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PUMA PROPERTY FINANCE

Future-proofing UK care homes

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Foreword



Kelly Harrison
Co-founder & Director, alpha – part of the Whitby Wood Group

An ageing population means the UK will need more care provision in the decades ahead. That will mean investing in existing care homes, expanding facilities, repositioning other buildings for care and developing new ones. The question is how we make sure that investment creates buildings that are ready for the conditions they will face over their lifetime.

The real estate sector has become much better at understanding transition and climate risk at portfolio level. The harder question is what those risks mean for an individual building. A care home's location might leave it more exposed to flooding or extreme heat. Its design and building systems affect how easily it can keep residents comfortable as temperatures rise, while changing energy systems and regulation create other pressures. Look at these issues together and you can start to see where an asset is most vulnerable, and where one intervention could respond to several challenges at once.

Identifying what needs to change is only useful if those interventions can be delivered, and whether their effect is evidenced. Care homes are among the least studied building types in this respect; there is very little post-completion data on how resilience measures actually perform. Whether adapting an existing building or developing a new one, investment and lending decisions will shape how and when resilience is built in, and collecting the evidence afterwards is what allows the next decision to be made with more confidence.

That's why we're pleased to have developed this guide with Puma Property Finance, combining alpha's engineering and transition resilience expertise with the perspective of a lender that has extensive experience financing new care provision across the UK.



Dee Korab
Head of Impact , Puma Property Finance

Care homes are among the most socially important assets in the UK, providing accommodation and care for some of society's most vulnerable people. As climate change increases the frequency and severity of risks such as overheating and flooding, ensuring these buildings remain safe, resilient and fit for purpose becomes increasingly important.

This is not only a challenge for residents and operators, but also for insurers, investors and lenders who are assessing how climate risk may affect long-term performance and resilience. As a development finance lender, we see growing scrutiny of these issues across the capital stack and believe developers and operators can benefit from practical, accessible guidance on what these risks mean and how best to respond to them.

Since inception, Puma has now provided approximately £700 million of new care home loans, supporting the delivery of more than 50 care homes and over 4,000 new care beds nationwide. alpha's analysis makes clear, and our own underwriting reflects the same conclusion, that resilience and financial performance are converging. A care home that can manage extreme heat, operate efficiently, and remain fit for purpose in a changing climate is not just better positioned operationally, but also financially. As insurers, investors and lenders place greater emphasis on climate resilience, developers who incorporate these considerations into design and delivery are likely to benefit from broader access to insurance and capital, stronger long-term asset performance,
and continued investor demand.

We recognise that building this kind of resilience comes at a cost. But we believe it also results in better assets, for residents, operators and owners. This is why we developed our Impact Lending Framework: to reward and incentivise best-in-class sustainability and social outcomes, including resilience, and to give developers a direct reason to build it in from the outset.

We are proud to co-publish this guide with alpha. It reflects our ambition to partner with, and actively support, an industry working to deliver better, more resilient assets.

A practical guide to protecting resident health and long-term asset value in a transitioning world

The **over-85 population is set to roughly double**, from 1.75 million in mid-2024 to 3.6 million by mid-2049, increasing demand for care at a time when the number of care beds has fallen significantly. The sector therefore faces a growing challenge: how to meet rising demand while ensuring the care homes it builds and operates remain fit for the future.

