

Heating Use in Social Housing: A Missing Piece in Damp and Mould Prevention

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GUEST ARTICLE



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Introduction

At **Mid Devon Housing**, we've spent years examining damp and mould from every angle—ventilation, insulation, repairs—and a significant part of this has been **data monitoring**.

One issue that keeps coming up, and that until recently we lacked the tools to measure and tackle effectively, is **heating**. We already know that homes need a **balance of ventilation and heating** to avoid condensation issues, but understanding and influencing heating behaviours has proven far more complex.

The Role of Ventilation vs. Heating

Over the past couple of years, we've been able to monitor the impact of **ventilation interventions**, which we estimate resolve **around 70% of mould issues**. Our environmental monitoring data shows clear, measurable improvements when interventions are made, such as:

- **Installing extraction/ventilation measures such as extractor fans or positive input ventilation (PIV) systems** – resulting in immediate reductions in humidity.
- **Encouraging tenants to use window vents correctly** – stabilising background moisture levels.

However, in some cases, **ventilation improvements alone do not resolve the problem**.

Environmental monitoring frequently identifies **underheating** as a root cause of persistent damp and mould.

The Challenge: What Happens When Lack of Heating Use is the Issue?

This is where we **hit a wall**. In many case studies, we reach a familiar conclusion, and this is how the presentation goes:

"We identified an underheating issue, discussed this with the tenant, and signposted them to heating advice and financial support."

But then... nothing changes. The natural next step should be:

"And on the next slide, we can see the impact of increased heating once the tenant was aware of the issue and adjusted their usage."

Except, that slide **doesn't exist**.

In nearly every case study we've monitored, **heating use remains unchanged**, even when tenants are given clear evidence that underheating is contributing to damp and mould. Until my most recent case, the **only time we see a significant shift in heating patterns** is when there's a **change of tenancy**—when a new occupant moves in and simply uses the heating differently.

This leaves case studies feeling **incomplete**, like an unresolved final chapter that should be there but never materialises. And the reasons behind this are **complex and deeply personal**.



Why is Heating Different?

Unlike ventilation or insulation—where landlords can **install improvements, automate interventions, and monitor outcomes**—heating use is almost entirely within the **tenant's control**. *

A landlord can **provide a heating system**, but:

- Whether a tenant **chooses to use it**
- **How long they use it for**
- **What temperature they set it to**

...is their **personal decision**.

A key example of this is tenants requesting **removal of gas meters** to save on the **daily standing charge**, which is the case in a few of our homes, leaving them with no fixed heating. While we supply the heating system, ultimately, the tenant is the **gas consumer**, and the energy company owns the meter.

**I should clarify, that for the purposes of this article, I'm discussing with the context of homes where we know that the heating system is capable of bringing the home to a reasonable temperature. If a landlord has not provided a suitable source of heating, obviously that is not a tenant responsibility, and this article does not apply. Within Mid Devon Housing stock, any home with access to the gas network has a gas combi boiler on a 10-year renewal programme, any home off the gas-network has either air-source heat pump or electric storage heaters, with the occasional solid fuel appliance still in operation. Any older style storage heaters are in the process of being renewed to Dimplex Quantum storage heaters. Heat pumps in smaller homes (1 and 2 bed bungalows) are being renewed also with Dimplex Quantum.*

Rethinking Heating Standards: What is 'Enough'?

Much of the conversation in housing has focused on **healthy heating levels**—what homes *should* be heated to in order to:

- **Prevent damp and mould**
- **Maintain health and wellbeing**
- **Ensure a comfortable living environment**

But last year, I worked on a project looking at a slightly different question:

“What is the minimum heating level a home should have?”

This came in response to tenants who were **barely heating their homes** and worried they couldn't afford the significant extra cost of increasing it, even **to a baseline level**.

✦ That project is now complete—[here's a link to that video](#)

✦ And the [follow up](#)



A Personal Experiment in Heating Costs

While working on this project, I reflected on my **own experiences and perceptions** of heating. It's one thing to look at the data from a professional standpoint, but taking a step back, I realised just how **deeply ingrained certain ideas** about heating are.

- Last year, I **increased my heating duration**, expecting a **significant jump in energy costs**.
- Surprisingly, that increase **never really came**—at least, not to the extent I had anticipated. Around £160 to £180 gas and electric per month combined, around a time when energy prices increased anyway.
- My home is a **solid-walled property** with **high thermal mass**—it retains heat well but has **exposed external walls**. It also has a few structural damp issues.
- This experiment **wasn't enough** to say, *"I tried this, it worked, so tenants should do the same"*, but it gave me a **personal benchmark** for energy costs.
- I now **better understand** how perceptions of heating expenses influence behaviour.

Childhood Heating Experiences: A Lasting Impact

- I grew up in a **very cold home** with: **Night storage heaters, single glazing (sometimes with ice on the inside!), an electric meter often on emergency credit**.
- Portable **blower heaters** and **electric blankets** were favoured over fixed heating—because they could be used during the day and turned off **as soon as credit ran low**.
- When visiting **friends with gas central heating**, I often felt **lightheaded** and **chose to play outside** rather than stay in the warmth.
- When I moved into my first rented flat at 18, it didn't even have a fixed heating system, so I was back to the portable electric heater situation. It was a bad time to be living independently, and I found myself in a very similar situation to many of our tenants today. **My rent was more than a third of my income and this, combined with an energy price increase in 2008 did impact on the decisions I made day-to-day, such as what I could afford to eat**. This swiftly led to a decision to downsize, spending the next few years in shared accommodation, bedsits and annexe flats whilst saving to buy.

