MONITOR | MANAGE | MAINTAIN
Smart devices and systems for
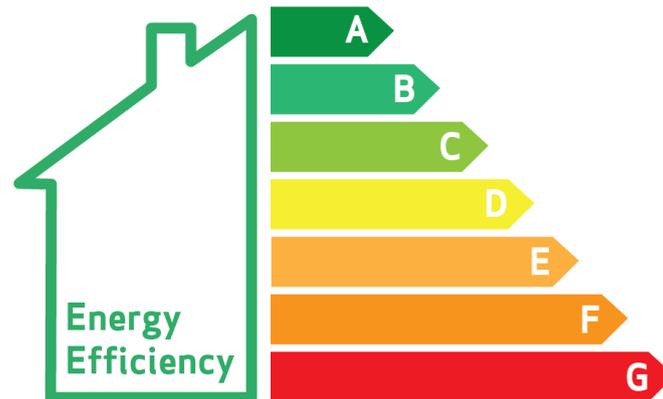building management and control

Vericon Systems: The Sustainability Intelligence Platform

Delivering measurable carbon reduction, energy efficiency, and environmental quality at portfolio scale

Sustainability Managers are under immense pressure to deliver Wave 3 retrofits that stick. They are expected to deliver verified decarbonisation, achieve EPC C uplift, alleviate fuel poverty, and improve indoor environmental quality — all while navigating strict spend profiles, Regulator of Social Housing scrutiny, and Housing Ombudsman accountability.

Vericon Systems is not just a sensor company. We are your **Wave 3 Compliance Assurance Layer** — the Monitoring & Verification (M&V) infrastructure that proves your "Least Regrets" measures work in the real world.

By integrating heating performance **(BCM)**, environmental quality **(MultiDot)**, and electrical consumption **(PowerSense)**, we allow you to validate the impact of every pound of grant funding spent — and generate the auditable evidence trail required by PAS 2035:2023, your Retrofit Coordinator, and your funder.

⏱ A Note on Timing: Wave 3 Has a Hard Deadline

Wave 3 delivery windows are fixed. Properties that begin monitoring **after** their Retrofit Assessment has been completed are already behind — your Retrofit Assessor has no pre-retrofit baseline to work from, and your funder has no M&V foundation to audit against.

The evidence Vericon Systems generates is most valuable — and most defensible — when it starts **before** the first measure is installed. A pre-retrofit baseline is not a nice-to-have; under PAS 2035:2023, it is the foundation of your Post-Occupancy Evaluation.

Every week of delay is a week of baseline data you cannot recover.
Housing providers currently mobilising Wave 3 programmes are deploying Vericon Systems at the Retrofit Assessment stage. If your programme is already underway, contact us today to discuss a rapid deployment pathway that can still capture meaningful pre-measure data.

Why Sustainability Leaders Choose Vericon Systems

🔒 **De-Risking the "Admin & Ancillary" Spend** Vericon Systems' ecosystem provides the mandatory Post-Occupancy Evaluation (POE) data required under PAS 2035:2023. This repositions monitoring spend from an operational cost to a capitalised project assurance tool — eligible within the Wave 3 "Administration & Ancillary" budget allocation (up to 15% of total project cost per SHDF Wave 3 Scheme Guidance).

🔗 **Supports the Full PAS 2035 Delivery Chain** PAS 2035:2023 requires a structured delivery sequence: Retrofit Assessment → Retrofit Design → Specification → Installation → Handover → Evaluation (Post-Occupancy). Vericon Systems' ecosystem supports both your **Retrofit Assessor (RA)** at the assessment and targeting stage and your **Retrofit Coordinator (RC)** at the evaluation and sign-off stage, with data exports structured to reduce administrative burden at both points.

✅ **TrustMark & MCS Alignment** All Vericon Systems' deployments are designed to support works delivered by TrustMark-registered contractors and MCS-certified installers. Our M&V data is structured to complement the compliance documentation required under both schemes, ensuring your audit trail is complete from installation through to performance verification.

🧩 **Data Sovereignty & Integration** All Vericon Systems' data is available to integrate directly into your existing Asset Management Systems or BI dashboards, ensuring you own your sustainability data without silos or vendor lock-in.

📈 **Spend Profile Support** Wave 3 requires housing providers to manage delivery against defined annual spend milestones. Vericon Systems' property intelligence identifies the highest-priority, most accessible stock first — properties with pre-existing damp, high heat loss, or underperforming heating systems — to help you mobilise quickly and protect your spend profile.