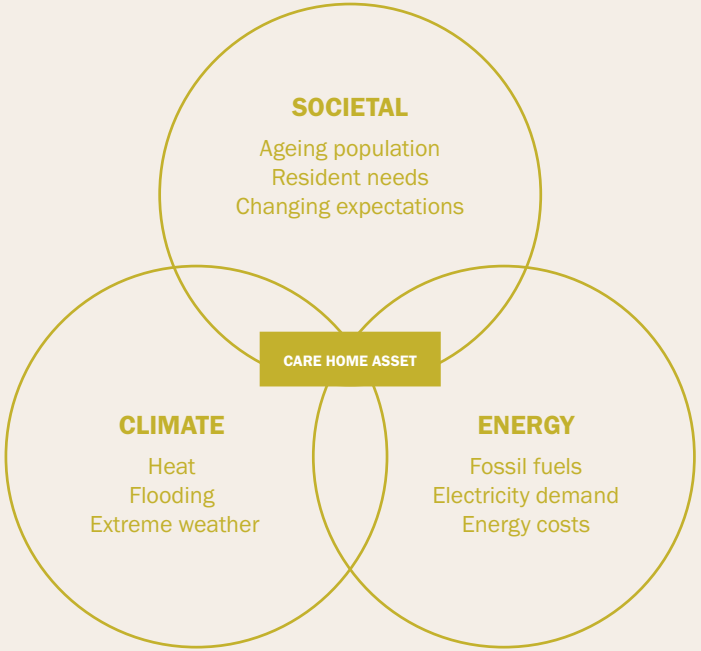
Meanwhile **almost four in ten heat-related deaths in England in 2024 happened in care homes**. The buildings designed to keep frail people warm are now also having to keep residents safe through increasingly extreme summer temperatures, creating new challenges for cooling, energy use and operational resilience.

Compared to other asset types, care homes feel the pressures of climate change particularly acutely. They operate around the clock and support some of society's most vulnerable people. Extreme heat, flooding, power outages or failures in heating and cooling can affect resident wellbeing, staff and continuity of care, as well as the performance of the buildings themselves.

Energy is another growing pressure. Care homes rely on energy for heating, hot water, lighting, laundry, catering and specialist equipment, creating constant demand. As the economy moves towards a low-carbon future, owners need to consider not only how to reduce energy use and fossil fuel dependence, but how buildings will cope with greater electricity demand, hotter summers and more extreme weather.

There is also a commercial opportunity. Care homes with EPC ratings of B or above have been shown to have average operational costs around **14% lower per square metre than lower-rated properties**.

These pressures are increasingly interconnected. A poorly insulated building may be expensive to heat in winter and difficult to cool in summer. Electrifying it without improving the fabric first can increase peak electricity demand. A building that is uncomfortable or costly to run may also become less attractive to residents, families and staff, while increasing operating costs and putting pressure on long-term asset performance.



HOW CLIMATE, ENERGY AND SOCIETAL TRANSITION PRESSURES INTERACT AT ASSET LEVEL

This is coupled risk: the way climate, energy and societal changes interact at asset level.

Yet there is limited practical guidance that brings these issues together specifically for care homes. A recent review found that, although policy momentum is growing, there is still **no comprehensive synthesis of decarbonisation strategies** tailored to long-term care, leaving providers and regulators without the evidence-based guidance needed to inform practice and decision-making.

For owners, operators, investors and lenders, the question is increasingly how to ensure assets remain safe, healthy, efficient, insurable, financeable and attractive throughout their operating life. This guide responds to that gap, setting out three practical steps to help the sector understand its exposure, build resilience into existing and new developments, and protect and enhance long-term value.



STEP 1

Understand your exposure and opportunities

Before deciding where to invest, understand the risks facing each asset today and how they could evolve over its lifetime. This creates a stronger basis for prioritising capital and identifying where early action can prevent greater costs later.

The case for early action is strong. Analysis of two decades of US federally funded mitigation found average savings of $6 for every $1 invested. More recent **IFC analysis** found that targeted resilience measures could protect up to $8.60 in asset value for every $1 invested.

For care homes, that means assessing both extreme weather risks and exposure to the shift towards a low-carbon economy, alongside the regulatory and operational requirements of providing resident care. Weather risks include overheating, flooding, drought and heavy storms. Risks associated with the low-carbon transition arise as the economy changes, including through evolving regulation, carbon costs, energy systems, technology, investor and lender expectations, and changing demand from residents, families and staff.

Assess your **extreme weather** exposure.

HEAT

Care homes are particularly vulnerable to extreme heat, with residents more susceptible to the health impacts of overheating. As heatwaves become more frequent and severe, maintaining safe indoor temperatures will become an increasing challenge, with residential care homes expected to be able to **maintain indoor temperatures between 16°C and 26°C by 2040.** For owners, this makes overheating an important consideration when assessing the resilience, performance and future investment needs of existing assets.