Even as an adult, when I could **afford to heat my home properly**, there was still a **psychological barrier**:

- **The mindset that constant heating was an unnecessary luxury**
- **The instinct to put on another jumper instead of turning up the thermostat**
- It took time—not just gaining the financial means but **changing my mindset to prioritise a warm home**.

Why Does This Matter for Social Housing?

This personal reflection has been **invaluable** in my work with tenants. It's helped me understand **why so many people resist increasing their heating**, even when:

- ✓ They have the financial means
- ✓ Data and evidence show it would improve their comfort and health
- ✓ It would reduce condensation and mould issues

If it took **me years** to move past the *“just put on another layer”* mentality, it's no surprise that **many tenants struggle with the same mindset shift**.

Understanding this isn't about simply telling people to do better—it's about recognising the deeper experiences, habits, and perceptions shaping their decisions.

Is It Really Just About Fuel Poverty?

I often hear that the solution to underheating is just **to fix fuel poverty**—by:

- Giving people more money
- Making energy cheaper
- Massively insulating homes

While these are **important factors**, from what I see in **Mid Devon**, they're only **the tip of the iceberg**. The reality is **far more complex**.

Understanding Tenant Resistance to Heating: Insights from Environmental Monitoring

While financial hardship is often cited as the main reason for underheating homes, the reality is far more complex. In my experience, many factors contribute to tenants keeping their homes colder than recommended, and these are often psychological, behavioural, or based on misinformation rather than purely economic constraints.

Key Reasons Tenants Underheat Their Homes

Preference for a Cooler Home

Some tenants simply prefer a cooler environment, whether for comfort, habit, or perceived medical reasons, and choose to keep heating to a minimum.

Debt and Financial Pressures

Even if rent and benefits are covered, other financial burdens—such as credit card debt, loan repayments, or rent arrears—can push heating down the priority list. By the time tenants have met their monthly obligations, they may not have enough left for effective heating.



Unstable Incomes

For tenants on zero-hour contracts or fluctuating wages, budgeting for heating becomes unpredictable. They may avoid using heating during uncertain weeks, leading to chronic underheating even when their income stabilises.

Rationing Mentality—Saving for a Rainy Day

Some tenants operate with extreme financial caution, avoiding ‘unnecessary’ heating in case their financial situation worsens, even if it means being cold now.

Misconceptions About Heating Levels

Many tenants genuinely believe they are heating their homes adequately when they are not. Research, such as Rose Chard’s work (featured on the Healthy Homes Podcast), has demonstrated this—households reported sufficient heating, but environmental monitoring showed otherwise.

Differing Perceptions of Temperature

Temperature comfort levels vary between individuals. Some tenants don’t notice gradual cooling throughout the day, leading to colder homes without realising.

Thermostat Issues

Poor thermostat placement (e.g., in draughty hallways or near radiators) can lead to inaccurate readings, causing heating to shut off prematurely or run inefficiently. In some cases, broken or misunderstood thermostats prevent tenants from heating their homes as intended. Older systems, such as storage heaters, offer little intuitive control—what does ‘3, 4, or 5’ mean in terms of actual temperature?

Unbalanced Heating Systems

If radiators heat unevenly, tenants may assume their system is faulty and reduce heating across the whole home rather than addressing specific imbalances.

Denial About Underheating

Some tenants, out of pride, habit, or psychological reasons, refuse to acknowledge that their home is too cold. They may attribute condensation or mould to structural defects rather than heating.

Lack of Awareness of Healthy Heating Levels

Many tenants do not know that the recommended indoor temperature for health and well-being is 18°C–21°C. Those accustomed to colder homes may assume that 14°C or 15°C is sufficient.

Belief in an Underlying Structural Defect

A common barrier to behaviour change is the belief that damp or condensation issues stem from a building defect rather than underheating. Some tenants resist increasing heating, fearing it will ‘mask’ an issue that needs fixing.



Manipulation of the System

While rare, some tenants deliberately underheat their homes to worsen conditions, increasing their chances of a managed move, decant, or upgrade to a more desirable property.

Difficulty Understanding Heating Controls

Modern heating systems, particularly heat pumps and high-tech controls, can be confusing for tenants unfamiliar with their operation. Without proper guidance, they may use systems inefficiently or avoid them altogether.

Fear of High Heating Costs

Many tenants assume that turning up the heating will lead to unaffordable bills, even if they are already spending similar amounts on inefficient alternatives (e.g., relying on a single electric heater instead of central heating).

Comparing Costs to Previous Homes or Others' Bills

Some tenants reduce heating after comparing their bills to previous properties or friends' homes, without considering differences in construction type, exposure to elements, insulation, heating systems, or property size.

Being on an Unfavourable Tariff

Some tenants fail to shop around for better energy deals or are stuck on high-cost prepayment meters. High standing charges, rather than actual energy use, can inflate perceived costs.

Misunderstanding Seasonal Heating Costs

Some tenants are shocked by winter bill increases, even though this is normal. Without budgeting for heating year-round, they overreact and reduce heating too much in colder months.

Confusion Over Smart Meter Displays

Real-time energy monitors can be misleading. Seeing high usage when heating first turns on may cause panic, leading tenants to turn it off, unaware that costs balance out over time.

The Challenge of Encouraging Behaviour Change

I've worked with tenants over several years, hoping that by remaining supportive rather than forcing the issue, they would eventually be willing to trial higher heating levels. However, this rarely happens. Instead, the same tenants repeatedly report recurring mould issues each condensation season, asking, *what is the landlord going to do about it?* This leads to repeated inspections with the same findings and discussions, albeit framed in different ways.

