The Five Criteria of a SUI

The Five Criteria of a SUI

A valid Scalable Unit of Impact must satisfy all five criteria simultaneously. Partial compliance — three criteria met, two not — does not produce a SUI. It produces an impact aspiration. The criteria are adapted from the IMP Five Dimensions of Impact (Impact Management Project, now Impact Frontiers) but operationalised at the per-application unit level rather than the portfolio level.

Criterion 1: Specificity (What)

> **Definition:** The SUI names a defined outcome in a recognised impact taxonomy, linked to a specific environmental or social change in a specific domain.

Specificity requires three nested choices:

1. **Domain selection:** Which system is being changed? (Climate, Biodiversity, Water, Social equity, etc.)
2. **Indicator selection:** Which standardised indicator tracks the change? (IRIS+ code, TNFD metric, GRI indicator, or AIMM dimension)
3. **Granularity selection:** At what level of aggregation does the unit apply? (Per dose, per hectare, per session, per kWh, per tonne)

Test: Can you complete this sentence unambiguously? *"One application of [product] produces [N] [units] of [IRIS+/TNFD indicator] in [defined system]."*

Examples:

- PASS: "One hectare treated with Becaps biostimulant displaces 102.4 kg CO?e of synthetic nitrogen fertiliser (IRIS+ PI5765 — GHG emissions avoided)"
- FAIL: "Our product helps farmers reduce their environmental footprint" (no taxonomy, no unit, no domain)

Criterion 2: Attribution (Contribution)

> **Definition:** The SUI magnitude is net of counterfactual — a documented baseline establishes what would have happened without the enterprise's intervention.

Attribution is the most technically demanding criterion and the most commonly ignored. It requires:

1. **Counterfactual baseline:** What outcome would occur in the absence of the product? (Business-as-usual scenario)
2. **Attribution boundary:** Which portion of the observed outcome change is caused by the enterprise versus other concurrent factors?
3. **Temporal boundary:** Over what time period is the attributed impact counted?

Common attribution errors:

- *Gross vs. net reporting:* Claiming 500 tonnes CO?e avoided when the counterfactual would have avoided 200 tonnes anyway — the net is 300 tonnes
- *Selection bias:* Measuring impact only among customers who adopted the product successfully, ignoring drop-outs or partial adopters
- *Displacement:* An activity that reduces emissions in one location but increases them elsewhere (leakage) must account for the leakage in its SUI

Criterion 3: Quantifiability (How Much)

> **Definition:** The SUI is expressed in a physical or monetary unit that is measurable at the point of application, with a defined measurement protocol.

Quantifiability requires:

1. A numeric value with unit (e.g., 102.4 kg CO?e, 47.3 kWh, 2.1 m^3 water)
2. A measurement protocol specifying who measures, with what instrument, at what frequency
3. An uncertainty range or confidence interval — all physical measurements have uncertainty; hiding it is a red flag

The choice between physical and monetary units matters:

- **Physical units** (kg CO?e, kWh, m^3) are more verifiable and less subject to monetisation assumptions
- **Monetary units** (USD impact-weighted revenue per application) allow direct comparison with financial metrics but require additional assumptions about social cost of carbon or impact valuations
- Best practice: define the SUI in physical units; provide a monetary translation as supplementary information

Criterion 4: Verifiability

> **Definition:** The SUI magnitude is validated by an independent third party against a Single Source of Truth (SSOT) — a system of record that captures, stores, and makes available the underlying evidence.

Verifiability has three components:

1. **Independence:** The verifier has no financial interest in the outcome they are verifying. Self-certification is not verification.
2. **Evidence trail:** The verifier can trace from the SUI claim back to the raw data source — sensor readings, satellite imagery, lab results, customer records — without relying on the enterprise's

summaries.
3. **Reproducibility:** A second independent verifier, given access to the same SSOT, would reach the same conclusion within the stated uncertainty range.

The SSOT system that enables verifiability is described in detail in Chapter 3. In practice, verifiability is achieved through a three-tier pipeline: Ingest ? Digital Twin ? Conversion.

Criterion 5: Scalability

> **Definition:** The SUI definition, baseline, and measurement protocol are replicable across applications without material change — the unit works at application 1 and application 1,000,000.

Scalability tests:

- Does the SUI definition change when the product is deployed in a new geography? (If yes, you may need geography-specific SUI variants — acceptable, but must be documented)
- Does the measurement cost per SUI decrease as volume grows? (Should be yes — a scalable SUI benefits from measurement infrastructure amortisation)
- Can the SSOT system handle N × volume without architectural changes? (A scalable SUI requires a scalable data infrastructure)

The Five-Criteria Matrix

Criterion	Key Question	Evidence Required	Failure Mode
Specificity	What changes?	Taxonomy link, unit definition	Vague outcome language
Attribution	Because of us?	Baseline, counterfactual methodology	Gross impact reporting
Quantifiability	How much?	Measurement protocol, uncertainty range	Directional claims without numbers
Verifiability	Can anyone check?	Independent auditor access, SSOT system	Self-certified data
Scalability	Works at scale?	Protocol stability, infrastructure plan	Pilot-only methodology

---

Next: Comparison with Existing Impact Frameworks — how SUI relates to IRIS+, AIMM, IMP, and others.

Revisión #1
Creado 2026-06-08 20:35:01 UTC por Angelica Diaz
Actualizado 2026-06-08 20:35:02 UTC por Angelica Diaz