FLOODING AND HEAVY STORMS

Assess the specific exposure of each asset, including surface water, river and coastal flooding, and the potential impact of extreme weather on roads, utilities, water supply, staff access and essential supplies. For care homes, the consequences can extend well beyond physical damage, with disruption affecting continuity of care, operating costs and the wider business. UK flood damage already averages **£3.3 billion a year** (2025 prices) and is projected to reach £4.5 billion by 2050. Rapid rollout of property-level measures in at-risk locations could cut average annual losses by up to half.

Some investors now rate flood risk net of the controls and adaptations in place and will only acquire where the remaining risk is low to medium. For a care home, where residents may not be able to move quickly, the same flood depth may warrant a higher rating than for other uses.

INSURANCE AND INSURABILITY

As extreme weather risks increase, affordable insurance cannot be taken for granted. The UK's insurance protection gap was estimated at 29% in 2024, with higher-risk properties facing rising premiums, higher excesses, tighter exclusions or difficulty securing cover. This can affect operating costs, asset value and access to finance. In some insurance markets, resilience measures are already being recognised through lower premiums: the US Community Rating System offers flood-insurance discounts of up to **45% for eligible properties** in communities with stronger floodplain management.

For lenders and investors, being able to demonstrate how these risks have been mitigated can also provide greater confidence in the asset's long-term resilience and insurability.

Assess your exposure to the **low-carbon transition**

ENERGY AND CARBON

Care homes have continuous energy demand. As the sector moves away from fossil fuels, the question becomes not only where that energy will come from, but how much electricity buildings will need and when they will need it. Owners should assess their dependence on fossil fuels, exposure to future energy costs and whether the asset's electrical infrastructure and grid connection can support demand over time. Grid connections can take years to secure, so it is worth checking capacity early in any retrofit or development plan. Constant heating demand also leaves care homes exposed to gas price swings, and European gas storage was low going into winter 2026. Underlying energy use is also rising as resident needs become more complex and medical equipment and environmental controls play a larger role in day-to-day care.

REGULATION AND STANDARDS

The requirements for buildings are changing as the UK moves towards a low-carbon economy. An asset that meets today's requirements may still need significant investment over its lifetime to keep pace with future energy, carbon and building standards, as well as requirements for care provision.

FUTURE ASSET VALUE AND MARKETABILITY

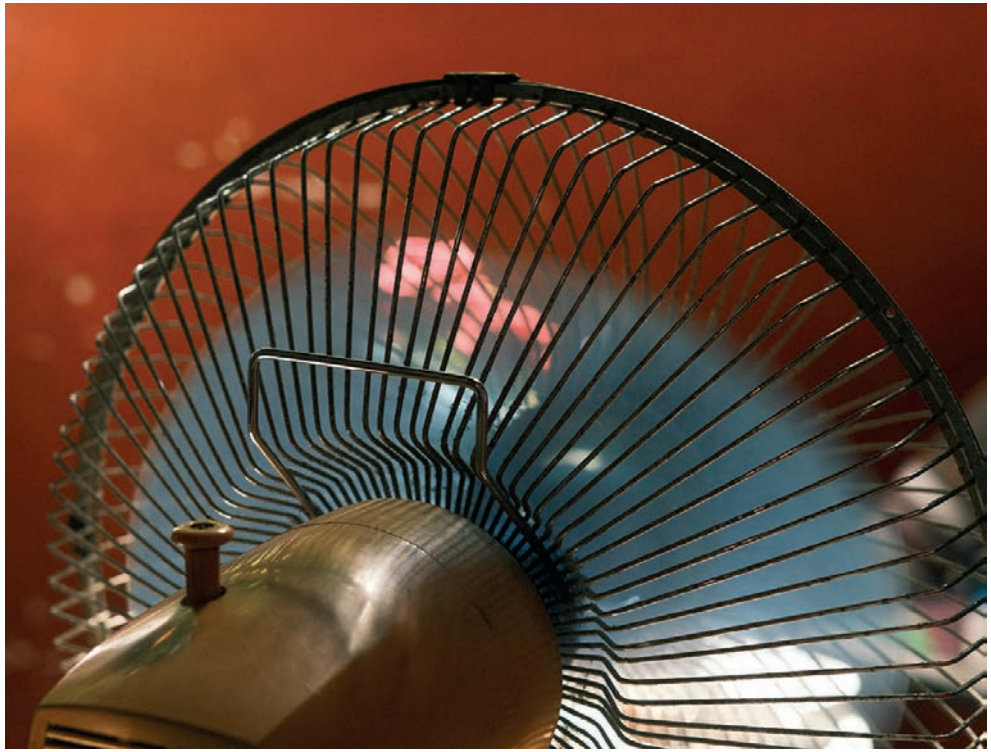
Changing regulation and market expectations can affect the cost of owning, refinancing or selling an asset. Consider whether each care home will remain attractive to investors, lenders and potential buyers, and whether the cost of bringing it up to future standards could affect its value and marketability.