📉 **Spend profile risk is real, and it compounds.** Providers who cannot demonstrate Year 1 spend progress risk funder intervention, and potential clawback. Vericon Systems' stock prioritisation tool has helped providers identify their first tranche of shovel-ready properties within weeks of engagement — giving you the data you need to hit the ground running rather than spending months on manual assessment.

💷 **Indicative Cost Guidance:** The Sustainability pack contains the BCM which communicates with any gas boiler or heat pump, two MultiDots for room analysis of environmental conditions and a PowerSense for measuring up to 3 electrical circuits - incoming mains, renewable and a heat pump. Unlimited access to the portal, reporting and data. The average cost of this pack is £ 523.83 with 3 years data.

BCM: Heating Efficiency & Carbon Reduction at Scale

Heating is the largest driver of carbon emissions in housing. BCM (Boiler & Heating Controller) *delivers real, measurable reductions.*
BCM gives sustainability teams unparalleled visibility into heating performance and resident behaviour — without needing to visit the property.

Key Sustainability Benefits

- **10–18% verified reductions** in heating-related gas consumption, achieved by optimising boiler flow temperatures (load compensation alignment), preventing dry-cycling, and identifying specific high-usage behaviours.
- Automated detection of inefficient heating behaviours (e.g. excessive boost usage, programmer overrides).
- Continuous boiler performance monitoring to reduce carbon-intensive emergency breakdowns.
- Direct contribution to **EPC uplift** through measured, sustained heating-demand reduction.
- Reduction in unnecessary heating-related visits, lowering your programme's operational carbon footprint.

PAS 2035 Process Stage Mapping

PAS 2035 Stage	BCM Role
Retrofit Assessment	Provides real-world heating demand baseline to inform and validate the RA's findings
Retrofit Design	Identifies heating behaviour patterns that inform specification decisions
Post-Occupancy Evaluation	Supplies the M&V evidence required by the RC to confirm heating performance outcomes

📊 The Cost of Starting Late

A BCM deployment capturing a full heating season of pre-retrofit baseline data is worth significantly more to your funder — and your Retrofit Coordinator — than one deployed mid-programme.
Consider a 200-property Wave 3 tranche:

Scenario	Baseline Data Available	M&V Strength	RC Sign-off Risk
Deployed before Retrofit Assessment	Full pre-retrofit heating season	High — clear before/after comparison	Low
Deployed after installation	Partial or none	Moderate — post-only data	Medium
Not deployed	None	None — manual estimation required	High — funder may query outcomes

Pre-retrofit baseline data cannot be recreated retrospectively. The window to collect it closes when your first measure is installed.

Wave 3 Compliance & Value

M&V Tools

BCM provides the essential performance monitoring and verification required by Wave 3 funders**.** These costs can be capitalised within the "Administration & Ancillary" budget allocation (up to 15%) as project assurance spend.

Explicit link to funded measures

BCM validates the impact of Wave 3-funded fabric measures (insulation, draught-proofing, window upgrades) by demonstrating real-world reductions in heating demand and gas consumption following installation**.**

Value for money (Least Regrets):

Reduces failed EPC uplift attempts, misdiagnosed faults, repeat contractor visits, and operational carbon — protecting both your funding outcome and your reputation with your funder

MultiDot: Environmental Quality, Damp/Mould Prevention & Wellbeing Evidence

Healthy homes are essential sustainability outcomes — MultiDot provides the evidence.
MultiDot continuously monitors the environmental conditions that determine comfort, wellbeing, mould risk, and fuel poverty indicators.

Key Sustainability Benefits

- **Early detection of damp & mould risks** before they escalate into disrepair claims or Housing Ombudsman referrals.
- **PAS 2035 ventilation performance verification:** Proves the adequacy of mechanical or natural ventilation strategies following retrofit — a specific PAS 2035:2023 evaluation requirement.
- **IEQ (Indoor Environmental Quality) reporting** for ESG, Social Value, and wellbeing metrics.
- Supports long-term fabric health by monitoring humidity loads that can undermine insulation performance post-retrofit.
- Provides a **defensible, timestamped audit trail** for Ombudsman cases, regulatory inspections, and disrepair litigation.

Deep Dive: From Raw Data to IEQ Intelligence

Many sensors capture data. Vericon Systems captures insight. Our algorithms process continuous data streams to produce a **Healthy Home Index** for every property — a single, portfolio-level view of environmental health.

