Historic England

Building and Landscape Conservation

The Sustainable Use of Energy in Traditional Dwellings: Using legislation and policy to guide decision-making

Prepared for Historic England by the Centre for Sustainable Energy

Discovery, Innovation and Science in the Historic Environment

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The Sustainable Use of Energy in Traditional Dwellings

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Front cover: Traditionally constructed terraced houses in Bristol.

FOREWORD

Improving the energy and carbon performance of historic buildings helps them remain viable and useful, now and in the future. There are numerous incentives for carrying out improvements: mitigating climate change, maintaining energy security; reducing energy costs and tackling fuel poverty; increasing comfort; complying with legislation. Unfortunately, unsuitable improvements may not deliver the benefits predicted, and can have unintended consequences that harm the building and jeopardise the health and well-being of its occupants. The research project described in this report forms part of a programme of investigation to understand better the factors affecting the energy and carbon performance of the historic built environment. This aim is to contribute to an evidence base that will enable better-informed decisions to be made about improvements.

To find out more about Historic England's current research see https://historicengland.org.uk/research/current/

SUMMARY

Local authorities are responsible for implementing a diverse range of legislation, policies and guidance relating to sustainable development, fuel poverty, housing standards and carbon reduction. These all have impacts on the historic environment. But if there is not adequate inter-departmental understanding and coordination of the many overlapping (and sometimes conflicting) requirements, there is a risk that one agenda will be undermined by another. The consequences of this include harm to heritage assets and failure to meet legislative and policy objectives in full. This report presents the findings of a research project carried out to understand better the areas of convergence and conflict between current legislation, policy and guidance. A further aim of the project has been to suggest ways in which Local Authorities might increase understanding between departments and stakeholders, and develop more integrated and better-informed approaches to policy and decision-making. The suggestions set out in this report have been developed in consultation with Oxford City Council, and other Local Authorities in four regional, cross sector workshops.

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1 EXECUTIVE SUMMARY

Local authorities are responsible for implementing a diverse range of legislation, policies and guidance relating to sustainable development, fuel poverty, housing standards, carbon reduction, and conserving heritage assets. This report presents the findings of a research project carried out to understand better the areas of convergence and conflict between current legislation, policy and guidance. It will be of interest to local authority officers and members dealing with policy-making within the theme of sustainable energy and heritage assets. It considers all the legislation relevant to officers working in this field. This is summarised in Table 1. Also, it investigates ways in which a local planning department can foster inter-departmental understanding and develop clear and effective policies on this subject, thereby enabling a more consistent authority-wide approach.

Decision-making on alterations to listed buildings and buildings in conservation areas is often led by a conservation officer working within a local planning department. Naturally, conservation officers tend to be experts in the legislation and policy surrounding heritage and conservation. But they may have only limited knowledge of the wider statutory duties of their local authority which have implications for the historic environment – such as those relating to climate change, energy targets and housing. Therefore, when delivering advice on whether or not energy efficiency or renewable energy measures should be permitted, they may, for example, underplay the importance of meeting housing standards or carbon reduction targets, or of tackling fuel poverty.

Conversely, local authority officers whose primary remit is promoting sustainability, or ensuring the provision of safe and healthy housing will have a good grasp of the of legislation that drives targets within those specific fields. But they may not have a good understanding of planning and conservation legislation.

Somewhat uniquely, planning officers are tasked with pursuing numerous and wide-ranging policy objectives, outlined in the council's development plan. When considering proposals planning officers explicitly weigh up the various factors, which may be in apparent or actual conflict, and seek to come to a balanced decision. However, whilst this weighing-up exercise is done on a daily basis, some of the issues considered by other teams, for instance relating to fuel poverty legislation and housing hazards, may not be particularly familiar to them, and may be overlooked in the decision making process.

It is clear, therefore, that there are tensions across local authority statutory duties, and that these play out on the ground in daily decision-making: some measures that would commonly be installed to combat fuel poverty or overcome serious housing hazards (for example, replacement double glazing) may harm the historic significance or fabric of a designated heritage asset; area-based external insulation schemes, initiated by housing teams to improve residential energy efficiency and to meet statutory fuel poverty requirements, can erode the historic character and appearance of undesignated heritage assets if not carefully detailed; the installation of a renewable energy plant could harm the setting or character of a heritage asset.

Without good inter-departmental understanding and communication on the subject of sustainable energy and heritage assets, there is a danger that one legislative responsibility will overshadow another, meaning local authorities may under-perform in some of their duties. They may also give contradictory advice to the public, dependent on which department is the first point of contact. It is clear, therefore, that a joined-up approach between different council departments – principally housing, planning, conservation and sustainability – is necessary.

This report suggests approaches a local authority can take to foster communication and understanding both across the organisation as well as with interested local stakeholders. It does this by providing an analysis of the range of legislative and policy drivers that affect decision making on sustainable energy in the historic environment. It assesses the options open to local authorities to use the local planning process to strengthen decision-making on these issues, drawing different departments into discussions with the aim of creating local plan policy that encourages appropriate sustainable energy improvements to traditional buildings. (Traditionally, policies encouraging climate change mitigation and those protecting historic assets sit separately in council planning policy, and there are relatively few authorities who have integrated the two.) The report also discusses the drafting of supplementary planning documents, to provide more detailed guidelines for householders and council officers, and makes suggestions for using less formal mechanisms, such as Statements of Common Purpose.

