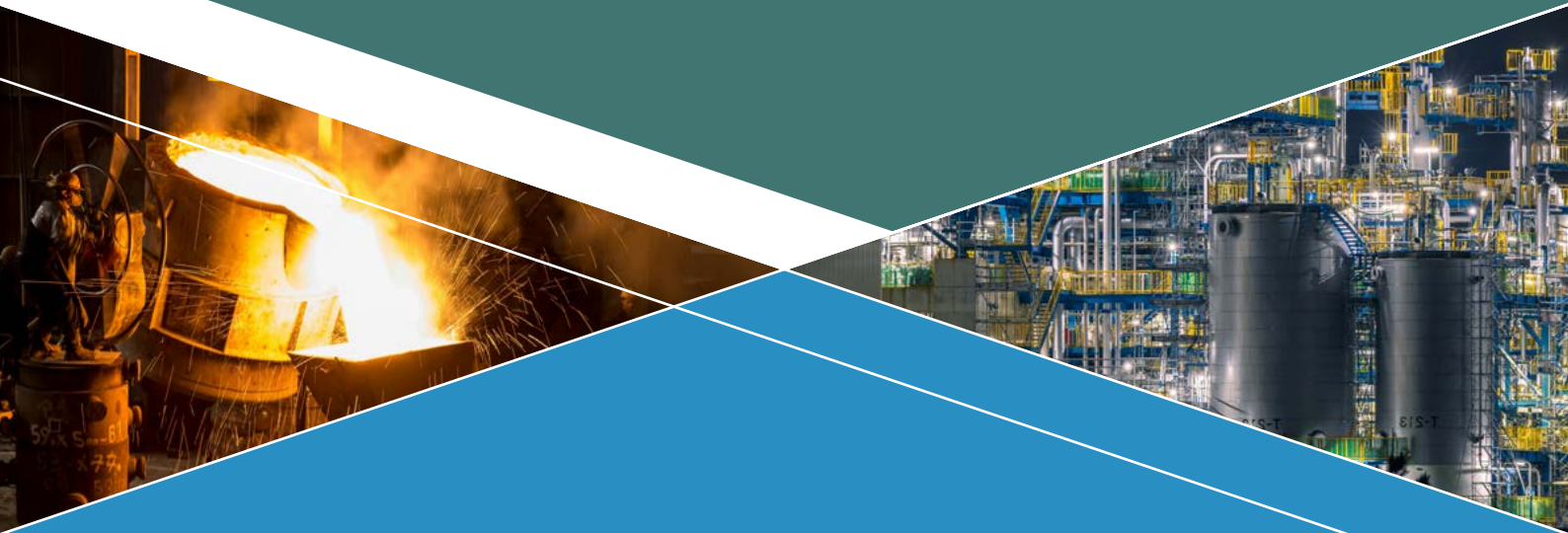


Mass Balance Assessment Tool

A due diligence tool for assessing the
credibility of low-emission product claims



MISSION
POSSIBLE
PARTNERSHIP

Mass Balance Assessment Tool

The tool is intended for buyers, producers, suppliers, investors, policymakers, standard-setters, and other stakeholders who need to distinguish credible, decision-useful product claims from weaker ones.

It accompanies our report: 'Principles and Guardrails for Credible Mass Balance Claims'.

Purpose and Design

The Mass Balance Assessment Tool is a due diligence instrument for evaluating mass-balance-based product claims. It helps users determine what type of mass balance approach is being used, how the claim is constructed, where the main risks and benefits are concentrated, and what evidence is needed before relying on the claim.

The tool helps users investigate questions systematically, compare claims on a consistent basis, and make more informed procurement, investment, policy, or market-design decisions. It is organised around a single overarching question:

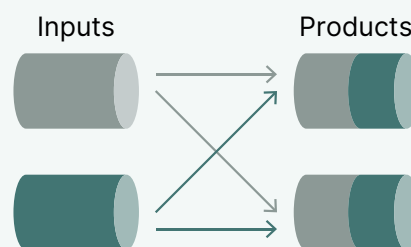
Does this mass balance approach support the long-term decarbonisation of this sector?

