestamp, source and lineage in the existing Physical Interface.
- Store CBAM-specific parameters only through an approved logical-extension or referenced Evidence Package object.
- Do not create parallel identity, Evidence Tier, materiality, authorization, assurance or claims fields.
- If no approved extension location exists, use REVIEW-REQUIRED and do not invent a storage field.

12.2 Controlled null states

Use explicit states such as NOT-ASSESSED, NOT-DETERMINED, NOT-APPLICABLE, CONTEXT-ONLY, REVIEW-REQUIRED or RECALCULATION-REQUIRED. Do not replace an unresolved legal or institutional determination with a blank, assumed pass, zero, inherited spreadsheet value or stale parameter.

13. Enterprise Evidence Package and DOI Landing Page

13.1 Protected enterprise Evidence Package

Package component	Minimum content
Regulatory reference	Instrument, article/annex/table locator, version, legal dates, hash and source relationship.

Package component	Minimum content
Classification record	Origin, CN/TARIC, code depth, nomenclature edition, evidence and reviewer.
Method record	Actual/default choice, production route, benchmark, precursor dependency and limitations.
Parameter record	Old/current version, direct/indirect/total values, unit, effective period and status.
Calculation record	Inputs, rule, mark-up year, engine/process version, timestamp and output.
Change record	Correction event, diff key, affected-object query, recalculation and supersession.
Decision-use record	Quote, declaration, procurement, contract or communication reference and follow-up.
Review record	Reviewer, authority boundary, verification status, release decision and unresolved issues.

13.2 Public DOI Landing Page

The public page may expose only status-level information necessary to establish provenance and currency: applicable regulatory basis, Evidence Package version, calculation/recalculation status, last review date, current or superseded state, and verification/review status. Product volumes, supplier identities, facility data, emissions values, contract terms and cost calculations remain protected unless explicitly authorized.

14. Rights, Version and Change Control

14.1 Source authority and information-only boundary

The legally binding values are those set out in the applicable Official Journal instruments. The Commission-provided Excel file is an information-format convenience resource. EMJ.LIFE must preserve this distinction in metadata, user interfaces, exports and public statements.

14.2 Change triggers

Trigger	Required action
New or corrected Official Journal instrument	Acquire, hash, classify legal effect, diff affected sources and open a Regulatory Change Event.
Commission Excel replacement	Acquire and hash; compare against the legal text relationship; do not silently overwrite.
CN / TARIC nomenclature update	Revalidate code depth, product classification evidence and parameter lookup keys.
Production-route or benchmark update	Revalidate route indicators, benchmark relationships and free-allocation calculation.
Actual/default methodology change	Revalidate method selection, supplier/operator evidence and calculation logic.
Verifier or Registry rule update	Revalidate interface status; do not infer acceptance from system evidence.
Core EMJ.NEXUS publication update	Confirm non-amendment boundary and refresh permitted insertion references.

14.3 Release gates

- Official source identity, legal status, locator, dates and file hash verified.
- Information-only datasets clearly distinguished from legally binding sources.
- Full parameter key, unit, method and effective period recorded.
- Affected-record query executed for retroactive changes.
- Old and new calculation outputs linked; no history deleted.
- Decision-use impact assessed and routed to an authorized actor.
- No EU, Commission, Registry, verifier or competent-authority endorsement implied.
- Canonical 38-field and 128 MME non-amendment assertions passed.

15. Standard Insertion and Citation Language

15.1 Core-document reference page

APPROVED LANGUAGE EU CBAM regulatory materials are controlled through EMJ.LIFE, EU CBAM 2026 External Supplement Appendix v1.2 (EMJ-EXT-EU-CBAM-2026-APPX). They may support enterprise evidence readiness, source provenance, regulatory parameter versioning, product-classification evidence, calculation lineage, retrospective impact identification and recalculation governance. They do not amend the canonical EMJ.NEXUS architecture or determine legal applicability, customs classification, origin, embedded emissions, verification, declaration accuracy, certificate surrender, enforcement or compliance.

15.2 128 MME task note

APPROVED LANGUAGE CBAM content, if used, is recorded as APPLICABLE, CONTEXT-ONLY, REVIEW-REQUIRED or RECALCULATION-REQUIRED external-supplement evidence. Canonical task identity, framework routing, points, value factors, weights, RCF, MCP, AEU, NTCC, Evidence Tier, assurance and claims conclusions remain unchanged.

15.3 Legal and endorsement disclaimer

APPROVED LANGUAGE This supplement supports the structured use, provenance, version control and application traceability of official CBAM regulatory materials. It does not replace applicable legislation, the European Commission CBAM Registry, competent authorities, authorised declarants, customs authorities, authorised verifiers or professional legal, tax and customs advice. Inclusion within EMJ.NEXUS does not imply endorsement, certification, approval or recognition by the European Commission or any EU institution.