Table 1: Key overlapping legislative responsibilities for local authorities affecting decision making in respect of heritage issues				
Delivery department	Legislation	Statutory duty arising from legislation	Delivery mechanisms and related documents	Other departments affected
All	Climate Change Act 2008	80% reduction in carbon emissions by 2050 De-carbonisation of energy by 2050.	Binding carbon budgets Carbon Plan	All
	Paris Climate Change Accord 2015	Commitment to keep global average temperature increases well below 2°C above pre-industrial levels No additional duties filtered down to local authorities yet	None	All
Planning	Town and Country Planning Act 1990	Support energy efficiency improvements Protect and enhance heritage assets Mitigate and adapt to climate change and move to low carbon economy; shape places to secure radical CO_2 reductions Promote renewable and low carbon energy and community renewables	Planning decisions National Planning Policy Framework (NPPF) Planning Practice Guidance website	Housing Sustainability Conservation
	Planning and Compulsory Purchase Act	Development and the use of land to contribute to the mitigation of and adaptation to climate change		
Conservation	Planning (Listed Buildings and Conservation Areas) Act 1990	Protect and enhance heritage assets: Listed Buildings, Conservation Areas and Ancient Monuments	Planning decisions Heritage 2020 Historic England Action Plan 2015-18 Conservation Principles, Policies and Guidance 2008	Planning Sustainability Housing
	Enterprise and Regulatory Reform Act 2013	Power and duty to enter into Heritage Partnership Agreements Listed Building Consent Orders		

Table 1: Key overlapping legislative responsibilities for local authorities affecting decision making in respect of heritage issues				
Delivery department	Legislation	Statutory duty arising from legislation	Delivery mechanisms and related documents	Other departments affected
Sustainability	Renewable Energy Directive 2009	15% of energy consumption from renewable energy by 2020	Planning decisions National Planning Policy Framework Renewable Energy	Sustainability Conservation
Housing	Energy Act 2011	Minimum energy efficiency standards for rental properties Tenants right to request energy efficiency improvements	Energy Efficiency (Private Rental) Regulations	Conservation Planning
	Warm Homes and Energy Conservation Act 2000	No-one to live in fuel poverty by 2016 Statutory duty to resolve severe hazards	HECA Programmes Fuel Poverty – Framework for Action	
	Home Energy Conservation Act 1995	Significant improvement in energy efficiency for all dwellings		
	Housing Act 2004	All homes to provide healthy and safe living environments Housing Health and Safety Rating System Assessments Mandatory improvements for Category 1 hazards Targets under Decent Homes programme	Housing Health and Safety Rating System 2004 Decent Homes Programme and standard 2000	
Building Regulations (and Approved Inspectors)	Building Act 1984	Securing the health, safety, welfare and convenience of persons in or about buildings Furthering the conservation of fuel and power Preventing waste, undue consumption, misuse or contamination of water	Building Regulations Approved documents: Part L (Conservation of fuel and power) Part J (Combustion appliances) Part F (Ventilation)	All

2 BASELINE KNOWLEDGE FOR LOCAL AUTHORITY OFFICERS

2.1 Introduction

This section of the report starts from the premise that there is an accepted need and a good opportunity to sustainably retrofit almost all traditional dwellings, and to develop renewable energy infrastructure in all communities. These opportunities not only support mandatory emission reductions but also ensure that those who live in traditional dwellings can heat them affordably and therefore live comfortably. The challenge is to ensure that this is done responsibly and through informed decision-making, so that the significance of heritage assets is not disproportionately compromised.

When considering a proposed development different stakeholders will assume different starting points, frequently based on different legislation, and dependent on their profession, existing knowledge and personal bias. These starting points may relate to, for example, heritage conservation, climate change mitigation, or housing standards and fuel poverty alleviation. As evident in Table 1, legislation underpinning the work of different local authority officers, whilst overlapping, can also pull in different directions, creating tensions between the officers' different remits.

Local authorities can use the suggestions contained in this report to develop a robust, organisation-wide interpretation of the full range of relevant legislation and policy. This will help to create cross-team understanding of the best way to preserve the significance of heritage assets.

Local residents applying for planning permission or listed building consent need to have confidence that the advice they receive and the decisions made are the result of a transparent and considered process. Local authority officers need to have confidence that their decisions are robust and defensible. Such robustness comes from the distillation of all relevant national policy and legislation into local authority policy, processes and position statements, rather than silo-based decision making that refers to only one aspect of legislation.

Reference to up-to-date technical information and the adoption of good practice will also make decision-making clearer for all parties.

2.2 Heritage legislation

A range of heritage legislation exists that creates for local authorities a statutory duty to protect and enhance heritage assets. In particular, the legislation creates a statutory duty for Historic England to secure the preservation of historic buildings, which includes promoting public understanding and knowledge of those buildings. This creates a critical role for Historic England in ensuring that the public can make informed decisions on the types of measures that would be appropriate to improve the energy efficiency of traditional dwellings. Key pieces of legislation for the protection and development of the historic environment are summarised below.

Planning (Listed Buildings and Conservation Areas) Act 1990

The Act states that, in deciding whether or not to grant listed building consent or planning permission for development which affects a listed building or its setting, local planning authorities or the Secretary of State 'shall have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses'.

With respect to buildings or other features of a conservation area, local planning authorities or the Secretary of State '[shall pay special attention] to the desirability of preserving or enhancing the character or appearance of that area'. Similar duties to protect exist for scheduled ancient monuments and world heritage sites. For the full legislative document, see: *www.legislation.gov.uk/ukpga/1990/9/contents*

2.3 Heritage policy and guidance

Summarised below are key policy and guidance documents which provide roadmaps for heritage legislation.

Heritage 2020 and The Historic England Action Plan 2015–2018

Heritage 2020 (out in draft) comprises a non-statutory document setting out shared strategic priorities for organisations working together to manage the historic environment, and will be the successor to the National Heritage Protection Plan. The document stresses cross-sectoral working, collaboration and public engagement in and understanding of heritage issues.

The document discusses the need for climate change resilience, ensuring the physical impacts of climate change adaptation and mitigation on historic assets are managed in a way which respects significance and reflects best practice, including:

- Responding to the Energy Act 2011 and its implications for historic buildings.
- Providing advice and guidance to help owners manage physical change of historic assets in relation to climate change impacts (such as flooding) or mitigation (such as energy efficiency measures).
- Developing a sector philosophy on the management of coastal erosion.

Historic England Action Plan 2015-2018 and National Heritage Protection Plan

The Historic England Action Plan is the delivery document for the Historic England Corporate Plan and sets out the contribution Historic England will make to Heritage 2020.

The Action Plan is guided by a collaborative approach to conservation which Historic England terms 'constructive conservation'. The aim of this approach is to allow people to continue to use, adapt and enjoy historic places in ways which reveal and reinforce their significance, and to adopt a constructive approach to understanding significance and facilitating change. The Action Plan helps local authorities develop systems that require proactive consideration of the technical and heritage impacts to be worked through on any application, thus ensuring that energy efficiency retrofits can be carried out to some extent on most traditional dwellings, where an application is made.