This question matters because mass balance is not a single model. Different designs can imply different levels of physical connectivity, attribution flexibility, disclosure quality, and market integrity. The tool answers the question in three steps:

1. A **Pre-Assessment** that defines the claim architecture;
2. An **Accuracy Review** that tests whether the claim is technically grounded and free from overstatement;
3. A **Usability Review** that tests whether the approach is disclosed, replicable, and practical for buyers and producers.

Mass Balance:

Tracking of environmental attributes from inputs to products



Buyer due diligence — mass balance assessment tool

Pre-Assessment: Net Zero Alignment

Use of mass balance	System boundary	Attribution method	Net zero alignment	Product-level claim	Site capability
Is this approach being used as a chain-of-custody method or a crediting method to assign low-carbon attributes to products?	Is the approach operating at the batch, site, or group level?	How are low-carbon attributes assigned to outputs — proportionally, selectively, or via another defined methodology?	Is the intervention aligned to a credible net-zero pathway for the sector?	Is a near-zero or net-zero product-level claim being made on the basis of this approach?	Is the site technology capable of reducing all of the site's emissions, or only a portion?

Note: Where a product-level claim significantly exceeds site-level capability, apply heightened scrutiny under both Accuracy and Usability.

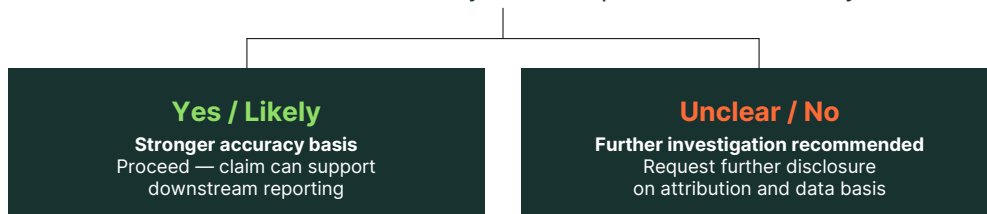


Criterion 1: Accuracy

Claims accurately reflect real production or supply, are free from overstatement, and are supported by robust underlying data and accounting.

Are the claims technically feasible at the site level given actual production conditions?	Is the attribution method free from over-crediting — i.e. are no more attributes claimed than are generated by the intervention?	Where non-proportional attribution is used, is there a clear and justified rationale?	Is there a risk of double counting within the system or with upstream/downstream claims?	Is the emissions intensity or reduction based on verified or third-party certified data?	Is the approach governed by a recognised certification scheme, or is it a proprietary methodology?

Based on the above: are the accuracy-related questions sufficiently answered?

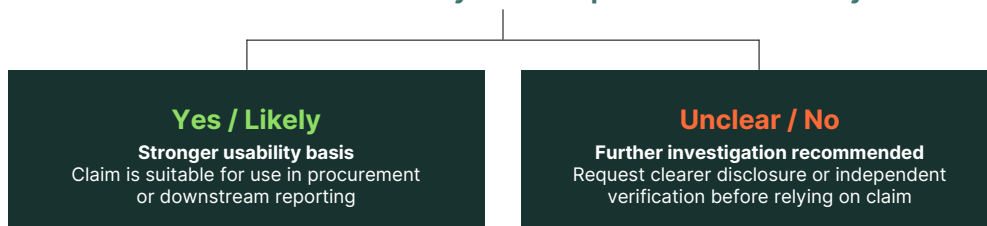


Criterion 2: Usability

The approach is clearly disclosed, consistently applied across products and time, and practical for all parties in the value chain.

Is the approach clearly enough disclosed to understand how the claim was derived?	Is the approach applied consistently across products and producers, or does it vary significantly?	Can the approach be independently verified or audited?

Based on the above: are the usability-related questions sufficiently answered?



Producer due diligence — mass balance assessment tool

Pre-Assessment: Net Zero Alignment

Use of mass balance Are you using mass balance as a chain-of-custody method or a crediting method to support green product claims?	System boundary Is the approach operating at the batch, site, or group level?	Attribution method How are low-carbon attributes assigned to outputs — proportionally, selectively, or via another defined methodology?	Net zero alignment Is the intervention aligned to a credible net-zero pathway for the sector?	Product-level claim Are you making a near-zero or net-zero product-level claim on the basis of this approach?	Site capability Is the site technology capable of reducing all of the site's emissions, or only a portion?
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Note: Where a product-level claim significantly exceeds site-level capability, apply heightened scrutiny under both Accuracy and Usability.