15.4 Citation pattern

Cite the specific legal instrument or Commission resource first, followed by this Appendix as the EMJ.LIFE control layer. Record the source ID, annex/table locator, file hash, acquisition date, legal effect and parameter version used. Never cite this Appendix as a substitute for the controlling EU legal text.

16. Implementation Decision and Release Plan

Priority	Required implementation	Acceptance condition
P0	Register 2026/1740; mark the replaced Annex I/IV relationship; establish a review query for the complete global correction population; add recalculation_required and superseded_by.	No affected result remains current without an identified source version.
P1	Implement CBAM Regulatory Parameter Versioning Schema; CN/TARIC dual classification; route/benchmark link; recalculation record; protected Evidence Package output.	A calculation is reproducible from source, parameter, rule and event records.
P1 POC	Global affected-parameter lifecycle using the complete jurisdiction/product correction set and cross-jurisdictional corrections.	Old/current parameter relationship, impact query, recalculation and superseded package demonstrated without jurisdictional prioritization.
P2	Expose controlled status on Enterprise DOI Landing Page and formalize CBAM Task Tag/use-case.	Public status is current without exposing protected commercial details.

FINAL ARCHITECTURE DECISION CBAM is governed as a version-controlled External Regulatory Reference Layer and enterprise application use case. It is not added as a tenth core framework and does not require reconstruction of the canonical 128 MME Mapping.

Appendix A. Cryptographic Source Manifest

The hash below locks the exact official-journal PDF supplied for this edition. Other official sources remain locator-controlled until separately acquired and hashed under change control.

Source ID	File / byte identity	SHA-256	Status
EU-CBAM-CORR-2026-1740	OJ_L_202601740_EN_TXT.pdf | 14,844,377 bytes	2417e5d962c261e5bed1b120f1bd9c4945 0c55b6a2ce3a99b576b863b0c9804e	BYTE-LOCKED
EU-CBAM-XLSX-2026-08-10	Default values definitive period (Excel format)	NOT LOCKED IN THIS EDITION	INFORMATION-ONLY / ACQUISITION REQUIRED
EU-CBAM-DV-2025-2621	Official Journal source for Implementing Regulation (EU) 2025/2621	NOT LOCKED IN THIS EDITION	GOVERNING LOCATOR / ACQUISITION REQUIRED

A.1 Official locators

Regulation (EU) 2023/956: http://data.europa.eu/eli/reg/2023/956/oj

Implementing Regulation (EU) 2025/2620: http://data.europa.eu/eli/reg_impl/2025/2620/oj

Implementing Regulation (EU) 2025/2621: http://data.europa.eu/eli/reg_impl/2025/2621/oj

Implementing Regulation (EU) 2026/1740: http://data.europa.eu/eli/reg_impl/2026/1740/oj

European Commission CBAM legislation and guidance: https://taxation-customs.ec.europa.eu/carbon-border-adjustment-mechanism/cbam-legislation-and-guidance_en

Appendix B. Global Correction-Population POC Control Record

This is the required control design for the first enterprise POC. It applies to the complete correction population identified through the legal text and full parameter diff. It does not assign priority to a single jurisdiction or state a financial delta until the replaced and corrected parameter datasets are acquired, keyed and compared.

Stage	Required record	Release state
Correction boundary	Complete recital-identified jurisdiction/product set plus every parameter, route, unit, naming, mark-up and precursor difference found through the full source diff.	REVIEW-REQUIRED until the affected-key registry is complete
Old source	2025/2621 Annex I/IV parameter key, value, unit, route and file hash.	Historical input
Correction source	2026/1740 replacement parameter key, value, unit, route and file hash.	Current legal source
Calculation dependency	Default/actual method, quantity, benchmark/free-allocation link, mark-up year and precursor relation.	Recalculation scope
Impact query	All evidence objects and calculation events in the retroactive period matching any affected key.	Open until the global population is resolved
Recalculation	New result, delta, engine/process version, reviewer and timestamp.	Current candidate
Supersession	Old output SUPERSEDED; new output linked through superseded_by.	Audit trail retained
Decision follow-up	Quote, declaration, procurement, contract or communication impact and authorized action.	Closed only with documented disposition

Appendix C. Controlled Status Vocabulary

Status	Controlled meaning
CURRENT	The record uses the presently controlled source and has passed required review.
HISTORICAL	The record is retained as evidence of a prior state or decision.
SUPERSEDED	The record has a linked controlled replacement and is not current for new use.
REVIEW-REQUIRED	A source, classification, method, parameter, rights or decision question is unresolved.
RECALCULATION-REQUIRED	A superseding parameter or rule affects the calculation event.

Status	Controlled meaning
RECALCULATED	A replacement result exists; review and downstream follow-up may still be open.
CLOSED	Affected records and downstream actions have documented dispositions.
NOT-APPLICABLE	A justified assessment found no relationship to the defined CBAM use case.

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