To illustrate, here are some case studies based on environmental monitoring data:

Case Studies: Insights from Environmental Monitoring

Case Study 1: Long-Standing Case with Recurring Damp and Mould Issues

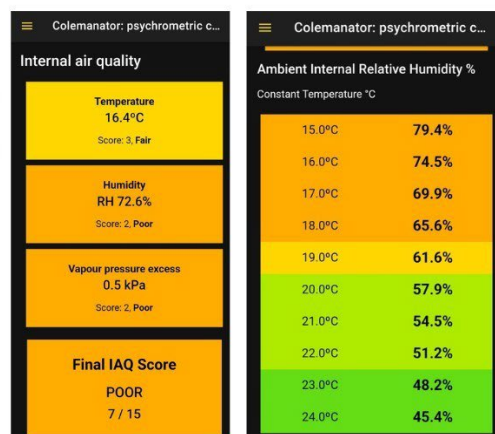
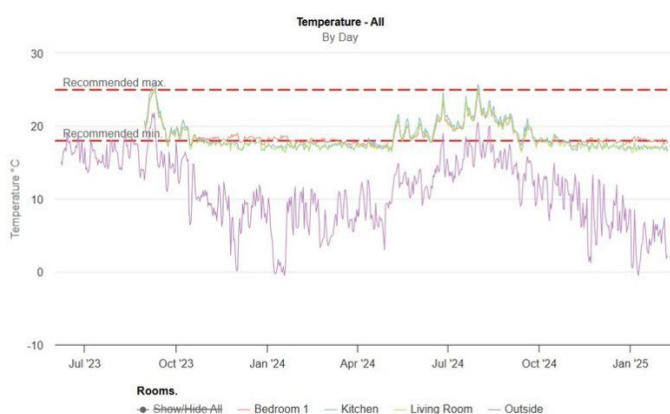
This tenant was decanted into their current home seven years ago from a similar property that required major damp-proofing works. However, within the first winter, nearly identical issues reappeared—low-level mould around skirting boards and furniture being affected.

Key Findings & Interventions:

- Over the years, remedial works were carried out, but the issues recurred.
- When visiting, I immediately suspected underheating, but at the time, I didn't have the tools I have now to confirm it.
- We identified a bridged damp-proof course, which we rectified to provide reassurance that structural issues weren't the root cause.
- Environmental monitoring showed the home was consistently cool, with the heating set to a setback temperature of 17°C, a maximum of 18°C, but never truly reaching it. The heating was only used for an hour or two a day.
- Despite financial support and signposting, we couldn't encourage the tenant to trial increasing the heating, even temporarily.
- This case was covered in previous videos and presentations, as it highlights key barriers to behavioural change in addressing damp and mould.

Over the past 3 years we have re-investigated to rule out any new structural issues, and urged the tenant to increase the indoor temperatures, and signpost to additional financial support, but this does not happen. However, each winter period, we continue to receive a new report from this very frustrated tenant, asking for a solution to the issue. This is one we are still actively working on, and our next step will be to offer a direct financial incentive to use the heating to higher levels.

More details about this case studies and others are available [as part of this video](#).



Environmental Monitoring data showing chronic underheating all winter. Psychrometric analysis shows the incremental improvements each °C increase in temperature would bring. Credit: Aico HomeLINK and the Colemanator App.

Case Study 2: Success in Addressing Underheating After a Flood

This property was initially monitored due to a plumbing leak, but after drying out, the data revealed a more persistent issue—underheating.

Key Findings & Interventions:

- Indoor temperatures dropped to 12–13°C in winter, with no evidence of heating use.
- The tenant, who has Asperger's, was receiving advice from family members discouraging heating use, as they believed structural defects were to blame and that heating should only be needed for an hour or two a day.
- Through discussion and financial support, the tenant agreed to raise the temperature to 18°C for a few hours daily, leading to a significant improvement in air quality and personal health (his persistent cough disappeared).
- He later asked to slightly increase the heating further, recognising the comfort and health benefits.
- While the home still didn't consistently reach the ideal 18–21°C range, the intervention significantly reduced risk, demonstrating a balanced, risk-based approach.

What's great about this one is that after the heating was increased, it looked as though the hallway was remaining much too cool. As it turned out, the sensor was not in the hallway of the flat itself, but in the unheated communal hallway. I decided to cancel the order to relocate it back inside the home, as I soon realised it was a perfect opportunity to track what the conditions would be like in the home if it returned to being unheated. It ended up being a perfect opportunity to showcase, without a doubt what the impact of heating was, accounting for external factors.



Monitoring data: The vertical green line shows the intervention (heating advice and support setting up programmer). The red arrows indicate a blip, during which time the tenant went away for Christmas and ran out of gas credit. Credit: Aico HomeLINK

Case Study 3: Impact of Heating on Mould Risk – Before and After Mutual Exchange

This home was heated at the lower end of the 18–21°C range, and monitoring revealed that when the heating was temporarily increased to 20°C, just for a 24-hour period, the mould risk was either significantly reduced or eliminated.

The mechanical ventilation in the home was increased to the maximum possible, and window trickle vents were already in place. Extensive investigations were carried out (moisture profiling, calcium carbide tests, salts analysis, cavity wall inspections, floor hygrometer, surface temperature measurement, psychrometrics and environmental monitoring) which all ruled out a structural defect.