The Action Plan commits to building on the initial programme of threat and opportunity assessment from the National Heritage Protection Plan (2010-15). This identified the following threats:

- 2A2: Resolving Impact of Carbon Challenge on Built Heritage. The drive towards a carbon-neutral economy will impact heritage assets as a result of the adaptation of buildings to increase their energy efficiency. Recognising the need to improve energy efficiency of traditional buildings, the outlined response to this potential threat is to avoid the degradation of England's most significant heritage assets through informed decision-making. This strategy therefore relies on the development of a sound evidence base by heritage organisations and local and national government, for local level officers to proactively engage with this evolving evidence and for householders to be kept informed.
- 2C1: Major Environmental Threats and 2C2: Attritional Environmental Threats. Flooding, erosion, and severe weather events as a consequence of climate change. This advice proposes that a crucial part of the response to these threats must be to ensure that heritage assets are part of, and not a barrier to, the necessary national mitigation strategy.
- 2D3: Energy Generation Impacts. The potential heritage impact of significant changes in the means of energy generation and supply. In response to this trend, the plan aims to assess potential negative impacts, as well as any opportunities to 'advance appropriate responses'. As part of these responses, the NHPP Action Plan specifies 'improved scheme advice' for large scale projects and guidance on the 'sensitive installation' of micro-generation schemes.

Conservation Principles, Policies and Guidance (2008)

This Historic England guidance document guides staff and local authority officers on best practice in decision-making about the historic environment.

The guidance sets out a method for thinking systematically about the heritage values than can be ascribed to a building, site, or whole landscape – with significance being the sum of these values. Values are grouped into four categories:

- Evidential (potential of a place to yield evidence about past human activity).
- Historical (how present connects to the past through a place).
- Aesthetic (sensory and intellectual stimulation drawn from a place).
- Communal (the meanings of a place for the people who relate to it, including how it figures in their collective experience or memory).

In practice, the long-term or permanent consequences of proposals on each of the values (and thus the significance as a whole) should be the reasoned basis for any decision-making.

The conservation principles in the guidance provide a framework for the sustainable management of the historic environment. The principles are:

- The historic environment is a shared resource.
- Everyone should be able to participate in sustaining the historic environment.
- Understanding the significance of places is vital.
- Significant places should be managed to sustain their values.
- Decisions about change must be reasonable, transparent and consistent.
- Documenting and learning from decisions is essential.

In relation to managing change to significant places, the guidance states that this should be done in ways that *"will best sustain its heritage values, while recognising opportunities to reveal or reinforce those values for present and future generations"*. Specific mention is made regarding the unknown long-term impact of certain interventions – specifically citing energy efficiency measures – and that it is therefore desirable to have the capability to reverse such changes to not unduly prejudice options for the future (although the reversibility should not be used to justify crude and intrusive changes). However, it also notes that *"places should not be rendered incapable of a sustainable use simply because of a reluctance to make modest, but irreversible, changes"*.

Managing Significance in Decision-Taking in the Historic Environment – Historic England 2015

This good practice advice note by Historic England stresses the value of pre-application enquiries and an early consideration of heritage significance to ensure that potential issues can be identified and appropriately addressed. The practice note suggests a structured approach to these discussions and to the assembly of information as follows:

1. Understand the significance of the affected assets.
2. Understand the impact of the proposal on that significance.
3. Avoid, minimise and mitigate impact in a way that meets the objectives of the NPPF.
4. Look for opportunities to better reveal or enhance significance.
5. Justify any harmful impacts in terms of the sustainable development objective of conserving significance and the need for change.
6. Offset negative impacts on aspects of significance by enhancing others through recording, disseminating and archiving archaeological and historical interest of the important elements of the heritage assets affected.

Box 1: Understanding the significance of traditional dwellings

When making an application that will affect a listed building, it is necessary for applicants to demonstrate that they understand the nature, extent, and degree of significance of their traditional dwelling (or parts thereof), and its broader setting, and that they relate that assessment to any justification they bring forward for the proposed works, weighing potential harm against public benefit. Local authorities should expect all applicants to demonstrate that they have considered and can adequately respond to the following three questions in considering the significance of heritage assets:

- What is the nature of the heritage interest? Is it historical, evidential, aesthetic, or communal?
- What is the extent of the building fabric that holds the interest? This is a useful guide to how adaptable the asset may be, and in turn the prospects for, and viability of, long term conservation.
- What is the relative level of importance of that interest? For example, how important is this building, or the particular element of the building that would be affected by the change, relative to others locally and nationally? This is important as it provides the essential guide to how protectively any policies should be applied.

The requirement that the applicant explicitly considers the significance of any heritage asset affected and the impact of the proposed works on the significance, setting and fabric of heritage assets is necessary, even where the applicant is the local authority itself or its housing team, and the level of detail of the assessment should be proportionate to the degree of significance of the asset.

Applications to improve the energy efficiency of traditional dwellings, (or area or street by street projects to improve energy efficiency requiring permission) should be collaborative between the applicant and local planning authority. There are almost always some energy efficiency solutions that can be applied without unduly affecting heritage values, and conservation officers should aim to take a positive, proactive role in looking for acceptable solutions. Householders should expect a proactive response to their application that reflects the nature, extent and relative importance of the heritage significance of their dwelling.

2.4 Climate change legislation

The climate change legislation and guidance creates an extremely challenging statutory duty to reduce the UK's carbon emissions and decarbonise our energy supply. The 2015 Paris Climate Accord commits nations, including the UK, to keep global average temperatures *"well below 2°C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5 °C"* leading to no net increases in carbon emissions in the second half of this century. This international agreement has yet to filter down into national legislation, but is likely to result in our carbon reduction targets becoming even more stringent, and in additional urgency to decarbonise our energy supply. This climate change legislation is summarised below.

Climate Change Act 2008

The climate change legislation and guidance creates an extremely challenging statutory duty to reduce the UK's carbon emissions by 80% by 2050 (from a 1990 baseline). These are amongst the most stringent targets in the world.

For the full legislative document, see: www.legislation.gov.uk/ukpga/2008/27/contents

The Energy Act 2013

The Energy Act allows for the setting of targets to decarbonise the electricity sector. In November 2015 the Government announced the launch of a consultation on proposals to close all unabated coal-fired power stations by 2025.