Criterion 1: Accuracy

Claims accurately reflect real production or supply, are free from overstatement, and are supported by robust underlying data and accounting.

Are the emissions reductions attributed through this approach technically feasible at the site level?	Is the attribution method free from over-crediting — i.e. are no more attributes claimed than are generated by the intervention?	Where non-proportional attribution is used, is there a clear and justified rationale?	Is there a risk of double counting within the system or with upstream/downstream claims?	Is the emissions data underlying the claim verified or certified by a third party?	Is the approach governed by a recognised certification scheme, or is it a proprietary methodology?
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Based on the above: are the accuracy-related questions sufficiently answered?

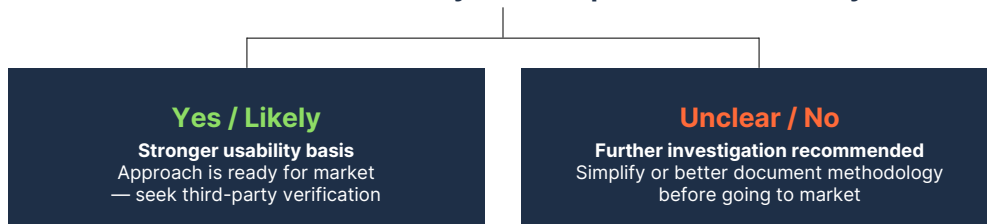


Criterion 2: Usability

The approach is clearly disclosed, consistently applied across products and time, and practical for all parties in the value chain.

Is your methodology clearly documented and disclosed so buyers can understand how the claim was derived?	Can the methodology be consistently replicated over time and by different producers or sites?	Can the approach be practically implemented by all parties in your value chain?
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Based on the above: are the usability-related questions sufficiently answered?



Decision Pathways

The decision trees translate the qualitative due diligence questions into practical pathways for buyers and producers. They are guidance tools, not pass/fail scoring systems. An unclear or negative answer at any stage should trigger further investigation into that issue, not a definitive conclusion about the overall quality of the approach. **Assessing a mass balance approach must be done by looking at the system in its entirety, not by one element alone. Definitive conclusions are ultimately dependent on the assessor's risk tolerance.**

Buyer due diligence

When reviewing a mass balance claim, buyers should begin with the pre-assessment stage to understand the claim architecture: system boundary, attribution method, and the net-zero alignment of the underlying intervention. Where there is a significant gap between what is being claimed at the product level and what the site can physically and technically achieve, buyers should apply greater scrutiny throughout the assessment.

Accuracy for buyers:

Under Accuracy, buyers should test whether the claim is technically grounded in what the production system can actually deliver. For near-zero or net-zero claims, buyers should ask whether the claim reflects site-level reality or is primarily created through attribution. Buyers should also assess whether the attribution method, emissions data, and baseline for reduction-based claims would withstand independent scrutiny. Where the accounting basis is unclear or undisclosed, buyers should request additional information before relying on the claim for procurement decisions or downstream reporting.

Usability for buyers:

Under Usability, buyers should assess whether the approach is disclosed clearly enough to

support procurement decision-making, product footprint reporting, environmental product declarations, or customer-facing communications. Where the methodology is opaque, inconsistently applied, or difficult to compare across producers, buyers should seek independent third-party verification or require clearer disclosure before using the claim with confidence.

Producer due diligence

When designing or disclosing a mass balance approach, producers should treat the pre-assessment stage as a disclosure discipline. Producers should be prepared to clearly communicate the use case, system boundary, attribution method, and net zero alignment of the intervention, because this information determines whether the claim can be trusted and used in the market.

Accuracy for producers:

Under Accuracy, producers should satisfy themselves that the claims being made are technically achievable at the site level and that the attribution approach would withstand independent scrutiny. Where there is a gap between the product-level claim and what the site can physically deliver, producers should be prepared to explain in detail how the mass balance approach was used to generate the claim, what reduction pool or eligible input pool supports it, and what evidence validates it.

Usability for producers:

Under Usability, producers should assess whether their methodology can be clearly explained to buyers and replicated consistently over time. Publishing the system design, including attribution rules, supports market trust. If the methodology cannot be communicated clearly or applied consistently, producers should simplify or better document the approach before making market-facing claims.

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and fast-tracking clean
industry this decade.**

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