UKNZCBS
A Practical Guide for Refurbishment Projects

KJ Tait

Closing the performance gap in buildings

Version 1 — May 2026

Executive Summary

Net zero claims are now a due diligence and leasing risk. The UK Net Zero Carbon Buildings Standard (UKNZCBS) is the industry-agreed route to making defensible claims, shifting the focus from design intent to evidence and measured performance. The Standard is voluntary, but it is increasingly used as a reference point for credible net zero-aligned claims across the market.

Pilot to Version 1

The Pilot was published in September 2024. Version 1 followed on 10 March 2026, adding landlord and tenant-only routes, an optional practical completion check, and clearer verification guidance.

"Net Zero Carbon Aligned" in Practice

A claim is only credible when backed by 12 months of in-use metered data after occupation. Design intent alone is not sufficient.

Commercial Risks

Unverified claims expose you to greenwashing challenges, lender scrutiny, and lease negotiation risk. Weak metering and missing data are the most common failure points.

Commercial Opportunities

Verified performance supports green finance, premium leasing, and asset value protection. An optional "on track" check at practical completion adds early commercial assurance.

Key Early Decisions

Choose your retrofit route early. Define your scope boundary. Confirm metering readiness and data access before procurement begins.

First Actions: 30 to 90 Days

Assign an evidence plan owner. Run a metering gap assessment. Set procurement requirements for product data and substitution approval.

What UKNZCBS Is in Plain English

The property industry has long struggled with inconsistent definitions of net zero. Claims have often been made on design modelling alone, with no requirement to prove what your building actually uses once occupied. UKNZCBS addresses that directly.

The Standard covers two main areas: operational energy, which is what your building consumes in use, and upfront embodied carbon, which is the carbon associated with materials and construction. It also sets mandatory requirements for fossil fuel free operation, on-site renewables, and refrigerant management.

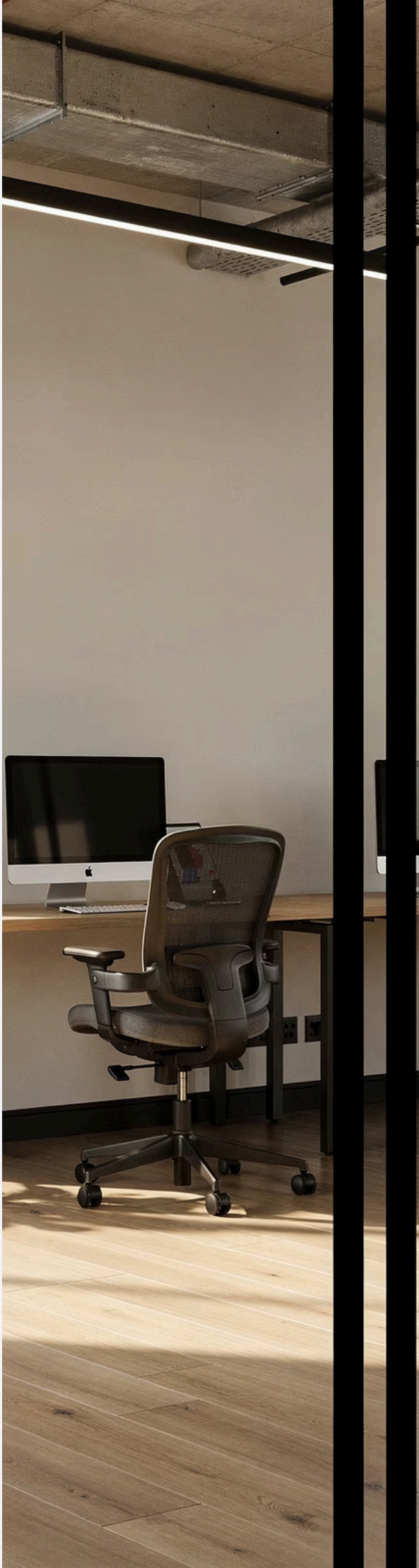
Who It Is For

Funders, developers, asset owners, occupiers, and design teams all have a role. The Standard is relevant at every stage, from feasibility through to post-occupation performance management.