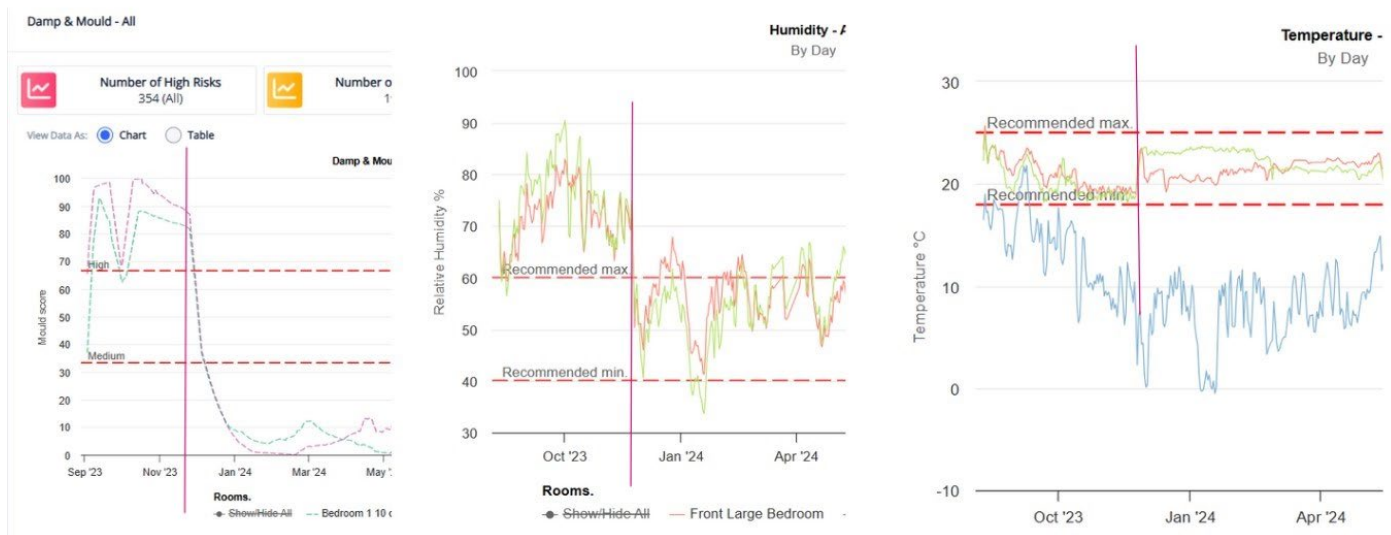
Key Findings & Interventions:

- The original tenants were unwilling to trial a sustained increase in temperature.
- Following a mutual exchange, the new tenants increased heating levels, completely resolving the mould issues.
- However, tenancy changes make it difficult to attribute improvements to just one factor, as other lifestyle and maintenance differences could also be at play.

Interestingly in this case, the data also suggests that:

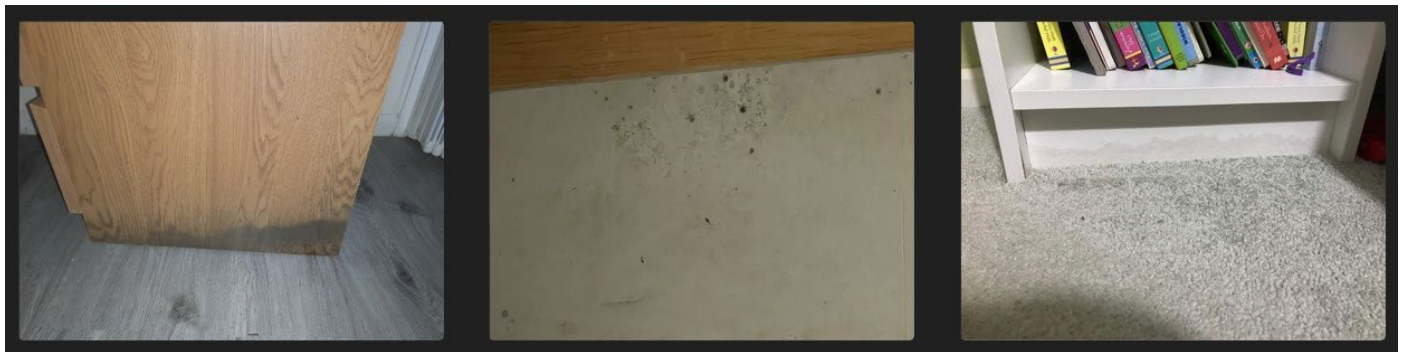
the heat loss was reduced by 21% as a result of the non-structural change.

(Time to lose 1°C in February 2025 was 126 minutes, compared to 104 minutes in October 2023).



Monitoring data: The vertical pink line shows the catalyst - a mutual exchange/homeswap and associated heating use and its impact on the damp and mould risk score, humidity and temperature.

Credit: Aico HomeLINK



Photos showing the fairly extreme presentation inside the home prior to the change of occupation. This disappeared despite the carpet and decoration remaining the same throughout.

