Chapter 6: The CTH VRF Integration

How SUI is embedded in the CleantechHUB Venture Readiness Framework.

- SUI in the Venture Readiness Framework
- Scoring Rubric for SUI Assessment
- Implementation Guide for CTH Startups

SUI in the Venture Readiness Framework

SUI in the Venture Readiness Framework

The CleantechHUB Venture Readiness Framework (VRF) is the structured assessment and acceleration programme through which CTH evaluates, supports, and connects climate startups to capital. The SUI framework is embedded in the VRF as a mandatory component for startups seeking access to CTH's investor network and blended finance facilitation services.

VRF Overview

The VRF assesses startups across five readiness dimensions:

Dimension	What it assesses	SUI Relevance
1. Technology Readiness	TRL level, IP protection, scalability of the core technology	SUI specificity criterion — is the application event technically reproducible?
2. Market Readiness	Market size, customer discovery, go-to-market traction	SUI scalability criterion — does the market allow repeated SUI application events?
3. Team Readiness	Founder-market fit, team completeness, advisory board	SUI quantifiability — does the team have data science / measurement competency?
4. Financial Readiness	Financial model, funding history, use of funds clarity	SUI-WACC linkage — has the team mapped SUI verification to financing pathway?
5. Impact Readiness	SUI definition, SSOT status, verification plan, MDB alignment	**The SUI framework is the primary tool for assessing Impact Readiness**

Impact Readiness: The SUI Component

Impact Readiness is scored on a 0–100 scale, with the following sub-components:

Sub-component	Weight	What Earns Points

SUI Definition Quality	25%	All five criteria met (Specificity, Attribution, Quantifiability, Verifiability, Scalability); taxonomy linkage documented
Baseline Robustness	15%	Official or peer-reviewed baseline source; geographic and temporal specificity; degradation plan
SSOT Maturity	20%	Level 1–3 assessment; data governance documented; verifier access defined
Verification Status	25%	0 pts: no plan; 10 pts: verifier identified; 20 pts: methodology reviewed; 25 pts: full third-party verification complete
MDB/Taxonomy Alignment	15%	AIMM self-score completed; EU Taxonomy or TNFD linkage documented; DFI engagement initiated

VRF Milestones and SUI Requirements

The VRF programme is structured as a 6-month journey with four milestones, each with specific SUI deliverables:

Milestone 1 (Month 1): SUI Definition

Deliverable: Completed SUI Specification Document (all 8 parameters, taxonomy mapping, baseline documentation)

CTH support: Two facilitated workshops with the CTH Impact Team; access to SUI Template and baseline data resources

Gate condition: SUI Specification must score ?60/100 on the CTH SUI Quality Rubric (see next page)

Milestone 2 (Month 2–3): SSOT Roadmap

Deliverable: SSOT Architecture document (data sources, system design, governance rules, current maturity level assessment)

CTH support: Technical advisory from CTH's data team; introduction to SSOT tooling partners

Gate condition: Clear pathway to SSOT Level 2 within 12 months; data governance policy drafted

Milestone 3 (Month 4): Verification Plan

Deliverable: Signed engagement letter with an independent verifier; verification scope and timeline agreed

CTH support: Warm introductions to CTH's network of certified impact verifiers (ISAE 3000-qualified, sector-experienced)

Gate condition: Verification engagement in place; cost budgeted in financial model

Milestone 4 (Month 5–6): Investor Readiness Package

Deliverable: Complete impact readiness package for investor distribution: SUI Spec + SSOT summary + verification status + AIMM self-score + blended finance opportunity map

CTH support: Facilitated investor introductions; pitch coaching on impact narrative

Gate condition: Impact Readiness score ?75/100; at least one investor or DFI engagement meeting scheduled

SUI in the CTH Investment Thesis

CTH's investment thesis (for ventures in which CTH takes an advisory equity stake) explicitly prioritises startups that meet or are on a clear pathway to meeting SUI verification standards. The rationale:

- Verified SUI increases the probability of blended finance access, reducing the startup's equity dilution requirement and protecting CTH's advisory equity value
- SSOT systems produce the data quality that CTH's own impact reporting to its funders (P4G, AFCIA, SDC, Energy Catalyst) requires — a verified portfolio startup is a reportable result
- Startups with verified SUIs are more fundable, reducing the time-to-investment and increasing the success rate of CTH-facilitated fundraises — the primary metric of CTH's programme effectiveness

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Next: Scoring Rubric for SUI Assessment — the detailed scoring criteria used in VRF evaluations.

Scoring Rubric for SUI Assessment

Scoring Rubric for SUI Assessment

This rubric is used by CTH programme staff to score the Impact Readiness of VRF applicants and portfolio startups. It is also provided to startups for self-assessment. The rubric is designed to be specific, repeatable, and free of subjective interpretation.