EU Renewable Energy Directive 2009

The UK is currently subject to the EU Renewable Energy Directive which mandates that 15% of the UK's total energy consumption is met from renewable sources by 2020. In the medium term, the UK's exit from the European Union may alter this legislation, but in the short term, the government has announced the intention to enact a 'Great Repeal Bill' which would enshrine all existing EU law into British law, pending its reconsideration.

For the full legislative document, see: http://eur-lex.europa.eu/eli/dir/2009/28/oj

2.5 Climate change policy and guidance

Summarised below are key policy and guidance documents which provide roadmaps for the legislation detailed above.

Carbon Plan 2011

The Carbon Plan sets out how decarbonisation, as mandated by UK energy legislation and policy, will be achieved.

In reference to low-carbon buildings the Carbon Plan states that *"By 2050, all buildings will need to have an emissions footprint close to zero"*, with better thermal efficiency in buildings and the decarbonisation of heating and cooling supplies being crucial ways in which to achieve this. The Plan states that *"over the next decade… all cavity walls and lofts, where practicable, will be insulated"* Decarbonising the energy used in homes will be achieved through the transition from conventional gas and oil boilers to low carbon heating alternatives (e.g. heat pumps) and more efficient systems (e.g. heating networks or combined heat and power). The Plan predicts that we will need 1.6-8.6m building-level low carbon heat installations by 2030. Whilst the Plan prioritises lower cost loft and cavity wall insulation, it does recognise that looking beyond 2020, it is likely that solid wall insulation and other energy efficiency measures will need to be installed in order that by 2030 mandated targets are met. In numbers this means that by 2030, 1.0-3.7m additional solid wall installations and 1.9-7.2m other energy efficiency related installations (e.g. improved glazing), will need to be installed.

In the face of these incredibly challenging targets, the number of applications for planning permission and listed building consent is likely to rise hugely over the next 15 years. For non-designated dwellings, these targets represent a real risk as if not well planned and managed, as the installation of wholesale solid wall insulation can be carried out in a way that is greatly detrimental to whole streetscapes. Only by engaging proactively with this challenge across departments will local authorities be best placed to positively influence how this process evolves.

Another key component of the Carbon Plan is low-carbon electricity. The Carbon Plan states that by 2050 electricity supply will need to be almost completely decarbonised – recognising also that by then we may need as much as double today's electricity capacity to deal with peak demand. This will be achieved through power being generated largely from renewables and nuclear and fossil fuel stations fitted with carbon capture and storage technology. The Plan outlines the scale at which renewables generation will need to expand to meet the 80% target: in 2008 the UK had 20GW of low carbon capacity, meaning that an average of 2.5GW new low carbon capacity will need to be built every year by 2050. The Plan states that industry will lead in the required large-scale deployment of low carbon technologies, but that government will play a key facilitating role by actively supporting each technology.

UK Renewable Energy Roadmap (2013 Update)

This Roadmap outlines the path by which the UK will meet the 15% target of the Renewable Energy Directive. The Roadmap outlines necessary actions in relation to eight key renewable energy technologies, which include: wind (onshore and offshore), biomass (electricity and heat), and heat pumps (ground source and air source). The Roadmap records the UK's renewable energy consumption as being almost on target to meet the outlined trajectory for the 15% target; however this trajectory requires an increasing rate of consumption of renewable energy from 2014 to ensure the target is met by 2020. The roadmap was not updated in 2015, but reductions in the subsidies to solar projects, the impending end of wind subsidies and a hardening of planning policy for onshore wind proposals are likely to reduce the pipeline of these renewables in the short-term, potentially threatening the UK's ability to meet the 15% target.

Irrespective of these short-term policy fluctuations however, the long term direction of travel is clear: we will need to accommodate more renewable energy installations within our landscapes in order to de-carbonise UK energy supply.

2.6 Fuel poverty and housing standards legislation

The fuel poverty legislation and guidance creates a statutory duty to eradicate fuel poverty and produce ongoing improvements to the energy efficiency of the existing housing stock. Concurrently, housing standards legislation creates a statutory duty for local authorities to provide safe and healthy residential premises. Key pieces of legislation are summarized below.

Warm Homes and Energy Conservation Act 2000

The Warm Homes and Energy Conservation Act 2000 (WHECA) places a duty on government to have a strategy for making sure no one lives in fuel poverty, as far as is reasonably practicable, by 2016. Fuel Poverty: a Framework for Future Action (2013) is the current strategy. The government has proposed amendments to the Act, which are currently the subject of parliamentary debate as part of the passage of the Energy Bill. The amendments require the Secretary of State to make regulations setting out an objective for addressing the situation of persons living in fuel poverty, to specify a target date for achieving this objective and to have a strategy which outlines how the regulatory objective will be achieved.

For the full legislative document, see: www.legislation.gov.uk/ukpga/2000/31/contents

Home Energy Conservation Act 1995 and 2013

The Home Energy Conservation Acts (HECA) placed an obligation on local authorities to publish plans outlining how the authority would improve the energy performance of its public and private residential stock. HECA was the first piece of legislation to devolve energy efficiency responsibility to local authorities, and it essentially outlines how the legal requirement of the Climate Change Act will be met at the local level. From 2013, local authorities were to publish further reports, setting out the energy conservation measures likely to result in significant improvements in the energy efficiency of residential accommodation in their areas, including area based and street by street improvements.

Some local authorities have set their own definitions and targets regarding progress on energy efficiency in residential accommodation. Example targets from 2013 HECA reports include: reduce domestic CO2 emissions by 3% a year from the 2010 figure of 2.1 tonnes per capita (Derby City Council); insulate an additional 1,000 solid wall properties by 2015 (Stoctkon-on-Tees Borough Council); increase average SAP ratings across all housing sectors to SAP 70 by 2020 (Leeds City Council).

For the full legislative document, see: www.legislation.gov.uk/ukpga/1995/10/contents

Housing Act 2004

The Housing Act introduced the Housing Health and Safety Rating system (HHSRS), a requirement for councils *"to ensure that any residential premises should provide a safe and healthy environment for any potential occupier or visitor"*.

Hazards are categorised into levels of severity and local authorities have a statutory duty to deal with serious (Category 1) hazards.

These requirements have the potential to create internal conflicts for local authorities in extreme cases. A traditional dwelling where an occupant is suffering from excessive cold, damp or mould growth could be constitute a Category 1 hazard, and where evidence demonstrated that the only way to address these would be to make alterations to the building that would harm its heritage significance, the local authority would have a duty of care under the HHSRS to ensure that these alterations were made.