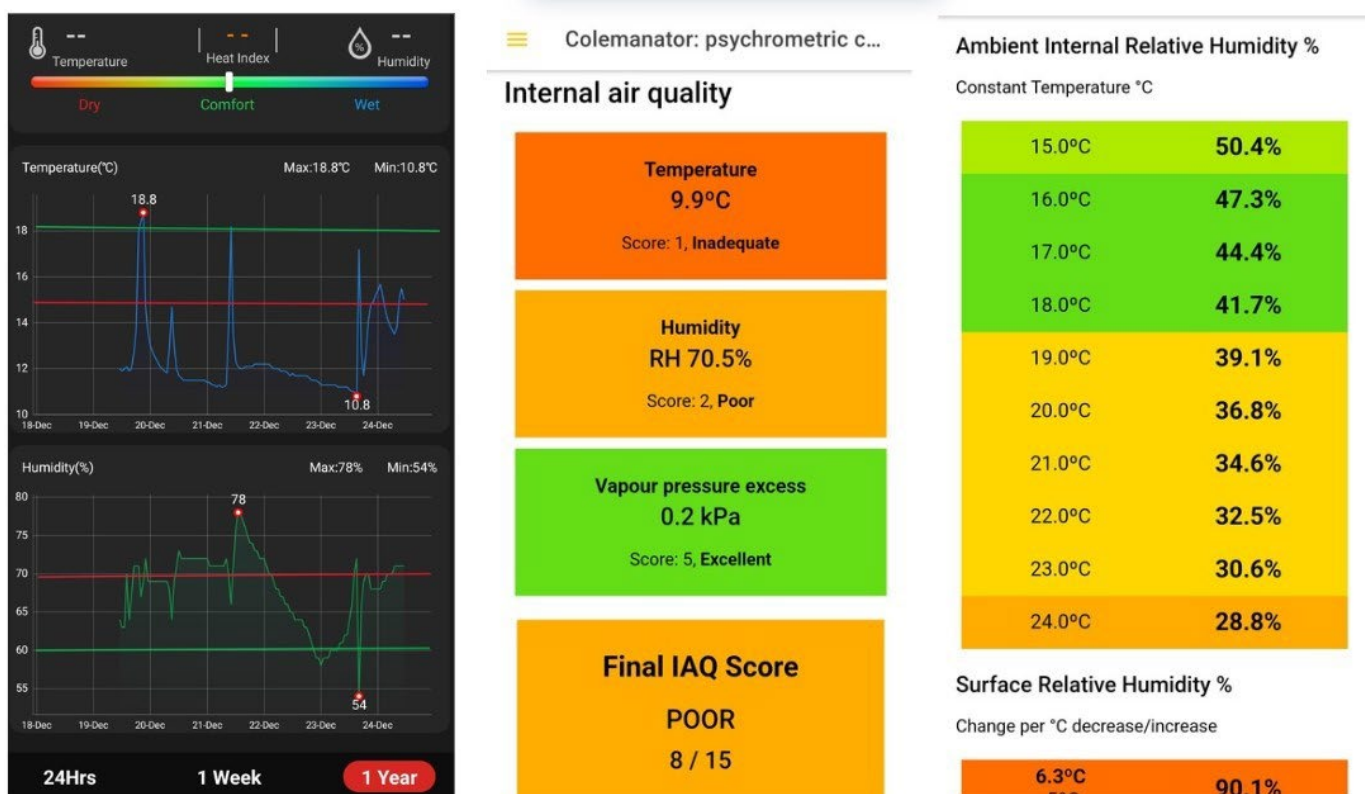
Case Study 4: Severe Underheating Identified Through Leak Investigation

A leak from the flat above had affected this home, causing damage behind the WC boxing. The leak was repaired, but unrelated issues persisted, prompting further investigation.

Key Findings & Interventions:

- Initial symptoms resembled rising damp, but salts analysis and profile readings ruled this out.
- A follow-up winter visit revealed the home was extremely cold, with windows left wide open.
- Environmental monitoring showed winter temperatures as low as 11–13°C during the day, with no heating use detected. The only temperature spikes were linked to shower use.
- Extensive investigation included an independent surveyor, leak detection specialists, cavity inspections, and rainwater goods assessments—all ruling out external moisture sources.
- A financial incentive (£200) was offered to encourage trial heating to 18–21°C for just a couple of weeks, but the tenant declined.

Again, this is very similar to the first case study. Similarly to that tenant, from a very early stage the tenant has expressed a desire to relocate to another home in a different area. It's a chicken and egg situation - has the desire to move really come from a lack of faith in the home, or would allowing the issues to be simply resolved be perceived as reducing the priority for re-housing?



Data from Bluetooth monitor showing very low temperature levels (spikes generally caused by use of shower), associated high humidity and poor indoor air quality. Credit: ThermoPro Monitor and Colmanator App.

Case Study 5: Persistent Mistrust in Heating System Leading to Extreme Measures

This tenant had a history of housing instability due to mental health challenges. She was transitioning from an air-source heat pump to quantum storage heaters but had ongoing disputes about her previous heating system.

Key Findings & Interventions:

- The heating contractor confirmed the heat pump was functional but was regularly being turned off, reducing efficiency and indoor temperatures.
- Classic condensation-related black mould was present in cold bridge areas.
- The tenant reported that her bathroom wasn't warming up, despite the thermostat being set to 19°C.
- When asked to clarify, she confirmed the heating was set to 19°C, the bathroom thermometer read 19°C, but she *felt* cold. As a result, she turned the entire heating system off.
- She then moved all furniture into the kitchen, living exclusively in that space with a portable electric heater.
- Despite explanations and offers of support, she refused to re-engage with the heating system or schedule the new storage heater installation.
- There was a clear underlying mistrust of the system, coupled with a desire to use the property condition to support a request for rehousing.

Case Study 6: A Tenant Who Took on Advice, Demonstrating Tangible Impact

This case, just weeks old, reinforced my drive to keep pushing forward. It involves the same property type, on the same street, as the first case—highlighting the stark contrast that behaviour makes.

Key Findings & Interventions:

- The home is a 1950s/60s bungalow with:
- The tenant actively engaged with advice and implemented several recommendations, leading to noticeable improvements.
- A small amount of mould remained in bedroom corners and under a mattress topper.
- Demonstrating cross-ventilation using a CO₂ monitor helped address misconceptions about heat loss.
- Real-time data showed a brief drop in temperature with ventilation, but it stabilised quickly, reinforcing the benefit.
- The tenant had initially kept heating off for long periods, rarely using it in the Winter, struggling with condensation and mould.