Section 1: SUI Definition Quality (25 points)

Criterion	0 points	3 points	5 points
Specificity (5 pts max)	Outcome described in generic terms ("reduces environmental impact")	Outcome linked to a recognised domain (climate, water, biodiversity) with approximate unit	Outcome linked to specific IRIS+/TNFD/GRI indicator; application event precisely defined; unit of application clear
Attribution (5 pts max)	No mention of counterfactual; gross impact only	Counterfactual acknowledged; baseline described in general terms	Documented baseline with source citation; geographic and temporal specificity; net impact calculation shown
Quantifiability (5 pts max)	Directional claim only ("significantly reduces emissions")	Numeric estimate with unit; calculation methodology described but not documented	Full calculation methodology documented; uncertainty range provided; measurement protocol specified
Verifiability (5 pts max)	No verification plan; self-certified data	Verifier type identified; verification standard referenced; timeline indicated	Independent verifier engaged or contracted; SSOT access protocol defined; verification standard specified (ISAE 3000 or equivalent)
Scalability (5 pts max)	SUI only demonstrated in pilot context; no protocol for replication	Protocol exists for replication; no infrastructure assessment	Protocol stable across geographies/customer types documented; SSOT infrastructure plan supports target volume

Section 2: Baseline Robustness (15 points)

Indicator	0 points	5 points	10 points	15 points
Baseline Source Quality	No source cited; founder estimate	Industry report or secondary source; limited geographic specificity	Government statistical source or peer-reviewed study; adequate geographic match	National statistical institute or IPCC/equivalent official body; country and crop/sector specific; year cited

Indicator	Deduction
Baseline older than 5 years with no update plan	?3 points
No baseline degradation assessment (what if counterfactual improves?)	?2 points
Baseline scope mismatch (national average applied to highly atypical geography)	?3 points

Section 3: SSOT Maturity (20 points)

SSOT Level	Score	Criteria
Level 0: Fragmented	0 points	Data in multiple disconnected tools; no central repository
Level 1: Consolidated	8 points	All impact-relevant data in one system; version-controlled; manually updated
Level 2: Automated	15 points	Automated data flows from source systems; validation on ingest; change log
Level 3: Audit-Ready	20 points	Immutable audit trail; role-based access with logging; structured export for verifiers

Bonus: +2 points if SSOT roadmap to next level is documented with timeline and resource plan.

Section 4: Verification Status (25 points)

Status	Score	Evidence Required
No verification plan	0 points	—
Verifier identified; not engaged	8 points	Name of proposed verifier; confirmation of their sector experience

Status	Score	Evidence Required
Methodology reviewed by verifier	15 points	Written feedback from verifier on SUI methodology; issues identified and addressed
Data audit in progress	20 points	Signed engagement letter; audit scope agreed; SSOT access granted
Full verification complete	25 points	Issued verification statement following ISAE 3000 or GHG Protocol standard

Section 5: MDB / Taxonomy Alignment (15 points)

Indicator	Score	Evidence
No taxonomy mapping	0 points	—
IRIS+ mapping only	3 points	IRIS+ indicator code(s) cited in SUI spec
SDG + IRIS+ mapping	5 points	Relevant SDG targets identified; contribution mechanism described
AIMM self-score completed	8 points	Completed AIMM self-assessment document (IFC template or equivalent)
EU Taxonomy or TNFD alignment	10 points	Environmental objective identified; technical screening criteria assessed
DFI engagement initiated	12 points	Meeting held or email exchange with IFC, IDB, ADB, or regional MDB
DFI pipeline registered	15 points	Formal indication of interest from MDB investment team; project in their pipeline

Total Score Interpretation

Score Range	Classification	CTH Action
0–30	Impact Nascent	SUI Definition Workshop; not yet eligible for investor introductions
31–50	Impact Developing	SSOT and verification advisory; eligible for TA grant facilitation
51–70	Impact Ready	Eligible for impact investor introductions; blended finance scoping begins
71–85	Impact Advanced	Eligible for MDB introductions; blended finance structuring support
86–100	Impact Verified	Full CTH investor network access; results-based finance eligibility; flagship case study

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Next: Implementation Guide for CTH Startups — how to build your SUI from zero.

Implementation Guide for CTH Startups

Implementation Guide for CTH Startups

This guide walks a CTH portfolio startup through building their SUI from zero to investor-ready verification. It is designed to be followed by a founding team without a dedicated impact measurement staff member. The CTH Impact Team is available to support each step.

Before You Start: What You Need

Gather the following before your first SUI definition session:

- Your product's technical specification or LCA (if one exists)
- Your current operational data — production records, sales data, customer delivery records (in whatever format they currently exist)
- Any market or industry data you use to describe your impact in pitch decks
- The name of at least one academic or government source that describes the problem you solve (e.g., the average synthetic fertiliser application in your target region)

Step 1: Define Your Application Event (Week 1)

The application event is the single most important definitional choice in the SUI process. It defines the boundary of "one SUI."