The Problem It Solves

Without a shared framework, net zero claims cannot be compared or trusted. UKNZCBS gives funders, occupiers, and regulators a consistent basis for scrutiny. It moves the conversation from aspiration to evidence.

UKNZCBS is voluntary. However, it is increasingly referenced in green finance frameworks, lease negotiations, and investor due diligence. Ignoring it carries its own commercial risk.



What Changed: Pilot to Version 1

The Pilot was published in September 2024 as a consultation document. Version 1 was published on 10 March 2026 and is the first full release of the Standard for market use.

September 2024

Pilot published for consultation and early adoption.

Landlord and Tenant Routes

New office routes introduced where whole building verification is not possible.

Clearer Guidance

Verification and communication guidance strengthened throughout.

1 2 3 4 5

10 March 2026

Version 1 published. Full Standard released for market use.

Optional PC Check

An "on track" check at practical completion added as an optional assurance step.

The shift from Pilot to Version 1 reflects feedback from early adopters. The landlord and tenant routes are especially important for refurbishment projects in multi-let offices, where controlling the full building boundary is rarely straightforward.

The verification process and wider market adoption are still rolling out. Treat this area as emerging and check the official Standard for the latest position.

Refurbishment Routes: One-Go or Step by Step

Version 1 recognises two retrofit routes. Choosing the right one early shapes your programme, your evidence requirements, and your commercial timeline.

One-Go Retrofit

A single major intervention that addresses systems and fabric in one programme. Best when you have a clear decant window, strong capex appetite, and a lease event that creates the opportunity.

- Faster path to verification
- Cleaner evidence trail
- Higher upfront disruption and cost

Step by Step Retrofit

A phased plan delivered over time, with each intervention building toward the verified outcome. Best for occupied buildings, constrained capex, or complex tenancies.

- Lower disruption per phase
- Requires a credible long-term plan
- Governance and data continuity are critical

Decision Guide: Choosing Your Route

Lease Events and Decant

A lease expiry or planned void is often the clearest trigger for a one-go approach. Without it, step by step is usually more realistic.

Electrical Capacity and Grid

Electrification of heat and transport loads may require grid upgrades. Confirm capacity early. A constrained grid connection can force phasing regardless of preference.

Metering Readiness

Step by step retrofit depends on reliable data from day one of each phase. If metering is weak, fix it before committing to a phased route.

Governance Capacity

Year one performance management requires an accountable owner. If your FM or operations team cannot carry that role, build it into the programme before practical completion.

01

Lease Event or Void Available?

If yes, a one-go approach is viable. If no, step by step is likely more realistic.

02

Capex Available Upfront?

Strong capex appetite supports one-go. Constrained or phased capex points toward step by step.

03

Metering Ready from Day One?

If metering is weak, fix it before committing to either route. Step by step depends on reliable data from phase one.

04

Governance Owner in Place?

A named owner for year one performance is essential. If not in place, build it into the programme before practical completion.

05

Choose Your Route

One-go: faster verification, cleaner evidence trail. Step by step: lower disruption per phase, requires long-term plan and data continuity.

Evidence Pack: What You Must Be Able to Show

Verification is not a document exercise. It depends on data you can only collect if the right systems, agreements, and governance are in place from the start of the project. The checklist below covers the minimum practical requirements.

1

Metering and Energy Data Access

You must be able to retrieve 12 months of in-use metered data after occupation. Confirm data access rights in leases and FM contracts before practical completion.

2

As-Built Information and Quantities

Embodied carbon assessment requires accurate as-built quantities and product data. Capture this during construction. Retrospective data collection is unreliable and expensive.

3

Controls Strategy and Commissioning Records

A building that performs well on paper but is poorly commissioned will fail in use. Commissioning records are part of your evidence pack, not a handover formality.

4

O&M and Handover Information

Operations and maintenance information must support year one tuning. Generic manuals are not sufficient. The FM team needs to know what the building is designed to do and how to confirm it is doing it.