In such severe cases, the loss of significance would have to be offset against the safety of the dwelling for the occupant(s). In such a case, it would be incumbent upon the applicant (and the housing team) to demonstrate that the hazard could not be rectified in such a way as to limit harm to the significance of the asset.

Energy Efficiency (Private Rented Property) Regulations 2015

The Energy Efficiency (Private Rented Property) Regulations 2015 gives tenants the right to ask their landlord for energy efficiency improvements, and from 2018 will make it illegal to let properties which fall below a minimum EPC rating (band E). Exemptions include: where the property is unable to be brought up to the standard; where the landlord is unable to obtain consent from a third party; or where the works would devalue the property by more than 5% of market value. No specific exclusion is given for listed buildings. These regulations are likely to be a significant driver of energy efficiency improvements in traditional and historic buildings.

Box 2: Risks to heritage from the Energy Company Obligation and any Green Deal successor programme

The Green Deal, cancelled in July 2015 (but likely to be replaced with alternative policy instruments), and the ongoing Energy Company Obligation introduced a number of risks for heritage assets:

- Lack of skills and knowledge to adequately assess the heritage significance of a building.
- Difficulties in predicting the cumulative impact of installing multiple measures simultaneously, especially those measures that could affect the breathability of a traditional building, such as combinations of solid wall and underfloor insulation with overall draught proofing.
- A lack of installation specialists with the skills to sensitively retrofit appropriate products.
- A standard mass procurement model (for example external wall insulation) which pays insufficient regard to the significance of undesignated heritage assets.
- Workload challenges for local authority conservation officers

Taking on board these risks, it would be prudent for local authorities to have in place plans to educate and engage with householders, installers and providers in their area, in order to increase awareness of the need for sensitivity to heritage assets. It will also be vital to proactively respond to emerging evidence of impacts on historic fabric or significance that arise from these programmes, and to create a publicly available 'database' of materials and approaches.

In the longer term, the likelihood of ECO and similar mechanisms driving applications for multiple measures simultaneously could result in the need for Local Authorities to develop protocols for staged consents, such that measures are installed in such a way as to allow the impact of the first measure to be understood before subsequent measures are installed.

2.7 Fuel poverty and housing standards policy and guidance

Summarised below are key policy and guidance documents which provide roadmaps for the legislation detailed above.

Fuel Poverty: a Framework for Future Action (July 2013)

This documents sets out the government's framework for future action in tackling fuel poverty in England. It outlines the key causes of fuel poverty – the thermal inefficiency of dwellings, low income, and fuel costs – and how the Government seeks to 'help' the fuel poor. The framework stresses the important role of local authorities in addressing fuel poverty.

The framework notes that certain dwelling types and characteristics are more strongly associated with fuel poverty. These dwelling types are: low income; old (pre-1945); large; privately rented; with old/inefficient boilers (or no heating system); and those with non-gas heating. Of these different characteristics, the age and size of dwellings are noted as being very strongly related to severe fuel poverty. The Analytical Annex to the framework demonstrates this link, showing the increased odds of people being fuel poor where they live in traditional dwellings of solid walled construction and the increased fuel bills that result.

The Green Deal and Energy Company Obligation

Increasing the thermal efficiency of dwellings is noted as a key policy response in the 2013 Fuel Poverty framework, and as being the most cost effective way of reducing energy costs for low-income households. The key manifestation of this has been the Energy Company Obligation (ECO) and the Green Deal at the national level, and an array of locally-delivered programmes. The government stopped financing the Green Deal in July 2015. It is not yet clear what will replace the Green Deal, but the centrality of energy efficiency to the government's fuel poverty strategy (whatever this may be in the future) is only likely to grow stronger as energy prices continue to increase and as international commitments to achieve carbon reductions grow.

The Housing Health and Safety Rating System (HHSRS)

The HHSRS is a framework through which housing inspectors assess the health and safety of housing. Inspections may result from a local authority's general review or because of a specific complaint made by a tenant or neighbour.

There are 29 categories of hazard. Those of most relevance to this document are those within the 'physiological' hazard group – notably damp and mould growth, and excess cold. Where hazards are judged to be serious, they are deemed as Category 1 hazards. Local authorities have a duty to deal with Category 1 hazards, and discretionary powers to deal with other hazards.

The Housing Act 2004 also introduced the legal basis and specific measures for local authorities to enforce the removal or minimisation of risks and hazards to health and safety that have been identified in housing.

Decent Homes Programme and Standard

The Decent Homes Standard forms part of the broader Decent Homes programme (introduced in 2000), which aims to improve the condition of social housing and of vulnerable households (in receipt of benefits) in the private housing sector. The standard is a minimum standard that triggers action. The Decent Homes programme set an original target that 95% of social housing should be 'decent' by 2010, along with 70% of vulnerable households in the private sector. A decent home is one that meets the following four criteria:

- Does not contain any Category 1 hazards (as determined by the HHSRS).
- Is in a reasonable state of repair.
- Has reasonably modern facilities and services.
- Provides a reasonable degree of thermal comfort (requires dwellings have both effective insulation and efficient heating).

In relation to thermal comfort, specific levels of insulation are expected – cavity wall insulation or at least 50mm of loft insulation in gas/oil heated homes, and at least 200mm of loft insulation and cavity wall insulation in electric heated homes. The standard suggests that a SAP rating of less than 35 (using the 2001 SAP methodology) can be used as a proxy for the likely presence of a Category 1 hazard from excess cold (HHSRS). Local authorities have a statutory duty to deal with such hazards.

Within social housing, this standard will be met through housing or broader neighbourhood renewal programmes. Within the private housing sector, this may be guided by a local authority's private sector renewal strategy, which local authorities are encouraged to develop and to use powers granted to them under the Regulatory Reform Order 2002 to work with landlords and owner-occupiers (Section 3 of the Order relates to assisting persons in their area for the purpose of improving living conditions, such as through improving or adapting living accommodation).

2.8 Planning legislation

The Town and Country Planning Act 1990 (and subsequent alterations) is the principal planning Act in England. Sitting alongside this are the National Planning Policy Framework (NPPF) and the associated Planning Practice Guidance website, which are now the key documents guiding the implementation of the Act and other key pieces of legislation.