Guiding questions:

1. What is the smallest unit of your product or service that produces a measurable outcome? (1 kg of product, 1 kWh delivered, 1 session, 1 device)
2. Is this unit consistently countable in your operational records? (Can you tell from your current data how many of these events occurred last month?)
3. Does your team agree on the definition? (Product, sales, and impact team should all point to the same thing)

Common mistakes:

- Defining the application event too broadly ("one customer contract") — too aggregated to verify at unit level
- Defining it too narrowly ("one CFU of bacteria") — not operationally countable
- Conflating the application event with the outcome ("one tonne of CO?e avoided" is an outcome, not an application event)

Output: A one-sentence application event definition. *Example: "Application of 1 kg Becaps biostimulant to 1 hectare of cultivated land."*

Step 2: Map to Taxonomy (Week 1)

Open the IRIS+ 5.3b metric browser at thegiin.org and search for indicators that match your outcome domain. You are looking for the most specific indicator that applies — not the most impressive-sounding one.

Output: IRIS+ code(s) + SDG target(s) added to the SUI Specification template.

Step 3: Research Your Baseline (Weeks 1–2)

The baseline research is often the step that takes the most time and produces the most value. You need to find an official or peer-reviewed source that quantifies what happens in your sector *without* your product.

Sources by sector:

- **Agriculture:** National agricultural census (DANE in Colombia, INDEC in Argentina, IBGE in Brazil), FAO country statistics, CIMMYT research papers
- **Energy:** National utility regulator grid emission factors (UPME in Colombia, CAMMESA in Argentina), IEA country profiles, national energy ministry statistics
- **Water:** IDEAM water quality data (Colombia), ANA (Brazil), national environment ministry reports, WHO/UNICEF JMP data
- **Transport:** IDEAM vehicle fleet emission factors, national transport ministry statistics, ECLAC transport data for Latin America

Output: Baseline value with source citation, year, geographic scope, and any limitations documented in the SUI Specification.

Step 4: Calculate Your SUI Magnitude (Week 2)

With your baseline and your observed data (from your own field trials, lab reports, or operational records), calculate the net impact per application event.

Required calculation elements:

1. Baseline value (from Step 3)
2. Observed value (from your data)
3. Net difference: Baseline ? Observed
4. Conversion factor (from IPCC, EPA, or relevant standard): converts the net difference into your SUI unit (e.g., kg N displaced ? kg CO?e)
5. Uncertainty: estimate the range based on your sample size and measurement variability

Document every step. A future auditor needs to be able to follow your calculation from raw numbers to final SUI magnitude without asking you for help.

Output: SUI magnitude with uncertainty range, documented calculation methodology.

Step 5: Audit Your Data (Week 2–3)

Before engaging an external verifier, conduct an internal data audit:

1. Can you locate the source data for every number in your SUI calculation?
2. Is each data source stored in a consistent, dated format?
3. Is there a chain of custody between raw data and the calculated SUI magnitude?
4. Are there any gaps — periods where data was not collected, or records that were lost or overwritten?

Document gaps honestly. Verifiers prefer disclosed gaps with mitigation plans to hidden gaps discovered during audit.

Step 6: SSOT Assessment (Week 3)

Assess your current SSOT maturity level (0–3) using the criteria in the Scoring Rubric. Then design your path to Level 2:

- Which data source systems will feed the SSOT? (List each system and what data it holds)
- What is the central repository? (Start simple: a well-structured PostgreSQL database, Notion database, or even a Google Sheet with strict access control)
- Who can write data? Who can read? Who can export?
- How will you implement version control for corrections?

Step 7: Engage a Verifier (Week 3–4)

CTH maintains a directory of impact verifiers with sector experience in Latin American cleantech. Contact CTH's Impact Team at impact@cleantechhub.net to request an introduction. When approaching a verifier, provide:

- Your completed SUI Specification Document
- A brief description of your SSOT current state
- The volume of SUI events you want verified (approximate)
- Your target timeline for a verification statement

Step 8: Build Your Impact Investor Package (Week 4–6)

With the SUI defined and verification in progress, assemble your Impact Investor Package:

1. **SUI Summary (1 page):** The non-technical executive summary of your SUI — what you measure, why it matters, what the magnitude is
2. **SUI Specification (full document):** The complete parameter set, taxonomy mapping, baseline documentation
3. **SSOT Architecture Summary (1 page):** Current maturity, data sources, governance, path to Level 3
4. **Verification Status Letter:** Letter from your verifier confirming engagement and current status
5. **AIMM Self-Score (1 page):** Your self-assessment against IFC's AIMM framework
6. **Blended Finance Opportunity Map (1 page):** Which instruments you are eligible for now, and which you will be eligible for as verification progresses

CTH's Impact Team reviews this package before investor introductions. Use the Scoring Rubric to identify any sections below 70% before submitting for review.

Timeline Summary

Week	Deliverable	CTH Support Available
1	Application event defined; taxonomy mapped; baseline identified	SUI Workshop (2hr facilitated session)
2	SUI magnitude calculated; uncertainty range estimated; data audit complete	Data advisory call (1hr)
3	SSOT assessment complete; SSOT roadmap drafted; verifier shortlist identified	Technical advisory call; verifier introductions
4	Verifier engaged; verification scope agreed; SSOT Level 1 confirmed	Verification scope review
5–6	Impact Investor Package assembled; CTH review complete	Package review session; investor matching

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Continue to Chapter 7: SUI Fundamentals Course — the structured learning path for deeper understanding.