- After implementing changes, she set her heating to a constant 20°C, occasionally increasing it to 22°C when needed.
- She expected significantly higher energy costs but found only a £10 per month increase in winter gas bills—far below fuel poverty levels. Remarkably, the gas use was around £50 per month when rarely being used and around £60 per month when increased to the constant 20°C. This is for a 2 bedroom bungalow identical to those in case studies 1 and 3.
- This case highlighted that **maintaining a stable and consistent temperature improves efficiency, comfort, and home conditions**.
- Unfortunately, there was no long-term environmental monitoring in place to track the impact fully. However, the contrast with the first case study provides valuable insights into heating behaviour and its effects on heat retention.

This case has been pivotal in shaping my approach to tenant engagement. It reinforced that **education, demonstration, and making concepts tangible** are key to shifting behaviours in a way that tenants trust and adopt.

The Role of Environmental Monitoring—And How Feedback Will Improve It

Environmental monitoring is already playing a crucial role in identifying underheating, tracking trends in home conditions, and helping us better understand how heating, ventilation, and occupancy interact. The data we're collecting is incredibly precise, allowing us to see patterns that would otherwise go unnoticed—fluctuations in temperature, humidity spikes, the impact of different heating schedules, and how small interventions like extractor fan use affect the indoor environment.

But while the data is powerful, it only tells part of the story. The real value comes when we combine this objective data with feedback from the people actually living in these homes. Tenant insights—how they perceive their comfort levels, how they interpret their energy use, what barriers they face to using heating effectively—will allow us to refine how we interpret environmental monitoring data and improve the way we respond.

How Feedback Will Strengthen Our Approach

1. **Understanding Behavioural Barriers** – Data alone won't always tell us *why* someone isn't heating their home enough. By combining environmental monitoring with tenant feedback, we can identify specific behavioural or financial reasons behind underheating and address them more effectively.



2. **Challenging Misconceptions** – Many tenants genuinely believe they are heating their homes adequately, even when the data shows otherwise. By feeding back real-world evidence—showing them their actual heating patterns compared to recommended levels—we can help shift perceptions and encourage change.
 3. **Fine-Tuning Minimum Heating Standards** – We already have a good understanding of what constitutes *healthy* heating levels, but we’re still refining what the *minimum effective* heating levels should be for our stock. Tenant feedback will help us determine how far homes can be stretched before underheating starts causing discomfort, condensation, or structural issues.
 4. **Improving the Accuracy of Our Interventions** – Right now, we often have to rely on assumptions when advising tenants on heating. More user feedback will allow us to tailor advice more precisely—understanding what messages resonate most and which solutions are most likely to be followed.
 5. **Making Environmental Monitoring More Accessible** – Not every tenant understands the value of the sensors in their homes, and some might even see them as intrusive. The more we engage with tenants about their experiences and how the data benefits them, the more likely they are to trust and engage with the technology.
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Next Steps: Encouraging Two-Way Engagement

For environmental monitoring to be most effective, it can’t just be a passive system that collects data in the background. The more we involve tenants—explaining what the data means, encouraging them to reflect on their own heating habits, and using their feedback to refine our approach—the more impact we’ll see.

This is something we’re already embedding into our work, but there’s huge potential to take it further. Whether that’s through personalised reports for tenants, more interactive engagement, or improved survey methods, the goal is to create a system where the technology and the user experience feed into each other, continuously improving both.

We’re still handling several serious and long-term underheating cases where tenants are reluctant, or in some cases outright resistant, to increasing their heating, despite persistent damp and mould issues. These cases have made me question whether we’re doing enough to understand and address the barriers to proper heating—and whether we need a clearer definition of what an absolute minimum, non-negotiable level of heating should be in our homes.

These conversations have prompted me to commit more time to this project, looking at heating behaviour, cost perceptions, and what’s actually achievable for tenants, particularly those on low incomes. There’s a lot to unpick—from misunderstandings about heating costs to the role landlords play in guiding tenants to use their heating effectively. I’m keen to explore this further and to hear from others working on similar challenges.

Some tenants remain convinced that their issue is structural, despite monitoring data, surveys, and remedial works. Others are financially cautious—sometimes for valid reasons, sometimes based on perceptions of cost rather than actual figures. Some are simply reluctant to engage in conversations about their energy use, often because they see it as something private or unrelated to their housing conditions.

Whatever the reason, the result is that we're left with case studies that clearly show the impact of ventilation and insulation improvements but fail to demonstrate what could happen if heating use was optimised alongside them. It's a missing piece that could completely transform the outcomes—but only if we can find the right way to engage tenants in that final step.

What Tenants Say vs. What the Data Shows

One of the most interesting things I've found is that people often believe they are heating their homes adequately, but the reality is very different. Rose Chard talked about this on the [Healthy Homes](#) podcast—her research showed that most people, when asked, stated they were heating their homes properly, but the actual temperatures recorded in their homes didn't match up.

This lines up with what I've seen in environmental monitoring data and tenant feedback. Some tenants genuinely think their homes are warm enough, but their heating use suggests otherwise. Others are very aware of their energy bills and deliberately limit their heating because they're worried about costs, often without realising that they're keeping their homes at unhealthy levels.

Misconceptions Around Heating Costs

A big part of this resistance seems to come from concerns about cost—and I completely understand why.

That final example I mentioned—the one who increased her heating—was initially really worried about how much it would cost her.