Across real estate markets, there is growing evidence that assets with stronger environmental performance can attract greater investor interest, while those that fall behind may face a 'brown discount'. At INREV's 2026 Sustainability Conference, several investors suggested the brown discount may now matter more than any green premium, as buyers increasingly deduct the capex needed to bring an asset up to standard from the price they pay.

However, the scale of any premium or discount varies significantly by asset type, location and market conditions, so owners should focus on understanding the implications for their individual assets. Being able to evidence stronger performance, including through recognised third-party certifications where appropriate, can also help lenders and investors understand how risks have been addressed.

CHANGING EXPECTATIONS

Residents, families and staff increasingly value comfortable, healthy, efficient and resilient care environments. Investors and lenders are also placing greater focus on the long-term performance and resilience of the assets they finance. Consider how these changing expectations could affect demand, access to capital and the cost of finance. Operator stability is one of the main drivers of value in the sector. Measures that lower running costs and improve comfort can support an operator's ability to deliver good care, and with it the owner's income.



Look at the risks **together**

The value of assessing these risks together is understanding where they overlap and where one risk can amplify another. For example, a care home exposed to overheating may also face higher energy demand and operating costs as cooling needs increase. If extreme weather disrupts power or access to the site, this could affect continuity of care while also increasing insurance and financing concerns. Understanding these connections can help owners identify where investment will have the greatest impact.

Take a single hot week in the 2030s. Bedrooms overheat, so cooling runs hard and electricity use peaks just as prices do. The local grid is under strain and supply fails. Back-up power must now support medication fridges, hoists and call systems, not just lights. Transport is disrupted, agency staff cannot get in, and those who are working are dealing with conditions that make good care harder. No single failure is dramatic on its own; together they are a serious incident, and each one raises the cost of the next.

This is why exposure should be mapped across the whole asset ecosystem and tested together under the same scenarios rather than one risk at a time. Scenario modelling can help explore how these risks could evolve over an asset's lifetime, test different pathways and identify where investment should be prioritised. The goal is to build a clear picture of where the asset is most exposed, what that could mean for its operation, financing and long-term performance, and where investment could improve its resilience.

Understand the **financing opportunity**

Understanding an asset's exposure isn't only about identifying downside risk. It can also help owners and developers demonstrate where resilience has already been built in, where further investment could improve performance and how those measures could affect the asset over the life of a loan or investment.

For lenders and investors, that evidence can provide a clearer picture of how well an asset is prepared for future climate, energy and regulatory pressures. And as financing criteria evolve, developments that can demonstrate stronger sustainability and resilience performance may also be better positioned to access financing products that recognise and incentivise those outcomes.





STEP 2
Build resilience into your assets

Once you understand where an asset is most exposed, the next step is to develop a practical pathway for improving its resilience and performance.

There is no one solution for every care home. The right approach depends on the building, its location, how it operates and the needs of its residents. The strongest strategies address energy efficiency, climate resilience and operational continuity together.