Town and Country Planning Act 1990 (and subsequent alterations), Planning and Compulsory Purchase Act 2004 and Localism Act 2011

These three acts define the structure and functioning of the planning system in England and Wales. The planning acts essentially nationalise the right to development land, define what 'development' is, necessitate the need to obtain planning permission for the development of land and define how the process works.

The system is plan-led: planning applications are assessed against the development plan (comprising local and neighbourhood plans) unless other 'material considerations' (issues relevant to planning) indicate otherwise. Local plans are published by local planning authorities following extensive consultation and contain all that council's principle policies against which proposals will be assessed. Local plans need to be consistent with policies set out by national government in the NPPF.

The Localism Act made provision for 'neighbourhood plans', which can be produced by local communities themselves, expressing policies for development within their neighbourhood; however there is no requirement for communities to formulate such a plan. Once finalised, neighbourhood plans have the same status as local plans and form part of the statutory development plan, against which development decisions must be made.

The Planning and Compulsory Purchase Act outlines the climate change policy requirements of development plan documents, stating that policies should be designed to 'secure that the development and use of land in the local planning authority's area contribute to the mitigation of, and adaptation to, climate change'.

For the full legislative documents, see:
www.legislation.gov.uk/ukpga/1990/8/contents
www.legislation.gov.uk/ukpga/2004/5/contents
www.legislation.gov.uk/ukpga/2011/20/contents/enacted

The Town and Country Planning (General Permitted Development) Order 1995

This order sets out certain classes of development for which planning permission is automatically granted (permitted development rights), provided certain conditions are met. The extent of development permitted in conservation areas and other historic designations is significantly restricted, and listed buildings do not benefit from 'permitted development rights'.

Local planning authorities may extend or restrict the range of 'permitted development' that may be undertaken in their areas without the need for planning permission.

For the full legislative document, see: www.legislation.gov.uk/uksi/1995/418/contents/made

National Planning Policy Framework (NPPF)

The NPPF sets out the planning policies for England, and is a material consideration in plan-making and planning decisions. The NPPF does not change the statutory status of local development plan as the starting point for decision-making.

The core of the NPPF is a 'presumption in favour of sustainable development'. The NPPF states that the purpose of the planning system is to contribute to the achievement of sustainable development. Of particular relevance to this document are the planning system's cited roles in supporting the environmental dimension – *"contributing to protecting and enhancing our natural, built and historic environment; and, as part of this, helping to... mitigate and adapt to climate change including moving to a low carbon economy"*. This dimension encompasses the dual requirements of both protecting and enhancing the historic environment and of mitigating and adapting to climate change. The phrasing highlights the need for these to be integrated activities.

The NPPF outlines twelve core planning principles that should underpin plan-making and decision-taking. Those of particular relevance to this topic are:

- Plans should be kept up-to-date, and be based on joint working and co-operation to address larger than local issues. They should provide a practical framework within which decisions on planning applications can be made with a high degree of predictability and efficiency.
- Not simply be about scrutiny, but instead be a creative exercise in finding ways to enhance and improve the places in which people live their lives.
- Support the transition to a low carbon future in a changing climate, taking full account of flood risk and coastal change, and encourage the reuse of existing resources, including conversion of existing buildings, and encourage the use of renewable resources (for example, by the development of renewable energy).
- Conserve heritage assets in a manner appropriate to their significance, so that they can be enjoyed for their contribution to the quality of life for this and future generations.

The framework states that "*planning plays a key role in helping shape places to secure radical reductions in greenhouse gas emissions, minimising vulnerability and providing resilience to the impacts of climate change, and supporting the delivery of renewable and low carbon energy and associated infrastructure*", in line with the objectives and provision of the Climate Change Act 2008. It stresses that planning authorities should adopt proactive strategies to deliver this role. In the case of energy efficiency, the NPPF states that planning authorities should 'actively support energy efficiency improvements to existing buildings'.

With regards to renewable energy, the framework states that planning authorities should *"recognise the responsibility on all communities to contribute to energy generation from renewable or low carbon sources"*, and *"should have a positive strategy to promote energy from renewable and low carbon sources"*, and should "*design their policies to maximise renewable and low carbon energy development while ensuring that adverse impacts are addressed satisfactorily, including cumulative landscape and visual impacts*". In determining planning applications for renewable energy installations, the framework states that planning authorities should "*not require applicants for energy development to demonstrate the overall need for renewable or low carbon energy and also recognise that even small-scale projects provide a valuable contribution to cutting greenhouse gas emissions*" and "*approve the application [unless material considerations indicate otherwise] if its impacts are (or can be made) acceptable*".

This section of the NPPF states that planning authorities should have within their local plans *"a positive strategy for the conservation and enjoyment of the historic environment"* (with conservation meaning *"the process of maintaining and managing change to a heritage asset in a way that sustains and, where appropriate, enhances its significance"*).

In the case of development proposals which would lead to substantial harm to or total loss of significance of a designated heritage asset, *"local planning authorities should refuse consent, unless it can be demonstrated that the substantial harm or loss is necessary to achieve substantial public benefits that outweigh that harm or loss"*. The NPPF does not define the term 'substantial harm', or indicate how to calibrate 'substantial' or 'less than substantial harm'. Rather, it is for the decision maker to assess this, having regard to the evidence presented to them. National Planning Practice Guidance specifically addresses the question of 'how to assess if there is substantial harm?' It gives the following guidance:

- Significance is the basis for assessing this.
- While the impact of total destruction is obvious, partial destruction is likely to have a considerable impact but, depending on the circumstances, it may still be less than substantial harm or conceivably not harmful at all.
- Works that are moderate or minor in scale are likely to cause less than substantial harm or no harm at all (although they have the potential to, with scale of works not being necessarily determinative of whether any harm caused is substantial or not).

In relation to energy efficiency and renewable energy in heritage assets a useful rule of thumb for ascertaining whether the degree of harm that may be incurred is substantial harm is: "*Works that cause permanent, irreversible or long term loss of features that contribute to the significance of the asset, to the extent that its suitability for continued protection or grade of designation may no longer be justified, including changes affecting its setting. This may include harm to the continued optimum viable use of the asset or changes affecting its setting*".