Meanwhile, I've had other tenants come to me with complaints about heating costs where the perception doesn't quite match reality. One tenant told us they'd had a heat pump issue that had resulted in a £300 bill for one month. We looked into it, and it turned out the bill was actually for three months—completely in line with what we'd expect for that home during winter.

Then there's the issue of standing charges. Many tenants are deeply worried about gas costs, but when you check, their actual usage is low—the high cost comes from the standing charge or an unfavourable tariff. Some tenants have even gone so far as to remove their gas meters entirely because they don't want to pay the daily charge. This means they're left with no fixed heating source, relying on inefficient plug-in heaters or not heating their homes at all.

Landlord vs. Tenant Responsibilities: Who Is Accountable for Heating and Excess Cold?

This raises a bigger question: where does this leave landlords when it comes to disrepair claims and Housing Ombudsman cases?

Section 11 of the Landlord and Tenant Act 1985 sets out that a landlord is required to keep the structure of the home and its heating system 'in repair'. The same section sets out that tenants are required to

"Use the property in a tenant-like manner."

But does this include using the heating system properly? If a tenant has a fully functional central heating system but refuses to use it, is the landlord still responsible for condensation and mould issues that arise as a result?

Sections 9A and 10 of the Landlord and Tenant Act 1985: Introduced by the Homes (Fitness for Human Habitation) Act 2018, this section requires landlords to ensure their properties remain fit for human habitation throughout the tenancy. Excess cold is one of the factors that can render a home unfit. Landlords must provide adequate heating and insulation to prevent unreasonably low indoor temperatures. Section 10 defines "fitness for human habitation" and explicitly lists "freedom from damp" and "adequate heating" as essential requirements. A home without sufficient heating could be deemed legally uninhabitable. It is important to note that the section clarifies that it must be defective (and so far defective) to be considered unfit for habitation:

"the house [or dwelling] shall be regarded as unfit for human habitation if, and only if, it is so far defective in one or more of those matters that it is not reasonably suitable for occupation in that condition."

So again, it begs the question: if the heating system is not defective but it is also not being used, this may lead to a defect in the form of excess cold, damp or mould. Where does the liability sit? The answer to this lies in this paragraph of the act "In subsection (1) "prescribed hazard" means any matter or circumstance amounting to a hazard for the time being prescribed in regulations made by the Secretary of State under section 2 of the Housing Act 2004." Following the trail, we end up with the HHSRS:

Housing Health and Safety Rating System (HHSRS)

The HHSRS, introduced under the Housing Act 2004, assesses risks in residential properties, including excess cold. Excess cold is classified as one of the 29 hazards that can pose a serious health risk to occupants. Local authorities use this framework to evaluate the risk and require landlords to take remedial action where necessary. Para 10.6 of the HHSRS Operators Guidance states that:

The HHSRS concentrates on threats to health and safety. It is generally not concerned with matters of quality, comfort and convenience. However, in some cases, such matters could also have an impact on a person's physical or mental health or safety and so can be considered.

The guidance goes on to clarify that consideration should be given to responsibility for deficiencies and hazards:

2.32 Hazards in dwellings can result from:

- (a) deficiencies solely attributable to the design, construction and/or maintenance of the dwelling;
- (b) deficiencies solely attributable to the behaviour of the occupants** or neighbours; and
- (c) deficiencies which are attributable to both the dwelling and the occupants or neighbours.

"2.33 The HHSRS provides a means of assessing the dwelling. It is, therefore, concerned only with those deficiencies that can be attributable solely or partly to the design, construction and/or maintenance of the dwelling [...]. This assessment is of the dwelling disregarding the current occupiers (if any)⁹, and based on the potential effect of any hazards on a member of the relevant vulnerable age group¹⁰. This is important and means that the assessment will not be affected by a change of occupier, and that an unoccupied dwelling can be assessed."

It also states that:

"Dwellings, as well as providing protection from the environment, should be capable of being occupied safely and healthily by a range of households with a spectrum of lifestyles. Also, dwellings should meet the needs of a wide range of households whose members may include the elderly or the very young. In some cases, occupiers, through their activities and the furniture, furnishings, fixtures and fittings they may introduce, can increase or reduce the likelihood of a hazardous occurrence and the severity of harm from any such occurrence. It is not always possible to apportion the contribution a deficiency makes to the likelihood of an occurrence and the contribution made by the behaviour of the occupants."

The Rating System is primarily concerned with those matters which can properly be considered the responsibility of the owner (or landlord) even where the dwelling is occupied by the owner. This means that it is necessary to distinguish between those elements of a dwelling for which responsibility lies with the dwelling owner (or landlord) and those for which responsibility lies with the user (the occupier).

Housing Ombudsman's Stance on Heating and Excess Cold

The Housing Ombudsman has reinforced that landlords must take proactive measures to address heating deficiencies and ensure tenants are not living in homes that are excessively cold. Common themes in upheld complaints include:

- Delays in repairing broken heating systems during winter.
- Failure to provide alternative heating solutions while repairs are ongoing.

- Inadequate insulation leading to significant heat loss and high energy costs.
- Landlords failing to take timely action when tenants report heating issues.

The Ombudsman expects landlords to respond promptly to heating failures, conduct property assessments to prevent heat loss, and support tenants in maintaining a healthy indoor temperature.

A spotlight report on complaints about heating, hot water and energy in social housing was published in 2021, and is available here: [Spotlight on: Complaints about heating | Housing Ombudsman](#), with a supplementary webinar which covered the subject: [Heating-and-Hot-Water-Webinar-.pdf](#)

Balancing Responsibilities: Where does this leave us?