START WITH THE FABRIC

Improving insulation, windows and the building envelope reduces energy demand, improves thermal comfort and makes future electrification more effective.

For existing buildings, a fabric-first approach reduces the additional electrical capacity needed as heating systems are electrified, helping keep peak demand manageable and limiting pressure on grid connections. Better fabric means less energy required in the first place. For new developments, designing for high energy efficiency from the outset lowers long-term operating costs and strengthens resilience to future energy prices and policy changes.

PLAN FOR HEATING AND COOLING

Care homes need to remain comfortable and safe throughout the year.

Consider passive measures such as shading, ventilation and greening alongside active cooling. Reversible heat pumps can provide both heating and cooling where appropriate (ground source systems hold their efficiency in cold periods better than air source, where ground conditions allow), although the right solution will depend on the building, site and local infrastructure.

The key is to plan for summer overheating and winter heating together from the outset, rather than treating cooling as something to add later.

DESIGN WITH NATURE

Greening can help care homes address several risks at once. Trees, green roofs and permeable landscaping can reduce local temperatures and cooling demand, while rain gardens, swales and other natural water storage can slow surface water runoff during heavy storms. Trees can also provide shelter from high winds and improve outdoor spaces.

These interventions can also support resident wellbeing. Biophilic design, including planting, natural views, daylight and access to gardens, is associated with lower stress and anxiety and can support better health outcomes. For care homes, these are core benefits rather than extras.

BUILD A RESILIENT ENERGY SYSTEM

Where electrification is appropriate, owners should consider how new heating and cooling systems will affect the building's energy profile and peak demand.

Solar PV can help meet the relatively consistent energy demand of a 24/7 care home, while batteries and thermal storage can help manage peaks, reduce operating costs and strengthen resilience during disruption. In a UK winter, PV and batteries cannot carry a care home on their own, but appropriately sized systems can reduce exposure to peak prices and help maintain critical services when supply is disrupted.

DESIGN FOR CONTINUITY

In a care home, emergency plans need to put residents' safety first, and staff need to know them. For a care home, resilience is ultimately about keeping essential services running.

Consider what happens if the power fails, extreme weather disrupts access or a building system breaks down. Identify which systems are critical to resident safety and care, and design resilience measures around those priorities. This could include backup power, energy storage, passive resilience measures and robust building systems, alongside clear operational plans. In a flood or other emergency, people often stay to protect property.

GO BEYOND TODAY'S REQUIREMENTS

Meeting today's requirements is not the same as being prepared for the future.

Owners and developers should consider the direction of travel for building, energy and carbon regulation, alongside the requirements of the Care Quality Commission (CQC), investor and lender expectations, and changing expectations from residents, families and staff. Frameworks such as CRREM and PCRAM can also help inform how assets may perform against future requirements.

The aim is not to predict every future requirement, but to avoid decisions today that create unnecessary costs tomorrow. For existing assets, prioritise interventions that address the most material risks and can be delivered through planned refurbishment and capital programmes. For new developments, build resilience into the design from the outset. **Two-thirds of people aged over 80 live with two or more long-term health conditions**, reinforcing the need for care environments that can support increasingly complex needs.

The strongest approach is one that reduces demand, improves comfort, strengthens operational resilience and creates flexibility for the future.



Financing **future-ready** care homes

Many resilience measures reduce long-term operating costs, but they increase upfront capital costs. The case for investing anyway rests on more than long-run savings.

Resilience measures, like recognised green building certifications, send a clear signal to lenders and investors about the quality of an asset: evidence that a developer has thought beyond compliance. That signal matters most when it can be evidenced. A developer who can clearly demonstrate the resilience measures built into a scheme, rather than simply describing good intentions, puts lenders and insurers in a much stronger position to recognise how risk has been mitigated, and to price that reduction in risk accordingly.

This matters because many of these measures are more difficult and costly to retrofit than to incorporate from the outset. Developers who recognise this early, and can evidence it clearly, have a genuine opportunity to differentiate their schemes. Some financing partners will reward that evidence directly.

Puma Property Finance's Impact Lending Framework is one example of this in practice.