How We Calculate IEQ — Four Critical Data Streams

Mould Risk Index
We assess every connected room every 5 minutes, predicting mould before it forms. This separates structural damp from lifestyle damp, ensuring accurate intervention.

Ventilation Effectiveness
We analyse humidity decay and recovery after peak events to confirm PAS 2035 ventilation performance and detect underperforming systems.

Thermal Comfort Score
We compare indoor temperatures with local weather data to reveal heat loss, insulation failure, or chronic underheating.

Fuel Poverty Likelihood
We detect heat-starve patterns such as short heating cycles or underheating, enabling early welfare support.

PAS 2035 Process Stage Mapping

PAS 2035 Stage	MultiDot Role
Retrofit Assessment	Provides pre-retrofit IEQ baseline; identifies damp, mould, and ventilation deficiencies to inform the RA's assessment
Retrofit Design	Ventilation and damp data inform specification of ventilation measures
Post-Occupancy Evaluation	Automates collection of IEQ evaluation data required by the RC; demonstrates fabric measure performance and absence of unintended consequences (e.g., new damp following air-tightening works)

The Output: ESG-Ready Data

MultiDots data automatically aggregates into your portfolio-level ESG and Social Metrics reporting, providing structured evidence for:

- **Tenant Satisfaction Measures (TSMs):** Demonstrates proactive management of repair and health risks.
- **Housing Ombudsman Defence:** Provides a defensible, timestamped audit trail of environmental conditions to rebut disrepair claims with factual data.
- **Retrofit Evaluation Reports:** Proves that fabric upgrades have improved comfort and IEQ without introducing damp or ventilation risks — a specific PAS 2035 evaluation obligation.
- **Awaab's Law Compliance:** Supports the 24-hour hazard response requirement by enabling early identification of conditions likely to trigger a formal complaint.

Wave 3 Compliance & Value

PAS 2035 Evidence Trail

MultiDots automate gathering of environmental data required at the Evaluation stage of PAS 2035:2023, reducing the administrative burden on your Retrofit Coordinator and accelerating sign-off.

Explicit link to funded measures

MultiDots verify IEQ improvements following Wave 3-funded insulation, ventilation, and heating upgrades — providing the "before and after" evidence your funder requires.

Value for money (Least Regrets)

Prevents damp and mould escalation, reduces complaint-driven visits, and avoids costly remedial works caused by poor retrofit execution or unintended consequences.

PowerSense: Electrical Consumption & Low-Carbon Heating Proof

Decarbonisation requires proof — PowerSense provides it. PowerSense monitors circuit-level electrical consumption, enabling landlords to validate retrofit and low-carbon heating performance with confidence.

Key Sustainability Benefits

- **Heat pump performance analysis** (pre- and post-installation) to verify real-world Coefficient of Performance (CoP) against MCS design specifications.
- **Solar PV and battery storage utilisation insights** — proving self-consumption rates and grid export volumes.
- High-demand appliance and energy-waste identification.
- **Baseline electricity consumption data** for decarbonisation planning and future funding applications.
- Fuel poverty detection through anomalous consumption patterns (e.g., absence of heating-related electricity draws during cold periods).

PAS 2035 Process Stage Mapping

PAS 2035 Stage	PowerSense Role
Retrofit Assessment	Establishes pre-retrofit electrical consumption baseline
Post-Occupancy Evaluation	Provides M&V evidence of low-carbon technology performance; confirms CoP and identifies underperforming installations

Wave 3 Compliance & Value

M&V Tool

PowerSense provides the validation data needed to prove that low-carbon technologies (heat pumps, solar PV) are performing as specified in the funding application — a key Wave 3 outcome requirement.

MCS Alignment

CoP data from PowerSense can be used to verify that heat pump installations are performing within MCS design parameters, supporting post-installation compliance obligations.
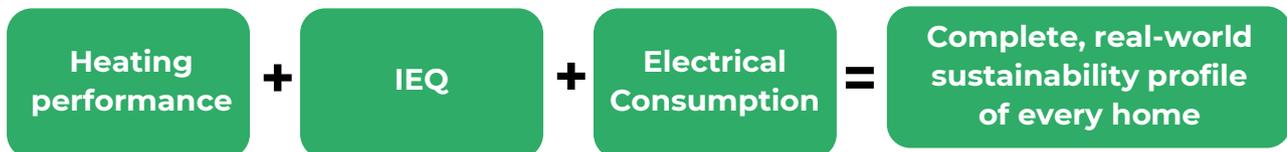
Explicit link to funded measures

Directly verifies the performance of Wave 3-funded heat pumps and low-carbon heating systems.