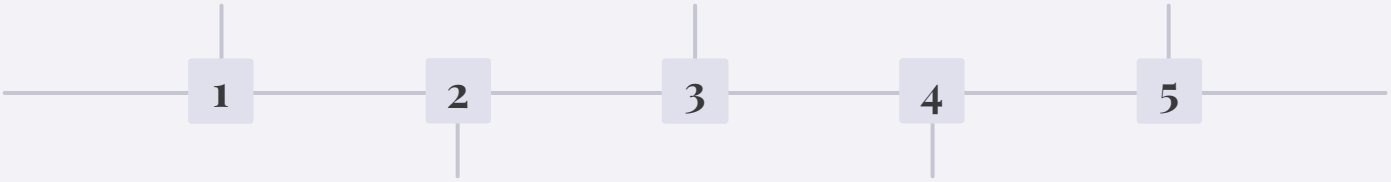
5

Governance: Who Owns the Data

Assign a named owner for performance data and issue closure before practical completion. Without this, problems identified in year one go unresolved and your verification window closes.

Timing, Claims and the Performance Gap

One of the most commercially significant aspects of UKNZCBS is what you can say and when. Getting this wrong creates greenwashing exposure. Getting it right creates a genuine market advantage.



Project Start

Route selection, boundary definition, evidence plan

Design & Construction

Metering strategy, embodied carbon data capture, commissioning plan

Practical Completion

Optional "on track" check for leasing and funding assurance

12 Months in Use

In-use metered data collection, year one performance management

Third Party Verification

Verified net zero carbon aligned claim confirmed

At Practical Completion

You may use the optional "on track" check as an additional assurance step. This has commercial value for leasing and funding conversations. It is not final verification and must not be presented as such.

After 12 Months in Use

Operational energy verification relies on 12 months of in-use metered data after occupation. Only at this point can a verified net zero carbon aligned claim be made. Third party verification confirms the outcome.

Metering: The Minimum Practical Outcomes

In refurbishment projects, especially multi-let buildings, perfect metering is rarely achievable from day one. The goal is data that is good enough to support verification and year one performance management.

Separate Landlord from Tenant Loads

Where feasible, landlord services must be distinguishable from tenant consumption. This is essential for landlord only or tenant only verification routes.

Isolate Major Plant

Chillers, boilers, AHUs and lifts should each have sub-metering. This allows abnormal loads to be identified and investigated quickly.

Confirm Data Access Rights

Metering hardware is only useful if you can retrieve the data. Confirm access rights in leases, FM contracts and BMS configurations before practical completion.

Controls, Commissioning and Year One Performance

Most projects that fail to meet design intent do so in year one. The building is handed over, the commissioning engineer leaves, and no one owns the gap between what the model predicted and what the meters show.

A Simple Year One Playbook

01

Seasonal Commissioning

Complete both summer and winter commissioning cycles. A building commissioned only in one season will underperform in the other.

02

Trend Logs and Setpoint Governance

Review BMS trend logs monthly in year one. Confirm setpoints have not drifted. Assign someone to approve any changes.

03

Fault Finding and Closure

Log faults as they arise and track them to closure. An unresolved fault in month two can distort your full year data.

04

Tenant Engagement

Tenant behaviour affects energy consumption. Share performance data with occupiers and agree escalation routes for comfort complaints that might otherwise lead to setpoint overrides.

Landlord

Owns the performance target, funds the commissioning programme, and receives the verification report.

FM Team

Operates the building day to day, logs faults, manages setpoints, and escalates issues to the commissioning engineer.

Commissioning Engineer

Leads seasonal commissioning, reviews trend data, and closes out technical issues through year one.