PUMA PROPERTY FINANCE'S IMPACT LENDING FRAMEWORK (ILF)

The ILF rewards developments that go beyond minimum sustainability standards with a reduction in their loan exit fee.

To qualify, developments must meet two minimum requirements: EPC A on completion (all units) and fossil fuel free, per UK Net Zero Carbon Building Standards.

Developments are then rewarded on a two-tier basis, based on independently verified sustainability certification:

- Impact: 0.5% exit fee reduction (EDGE Certified / NextGeneration Project Silver / BREEAM Excellent)
- Impact+: 1.0% exit fee reduction (EDGE Advanced+ / NextGeneration Project Gold+ / BREEAM Outstanding)

For the top tier, unless a development is targeting BREEAM Outstanding, we also require the adoption of at least one additional measure, such as Biodiversity Net Gain, Certified B Corp status, or development in an area of social deprivation.

The framework applies to both new-build and retrofit schemes.

Zephyr X Cedar Lodge, Whitchurch-on-Thames

CASE STUDY

THE FINANCING

In August 2024, Puma Property Finance provided a £7 million loan to Zephyr X to fund the development of a new 45-bed care home in Whitchurch-on-Thames, near Reading. The scheme, Cedar Lodge, was funded as an Impact Loan under the ILF, with sustainability goals embedded in the loan from the outset. It is operated by EQ Care Group and became the first care home in the UK to achieve EDGE Advanced certification, independently verified by Sintali on behalf of the International Finance Corporation.

DELIVERING RESILIENCE, NOT JUST COMPLIANCE

Cedar Lodge's EDGE Advanced certification connects directly to the resilience themes covered elsewhere in this guide. Compared with a typical new-build care home, independent verification confirmed the development achieves:

- 42% lower energy use
- 20% lower water use
- 43% lower embodied carbon in materials

Lower energy use reduces Cedar Lodge's exposure to volatile energy prices and eases pressure on the building's electrical infrastructure as heating and cooling systems evolve. Lower water use supports resilience to drought, while the reduction in embodied carbon lowers the development's exposure to tightening carbon regulation, protecting its long-term value and marketability as the low-carbon transition accelerates.
The development's operational performance is further evidenced by a **BREEAM In-Use 'Very Good' rating.**