Value for money (Least Regrets)

Identifies mis-sized heat pumps early, detects installation failures before resident complaints, and prevents costly rework — protecting your cost-per-property metrics and your relationship with your funder systems.

The Combined Value: One Platform, One Source of Truth

Full-spectrum home intelligence

Heating performance + **IEQ** + **Electrical Consumption** = **Complete, real-world sustainability profile of every home**

Evidence for every funding and compliance claim
- EPC uplift validation
- Fuel poverty identification and intervention
- Damp & mould prevention and Awaab's Law compliance
- Heat pump and low-carbon heating performance verification
- PAS 2035 Evaluation and Post-Occupancy Evaluation data
- Wave 3 KPI reporting

Demonstrable value for money

Fewer failed installs, fewer repeat visits, fewer poor-quality outcomes, fewer failed EPC uplift attempts, reduced remediation costs, and lower Ombudsman and audit exposure.

Targeting investment where it matters

Worst-performing stock, inefficient heating behaviours, damp and mould hotspots, underperforming low-carbon technology, and vulnerable residents requiring proactive support.

Resident wellbeing

Improved thermal comfort, lower energy bills, reduced mould and condensation, and tenant-friendly insights that support engagement and satisfaction.

Why Sustainability Teams Standardise on Vericon Systems

Need	Vericon Systems Advantage
Heating optimisation & carbon reduction	BCM delivers verified real-world gas reductions of 10–18% via flow temperature optimisation and behaviour management
Preventing damp, mould, and cold homes	MultiDot monitors IEQ continuously and predicts risk before it escalates
Verifying decarbonisation investments	PowerSense validates heat pump CoP, solar PV performance, and electrical consumption change
Proving PAS 2035 compliance	Structured data exports mapped to Retrofit Assessment, Retrofit Coordinator (RC), and POE requirements
TrustMark & MCS alignment	M&V data supports compliance documentation for TrustMark-registered and MCS-certified works
Funding eligibility	Eligible under Wave 3 "Admin & Ancillary" budget lines for M&V; cost guidance available per unit
Retrofit Assessor (RA) support	Pre-retrofit baseline data informs and validates the RA's findings at assessment stage
Retrofit Coordinator workflow	Data exports structured to accelerate RC sign-off at evaluation stage
Data strategy	Integrates into your existing Asset Management Systems and BI tools.

Your Next Step: A Free Wave 3 Portfolio Scoping Session

If you are managing a Wave 3 programme — or preparing a bid — the most valuable thing Vericon Systems can offer you right now is not a sales pitch. It is **clarity**.

In a free 30-minute Portfolio Scoping Session, a Vericon Systems Sustainability Specialist will:

- **Map your stock** against Wave 3 eligibility criteria and identify your highest-priority properties for early deployment

- **Model your Admin & Ancillary headroom** — showing exactly how Vericon Systems fits within your 15% allocation at your portfolio size

- **Walk you through a live example** of the BCM, MultiDot, and PowerSense data outputs your Retrofit Coordinator will receive

- **Answer your Retrofit Coordinator's questions** — we are happy to join a call with your Retrofit Coordinator directly if that helps accelerate sign-off

There is no commitment required. You will leave with a clear picture of whether Vericon Systems fits your programme — and if it does, a deployment pathway that can begin within your current compliance schedule.

📞 **Book your Portfolio Scoping Session**
Contact: Bernard Cook | bernard.cook@vericonsystems.com | 01242 582555

Slots are available now. We recommend booking before your Retrofit Assessment stage begins to maximise the baseline data available to your funder.

References

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4. TrustMark – *Scheme Requirements for Retrofit* — TrustMark registration obligations for Wave 3 retrofit delivery. https://www.trustmark.org.uk
5. MCS – *MCS Standards for Heat Pump Installation* — CoP verification and post-installation compliance requirements. https://mcscertified.com
6. National Insulation Association – *Summary of SHDF / Wave 3 Draft Guidance* — Cost cap and spend profile guidance.
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8. HACT – *Social Value Bank* — Social value calculation methodology (£11.28 per £1 invested figure). https://hact.org.uk/tools-and-services/uk-social-value-bank
9. Awaab's Law — *Social Housing (Regulation) Act 2023*, Section 10 — Landlord obligations to investigate and remedy hazards within prescribed timeframes.

Version 3.2 | Vericon Systems | 20 February 2026 Performance data and case study evidence available on request. All financial projections should be validated against your specific portfolio characteristics before inclusion in funding applications or business cases.