From a legal standpoint, both landlords and tenants have distinct yet interrelated responsibilities when it comes to heating and excess cold. Ultimately, it is decided on a case-by-case basis, by the Housing Ombudsman and the Courts. As sections 9a and 10 are relatively new, there is no binding case law yet which we can rely on.

Landlords are obligated under Section 11 of the Landlord and Tenant Act 1985 to ensure heating systems are in good repair and functioning properly. Sections 9A and 10, introduced by the Homes (Fitness for Human Habitation) Act 2018, extend this responsibility to ensuring homes remain fit for habitation, including providing adequate heating. Additionally, under the HHSRS, landlords must take reasonable steps to mitigate excess cold risks and ensure homes are suitable for a range of occupants, including vulnerable groups. The Housing Ombudsman also places clear expectations on landlords to act swiftly on heating issues and prevent conditions that could cause harm to tenants.

However, tenants also have a duty to use the home in a "tenant-like manner." While landlords must provide a working heating system, tenants are expected to use it appropriately to prevent excess cold and its associated risks, such as condensation and mould. The HHSRS guidance acknowledges that occupant behaviour can contribute to deficiencies but focuses on the property itself when assessing hazards. This creates a grey area—if a tenant chooses not to use the heating, leading to cold and damp conditions, the legal responsibility becomes less clear.

Ultimately, liability depends on whether the issue arises from a defect in the property or tenant behaviour. If a heating system is faulty or inadequate, the responsibility clearly falls on the landlord. If a tenant has access to working heating but does not use it, the landlord's obligation is less straightforward. This reinforces the need for clear communication, proactive support, and appropriate interventions to balance legal responsibilities while ensuring homes remain warm, safe, and habitable.

How Does Fuel Poverty Fit In?

Another factor to consider is fuel poverty. In Mid Devon, our rents are almost all at **social rent levels**, meaning they are covered by **Local Housing Allowance (LHA)**. That means even tenants on full welfare benefits should, in theory, have enough income to cover reasonable heating costs.

Fuel poverty in England is defined as when a household's energy costs are above the national median, and paying for them pushes the household below the poverty line.

Can Tenants Help Each Other?

I've been wondering whether tenants might be more open to changing their heating habits if the advice came from **other tenants** rather than from the council.

The tenant who adjusted her heating and saw improvements could be the perfect person to become an '**energy champion**'—someone who shares their experience and encourages others to think differently about heating.

Action Plan Moving Forward

Given the insights from environmental monitoring, tenant feedback, and case studies, the next steps should focus on a more structured approach to tackling underheating and tenant engagement. The following action plan outlines key initiatives:

1. Strengthening Tenant Engagement and Education

- **Develop clear pre-tenancy information:** Ensure all tenants receive guidance on expected heating costs for their specific home and minimum heating recommendations.
- **Create peer-led support networks:** Identify tenants who have successfully improved their heating use and encourage them to act as 'energy champions' to share their experiences with others.
- **Host practical energy workshops:** Run sessions on energy efficiency, heating system use, and cost-saving measures, making use of real tenant case studies.

2. Refining Environmental Monitoring and Feedback Integration

- **Introduce personalised heating reports:** Provide tenants with data-driven insights into their heating habits and how they compare to recommended levels.
- **Enhance tenant feedback mechanisms:** Incorporate more direct feedback loops into monitoring data collection, using surveys and interviews to understand behavioural barriers.
- **Expand HomeLink's energy monitoring uptake:** Explore ways to improve engagement with smart monitoring systems, making them more accessible and relevant to tenants.

3. Defining Minimum Heating Standards and Addressing Financial Concerns

- **Set and communicate non-negotiable minimum heating thresholds:** Define clear standards for acceptable heating levels in different property types and ensure tenants understand their role in maintaining these conditions.
- **Improve financial support signposting:** Provide targeted advice on available financial assistance, tariff options, and efficient heating strategies to help tenants overcome cost concerns.



- **Challenge misconceptions around heating costs:** Use real-world examples to show tenants the actual cost of adequate heating versus perceived affordability barriers.

4. Reviewing Policy and Legal Considerations

- **Clarify landlord and tenant responsibilities:** Work with legal and regulatory teams to define the boundaries of responsibility under Section 11 of the Landlord and Tenant Act 1985.
 - **Develop a disrepair risk assessment framework:** Implement a structured approach to assessing tenant heating behaviours in damp and mould cases to ensure fair outcomes in legal claims.
 - **Collaborate with other housing providers:** Share data and best practices with other landlords facing similar challenges to refine collective approaches.
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Conclusion and Next Steps

The challenge of underheating and tenant reluctance to adjust heating behaviours is complex, involving a mix of financial concerns, misconceptions, and behavioural patterns. While environmental monitoring has provided valuable insights into heating trends and property conditions, the missing piece remains tenant engagement—understanding their perceptions, addressing their barriers, and building trust in the data.

By taking a more proactive, evidence-based approach, we can refine our interventions and provide more tailored support. From improving pre-tenancy education to leveraging peer-to-peer support and smart monitoring, there are multiple avenues to explore.

A key focus moving forward will be defining clear minimum heating thresholds and ensuring tenants understand not just *what* to do, but *why* it matters. Strengthening tenant feedback mechanisms will also be crucial, as real-world insights will help shape the future of heating guidance and interventions.

Ultimately, the goal is to create a housing environment where tenants feel empowered to heat their homes effectively, understand the real costs of heating, and trust that the guidance given is in their best interest. This is an ongoing conversation—one that will evolve as we continue gathering data and refining our approach.

I'd welcome insights from others working in housing—how are you addressing similar challenges? What strategies have worked in tackling heating reluctance and fuel poverty? Let's keep this discussion going.