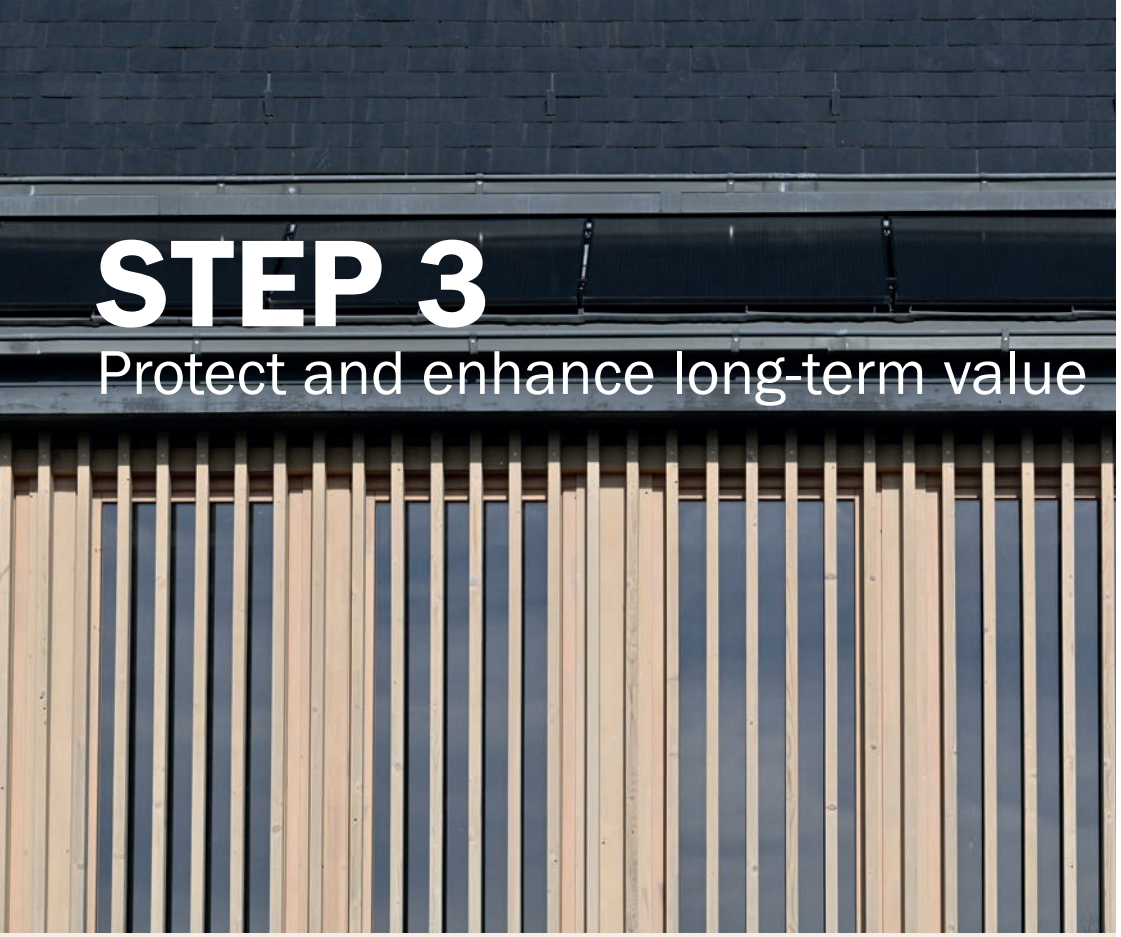
MEASURE, REPORT AND VERIFY

All performance figures were independently verified by Sintali, a global EDGE certification body operating on behalf of the International Finance Corporation, with technical support from LifeProven as EDGE assessor. This independent verification is what allowed stronger environmental performance to translate into a lower cost of capital under the ILF, demonstrating how evidenced performance can support the financial case for resilience.



Demand for sustainable, purpose built care homes continues to grow while much of the existing stock ages. With over 4,000 beds funded across the UK, our focus remains on bringing new, high quality beds to the market in partnership with experienced developers and operators.

Tony Throp, Director and Head of Healthcare at Puma Property Finance



STEP 3

Protect and enhance long-term value

Resilience is ultimately about performance. The benefits of investing in a care home asset extend beyond lower carbon emissions: healthier environments for residents and staff, lower energy costs, greater comfort, more reliable operations and less exposure to disruption all contribute to long-term asset quality.

The challenge is making those benefits visible and measurable.

For owners, the opportunity is to demonstrate not just that an asset is compliant, but that it has a credible plan to manage future risks and maintain performance.

Puma Property Finance's ILF provides one example of how sustainability performance can be linked to lending. As the market develops, there will be further opportunities to connect measurable improvements in asset performance and resilience to the cost and availability of finance.