Less than substantial harm can still be grounds for refusal of consent for certain works. The NPPF states that *"As heritage assets are irreplaceable, any harm or loss should require clear and convincing justification*". This then requires a consideration of the public benefit that would flow from the proposed works.

In terms of 'public benefit', the NPPF does not define this term. Rather, it is for the decision maker to assess this, having regard to the evidence presented to them. National Planning Practice Guidance specifically addresses the question 'what is meant by the term public benefits?' It gives the following guidance:

- Anything that delivers economic, social or environmental progress.
- Be of a nature or scale to be of benefit to the public at large and should not just be a private benefit (noting that this does not mean that the benefits have to be visible or accessible to the public).
- Examples of heritage benefits include: sustaining or enhancing the significance of a heritage asset and the contribution of its setting; reducing or removing risks to a heritage asset; and securing the optimum viable use of a heritage asset.

In considering applications for energy efficiency or renewable energy in traditional buildings (or their setting), local authorities should weigh the economic, environmental and social benefits of saving energy and/or making a building more efficient against the residual harm. However, the NPPF requires local authorities to give great weight to the desirability of preserving heritage assets. The relatively small public benefits of irreversibly retrofitting a single building would not in all cases outweigh relatively limited harm which is given proportionally greater weight. Conversely, the much greater public benefit that might accrue from large-scale renewable energy installations visible from the setting of a heritage dwelling could be deemed to outweigh the harm, especially if the installation is reversible and accompanied by planning conditions that require removal at the end of its working life.

As is evident, the planning system pursues multiple objectives which may overlap or have tensions between them. Whilst proposals must be assessed against the development plan, national guidance and other relevant planning issues (material considerations), the system allows an explicit weighing up of proposals against the various policy considerations, and allows considerable discretion in decision-making, provided this is applied with justification and is not irrational.

2.9 Building regulations legislation

The building regulations legislation creates minimum standards for design, construction and alterations which apply to virtually every building. There is no general requirement for all existing buildings to be upgraded to meet these standards. However, certain changes, such as the use of the building, can trigger the need for existing buildings to comply with the Building Regulations.

The Building Act 1984

This is the principal building regulations act in England. It sets national standards for building work, for all scales of development including new buildings and some alterations to existing buildings. The buildings regulations cover all aspects of construction including foundations, damp-proofing, building stability, insulation, ventilation, heating, fire protection and means of escape in case of fire.

- The building regulations require energy efficiency for existing buildings where elements are being substantially replaced or renovated, or where there is a change of use. These energy efficiency requirements apply when:
- Changes or renovations are made to thermal elements such as walls, floors or roofs which separate internal space from the external environment.
- Extension or conservatory is to be added, unless any walls, windows and doors are retained and the heating system is not extended into the conservatory.
- When the building is to be subjected to a change of use.
- When changes are to be made to controlled fittings or services. Controlled fittings are windows, external doors, roof lights and roof windows. Controlled services are space heating and hot water systems, mechanical ventilation and cooling, and fixed artificial lighting.
- When consequential improvements are required, when an existing building over 1,000m^2 is extended, or its capacity for heating or cooling per m^2 is increased.

Listed buildings (Grades I, II* and II), buildings within conservation areas and scheduled monuments are expressly exempted from the need to comply with the energy efficiency requirements where compliance would unacceptably alter their character and appearance.

The majority of building projects of any scale or complexity will require a Full Plans Application. With this method of applying, proposal plans and details are submitted and are checked for compliance by council-employed building regulation officers or by approved private sector building inspectors.

The Department for Communities and Local Government publishes guidance called 'Approved Documents' on ways to meet building regulations. Part L of the building regulations provides minimum standards of energy efficiency, as well as design criteria for space heating and hot water storage.

3 ROUTES TO PROACTIVE POLICY AND PROCESS AT THE LOCAL AUTHORITY LEVEL

Existing legislation demonstrates that the government strongly supports wholesale improvements to the energy efficiency of existing housing stock. Traditional buildings are not exempt, and the legislation will result in an increase in installations of energy efficiency measures as yet unseen in the UK. There are also binding and challenging national and international targets on renewable energy generation and carbon emissions reduction, both of which require the widespread deployment of renewable energy infrastructure. Alongside these sit clear guidance on the need to be robust in the preservation of heritage assets. As is clear, there are tensions between these different statutory duties which may lead to potential conflicts in how they play out 'on the ground'.

Planning or housing officers are very likely to be approached for advice, guidance, and even decision-making on applications for energy efficiency retrofit of, or renewable energy installations to, or in the setting of, heritage assets. There is a need for such officers to have a good grasp of how to assess and understand the significance of heritage assets, and of the need to do so. This requires greater collaboration with conservation officers, who are in many cases isolated – many local authorities have only one officer with this function, who may not be full-time.

Householders must have confidence that the local authority has a consistent, considered, evidence-based position that informs the advice and guidance they receive on the sustainable use of energy in traditional dwellings, and underpins the local authority's decisions about applications they make for related work to designated dwellings. It is important that officers of the council have the confidence that their decisions are fully supported by the corporate and political management structures across the council, and are reflected in advice given from all departments. Only through an open and inclusive process of bringing together the issues and interested parties will such confidence and consistency be generated. Creating supportive statements and policies also provides an opportunity to increase understanding among those who live in non-designated traditional dwellings, and should support the local authority to play a proactive role in disseminating information about the most appropriate ways to improve their energy efficiency without compromising heritage values or harming human health.

3.1 Using Local Plan policies to support sensitive retrofit of traditional dwellings

Two thirds of local authorities in England have adopted Local Plans. Of these, there are few policies which refer directly to the sustainable retrofit of traditional dwellings; instead, policies tend to refer to the preservation of heritage assets and the management of climate change separately. There are only a handful of examples of local authorities that have specific policies that consider the management of energy efficiency retrofit of traditional buildings – some examples are outlined below.

This report encourages other local authorities to explicitly consider sustainable energy and heritage conservation together, particularly in local authority areas with large numbers of traditional dwellings, and where this is combined with high recorded levels of fuel poverty. However, the key to making such policies work is to have a clear, council-wide interpretation of the meaning of the terms emphasised. Understanding of what constitutes sensitive or appropriate retrofit demands a good grasp of the heritage significance of the building(s) in question, and how this compares to the relative benefits of any proposed retrofit measures. See Section 4 for template policy examples.