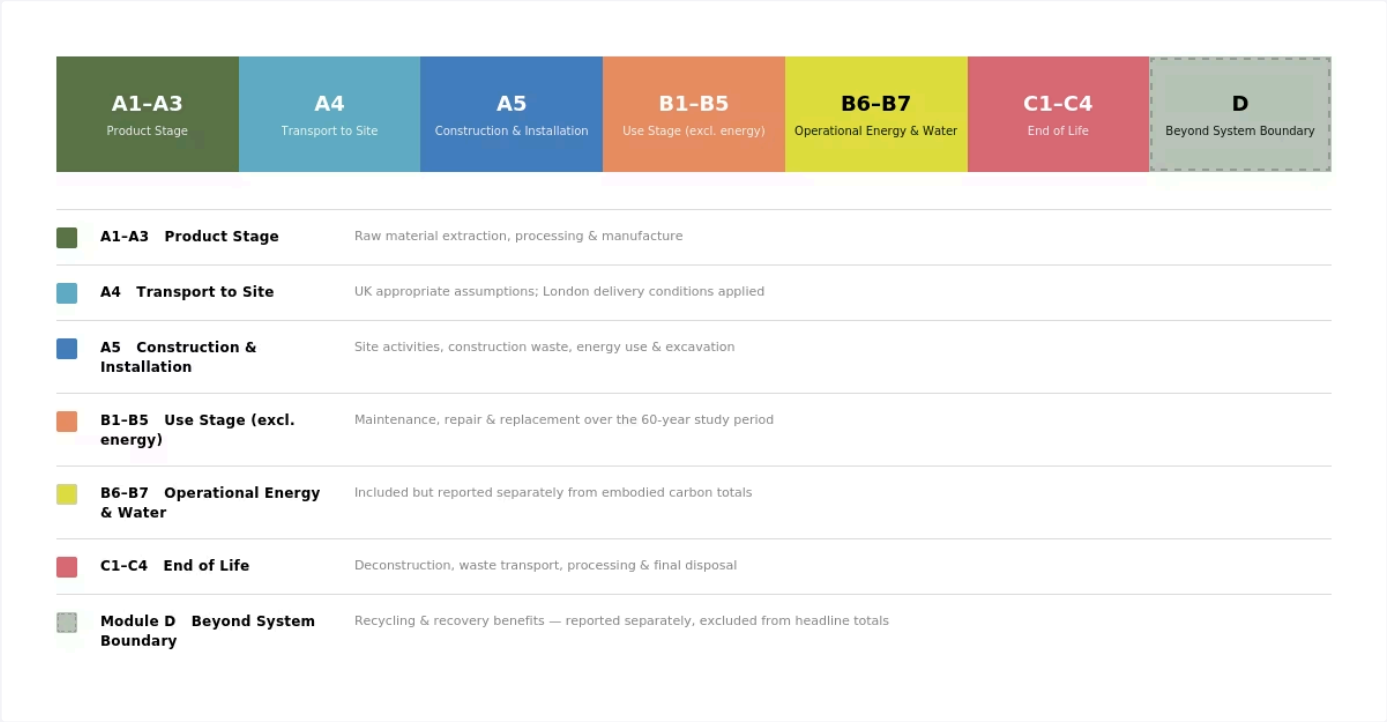
Tenant

Receives performance data, agrees escalation routes, and avoids unilateral setpoint changes.

Embodied Carbon, Landlord and Tenant Routes, and Jurisdiction

Embodied Carbon: Avoiding the Data Trap

Refurbishment projects face a specific embodied carbon risk. Procurement decisions and on-site substitutions can change the carbon profile of your project significantly after the design stage assessment is complete.



Whole life carbon stages — A1 to D

Product Data Capture

Require Environmental Product Declarations or equivalent data at procurement stage. Do not wait until handover.

Substitution Approval Workflow

Any material substitution must go through a formal approval process that includes a carbon impact check. Uncontrolled substitutions are one of the most common failure modes.

As-Built Quantity Records

Request final as-built quantities from your contractor and QS. These are required for the post-construction embodied carbon assessment.

Landlord and Tenant Routes, and Jurisdiction

Landlord and Tenant Routes

Version 1 introduced landlord-only and tenant-only verification routes for the office sector, recognising that whole-building verification is not always possible where tenants control their own consumption. You must define boundaries, metering responsibilities, data access rights and reporting obligations clearly before occupation.