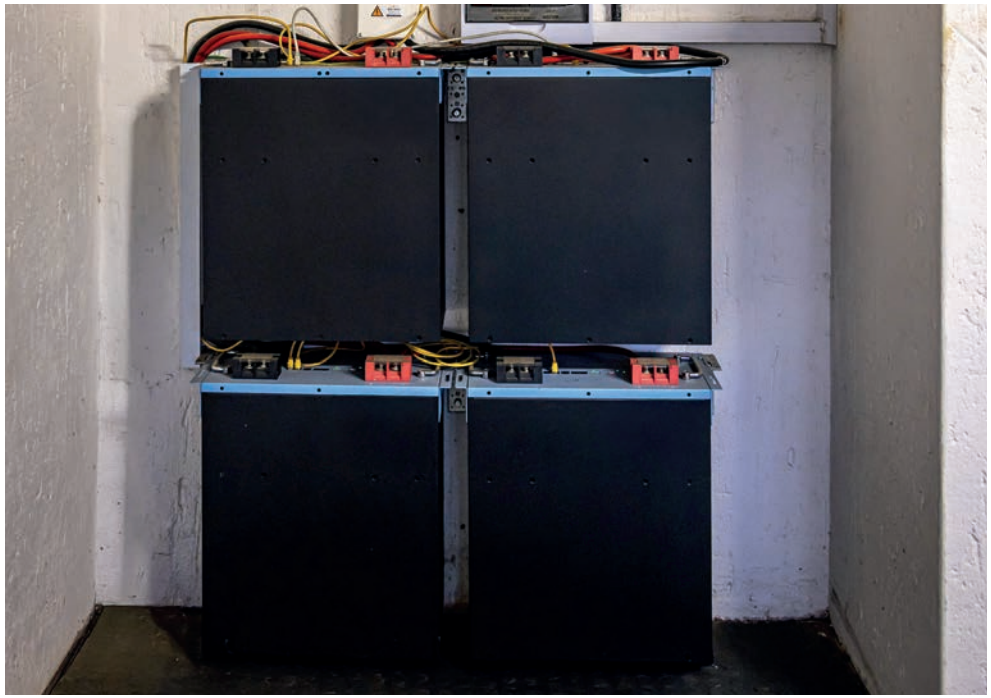
EVIDENCE THE VALUE CREATED

Owners should establish a baseline before investing and track what changes afterwards. Set the baseline at asset level and have results independently verified where possible. This makes measured improvements easier for lenders, insurers and buyers to assess and price.

Depending on the intervention, this could include resident and staff health outcomes alongside energy use, operating costs, carbon, thermal comfort and disruption.

Evidence of operational performance can help owners make better decisions across a portfolio, demonstrate the benefits of investment and support future conversations with lenders and investors. It can also reveal where one intervention delivers multiple benefits, helping to build a stronger case for investment.

The opportunity is to act before risks become costs, and to make resilience an investment in long-term asset performance.



Compact battery storage installation

Quick checklist: are your assets future-ready?

UNDERSTAND YOUR EXPOSURE	
Have you assessed both extreme weather risks and exposure to the low-carbon transition across the asset's lifetime?	
Do you understand how overheating, flooding, energy costs, regulation and changing expectations could affect this asset?	
Have you considered where these risks interact?	
BUILD RESILIENCE	
Is the building fabric efficient enough to support future electrification?	
Can the energy infrastructure support future demand and critical operations during disruption?	
Are you designing for summer comfort as well as winter heating?	
Are you using greening and biophilic design to cut cooling demand and support resident health?	
Are you going beyond today's minimum requirements?	
PROTECT VALUE	
Can you demonstrate the operational and financial benefits of resilience investment?	
Are you tracking resident and staff health outcomes alongside energy, carbon and cost?	
Could better evidence support future investment, refinancing or lending?	
Will this asset remain attractive to residents, staff, operators, lenders and investors in 10 or 20 years?	

alpha

alpha is an engineering-led advisory that makes real-asset transition risk and value visible, priced and investible. Bringing together expertise across climate, energy, engineering and finance, alpha works across the investment cycle. Before acquisition, a due diligence scan identifies where an asset is exposed, how risks could compound over its life and where investment is likely to protect or create value. Through development and the hold period, alpha provides stewardship, with ongoing measurement and independent verification of how interventions perform against a site-specific baseline. At exit, alpha's Impact Valuation uses that measured performance to evidence what has been delivered: realised value, unrealised value carried forward to the next owner or long-term holder, and impact value in environmental and social terms. That evidence can then inform better decisions on the next acquisition.

Applied to the care home sector, this approach can help owners and developers turn a complex set of climate, energy and health challenges into practical, implementable pathways for more resilient, future-ready assets.

Find out more at: alpha-ww.co

PUMA PROPERTY FINANCE

Puma Property Finance provides reliable and flexible funding solutions to experienced property professionals in the UK, delivering loans of £10m to £100m with the potential to lend more by exception. Puma Property Finance will consider financing all residential and commercial developments across all UK geographies, with a strong track record in supporting the living sectors as well as operational real estate, from care homes to student accommodation and hotels.

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