Whole Building

All loads within the verification boundary. Landlord and tenant consumption both included. Requires full metering access across the entire building.

Landlord Only

Common areas, plant and base build services. Excludes tenant fit-out and occupier loads. Requires clear metering separation at the lease boundary.

Tenant Only

Fit-out and occupier loads within the demise. Excludes landlord services. Requires sub-metering within the tenant's demise and data access rights in the lease.

England and Scotland

UKNZCBS is UK wide, but statutory compliance and policy context differ by nation. In England, energy compliance for refurbishment is guided by Approved Document L. In Scotland, the Technical Handbooks set the building standards context. Scotland also has a distinct heat policy direction, with a stronger steer toward heat decarbonisation in buildings. Consult the relevant national guidance alongside UKNZCBS rather than treating them as alternatives.

Common Failure Modes and What to Do Next

Common Failure Modes

Unclear Boundaries

Projects that do not define the verification boundary early create disputes at handover and gaps in the evidence pack.

Weak Metering and No Data Access

Hardware installed but data locked behind FM contracts or tenant systems is the single most common reason projects cannot proceed to verification.

No Year One Plan

Without a named owner for controls tuning and fault closure, year one performance drifts and the verification window closes without usable data.

Uncontrolled Substitutions

Missing product data from late-stage material changes makes the embodied carbon assessment incomplete and potentially unverifiable.

Action Plan: 30 to 90 Days

1. Choose your retrofit route: one-go or step by step
2. Define scope and verification boundary
3. Run a metering gap assessment and confirm data access rights
4. Set evidence plan and procurement requirements for product data
5. Agree commissioning and year one performance plan with FM
6. Decide whether to use the optional practical completion "on track" check
7. Plan verification-ready reporting from month one of occupation

FAQ, How KJ Tait Helps, and Further Reading

Mini FAQ

Is UKNZCBS a legal requirement?

No. It is voluntary. However, it is increasingly referenced in green finance, investor due diligence, and lease negotiations.

Can I claim net zero at practical completion?

No. You may use the optional "on track" check for commercial purposes, but verified status requires 12 months of in-use metered data after occupation.

Does it apply to refurbishments as well as new builds?

Yes. The Standard applies to both. Refurbishment projects have specific considerations around boundaries, phasing, and embodied carbon data.

What are the energy performance targets?

The Standard sets sector specific limits by building type and year. Consult the official Standard tables for exact values. Do not rely on third party summaries for compliance purposes.

What if my tenant controls their own energy?

Version 1 introduced landlord only and tenant only routes for offices. Define boundaries and data access rights in the lease before occupation.

What does third party verification involve?

The verification process is still rolling out. Check the official Standard and CIBSE guidance for the latest position on approved verifiers and process requirements.

Does UKNZCBS cover embodied carbon?

Yes. Upfront embodied carbon is a mandatory element alongside operational energy, fossil fuel free operation, renewables, and refrigerant management.

Is the Standard different in Scotland?

UKNZCBS is UK wide. Statutory compliance and policy context differ. Refer to Scotland's Technical Handbooks and heat policy guidance alongside the Standard.

How KJ Tait Helps

Refurbishment Readiness Review

Route selection, boundary definition, and evidence plan setup. We identify gaps before they become programme risks.

Metering and Controls Strategy

Metering gap assessment, data access planning, and controls strategy aligned to verification and performance management requirements.

Year One Performance Support

Seasonal commissioning oversight, trend log review, fault closure, and data driven optimisation through the verification window.

> Book a workshop or evidence pack setup session. Contact KJ Tait Engineers to get started.

Further Reading

- **CIBSE UKNZCBS overview page**
- **CIBSE announcement: Version 1 is here**
- **RIBA explainer on UKNZCBS Version 1**
- **RICS article: performance gap and 12 months in-use data**
- **GOV.UK Approved Document L**
- **gov.scot: Building Standards Technical Handbooks**
- **gov.scot: Heat in Buildings future plans**