Table 2: Local plan policies which integrate sustainable energy and heritage conservation		
Planning document	Policy	Comment
Bath and North East Somerset Core Strategy (Adopted July 2014)	CP1: Retrofitting Historic Buildings (part of policy) *The Council will seek to encourage and enable the sensitive retrofitting of energy efficiency measures and the appropriate use of micro-renewables in historic buildings (including listed buildings and buildings of solid wall or traditional construction) and in conservation areas, whilst safeguarding the special characteristics of these heritage assets for the future. Proposals will be considered against national planning policy.*	This policy integrates the two themes in a 'dual way' (i.e. promoting sustainable energy measures whilst 'safeguarding the special characteristics of heritage assets').
Brighton and Hove City Plan (Adopted March 2016)	CP15: Heritage (part of policy) *The council will work with partners to promote the city's heritage and to ensure that the historic environment plays an integral part in the wider social, cultural, economic and environmental future of the city... 2. Where proposals are promoted for their contribution to mitigating climate change, the public benefit of this will be weighed against any harm which may be caused to the significance of the heritage asset or its setting.*	This policy integrates the two themes and outlines how they will be weighed against each other in cases of conflict – this is in line with the NPPF, with public benefit being weighed against harm to significance.
Development management policies Islington Development Management DPD (Adopted June 2013)	DM3: Heritage (part of policy) *A. Protection of the historic environment: Islington's historic environment is an irreplaceable resource and the council will continue to ensure that the borough's heritage assets are conserved and enhanced in a manner appropriate to their significance.* *G. Climate change: i) Proposals to mitigate, and adapt to, the effects of climate change should in the first instance explore all opportunities of enhancing energy efficiency and forms of providing renewable energy and improved adaptation to climate change without harming the significance of heritage assets. ii) Where conflict between climate change objectives and the conservation of heritage assets is unavoidable the public benefit of mitigating the effects of climate change will be weighed against any harm to the significance of heritage assets, in accordance with the development management principles in national, London and Islington planning policy.*	As above, this policy integrates the two themes and outlines how they will be weighed against each other in cases of conflict – this is in line with the NPPF, with public benefit being weighed against harm to significance. This policy also refers to how such conflict will be avoided where possible, through ensuring a flexible approach where the full range of possible sustainable energy options is explored.

3.2 Supplementary Planning Documents

Supplementary Planning Documents (SPDs) are optional development plan documents within a broader Local Plan. They can cover a range of issues, thematic or site-specific, and provide further detail of policies and proposals in a 'parent' Development Plan Document (DPD), such as a Core Strategy. SPDs can be described as being hung on a 'hook' – usually a briefly defined policy statement within the high-level parent document. The Bath and North East Somerset Core Strategy example given in Table 2 is a good example of the 'hook' on which a more detailed SPD is hung – 'Energy Efficiency & Renewable Energy projects For Listed Buildings and Undesignated Historic Buildings'. An SPD requires a detailed evidence-base; the Historic England advice note, 'Energy efficiency and historic buildings', alongside the Sustainable Traditional Buildings Alliance (STBA) Sustainable Retrofit Guidance Wheel, can be used as part of this evidence.

Like all development plan documents, SPDs are subject to rigorous procedures of community involvement, consultation and independent examination. Once adopted, development control decisions must be made in accordance with the document unless material considerations indicate otherwise.

Producing an SPD can be costly; the requirements of community involvement and consultation, added to the compulsory sustainability appraisal and examination, can result in preparation costs in the tens of thousands of pounds. However, where a local authority has a significant stock of traditional and historic buildings, and particularly if it is an area that also has high levels of fuel poverty, an SPD on sustainable use of energy in traditional buildings is likely to be able to attract funding through internal prioritisation, particularly if the need is championed by a broad mix of officers and portfolio holders (conservation, sustainability, housing). Having clarity on these policy issues can also improve the efficiency of decision-making processes, leading to procedural cost savings.

It is vital to draw on knowledge from outside the local authority during preparation to ensure that the document is perceived as authoritative when it is examined. An authority with a large stock of traditional dwellings is likely to have established heritage interest groups that would bring locally relevant knowledge to the process. But it's important not to load the consultation process entirely in favour of those whose primary interest is in heritage preservation or the final document is unlikely to make it through examination. Low Carbon Bath (see Box 3) consulted with a broad range of local stakeholders to develop a vision for low-carbon retrofit policy regarding traditional dwellings, which subsequently formed the basis for the development of an SPD.

An SPD consultation process could draw on representation from the following local and national groups:

- Local heritage societies, clubs and neighbourhood planning groups.
- Managers of specific heritage properties in the borough (e.g. National Trust).
- Environmental groups, such as Transition groups, with a broad interest in sustainable living.
- Representatives of architects, builders and developers, especially where there are local professionals with proven expertise in sensitive retrofit of traditional dwellings.
- Householders with a personal interest in, and experience of, retrofitting traditional dwellings (for example through Green Open Homes network or Superhomes network).
- National interest groups relevant to the predominant local building type (e.g. Victorian Society, Georgian Society).
- Representatives from national research and academic institutions with relevant experience and knowledge (e.g. STBA, Buildings Research Establishment, Association of Environmentally Conscious Builders).
- Regional and national Historic England representatives.

Early consultation can be carried out through online surveys and telephone interviews. Specialist focus groups can also help officers to analyse the likely areas of common ground between stakeholders with potentially opposing views, before bringing them together. Open consultation events are of value, but the very specific nature of an SPD on energy use in traditional buildings means that these are likely to be more successful if held in areas where there are large numbers of designated, traditional dwellings, such as a venue central to a local conservation area (Box 3).

A different approach was adopted in Oxford where, instead of producing a SPD, the Council produced a tool for property owners to use when considering potential energy efficiency improvements appropriate to traditional and historic buildings (Box 4).

Box 3: Low Carbon Bath

Low Carbon Bath was a unique and award-winning initiative, run in partnership by the Centre for Sustainable Energy and the Bath Preservation Trust, and supported by the local authority.

The project engaged the local community of Bath in the planning process, as well as preservation, conservation and green groups, developers and landowners, and planners to develop a guidance document (Warmer Bath), which outlined a way forward for planning policy on energy efficiency and renewable energy within the sensitive context of a World Heritage Site.

At the heart of the project was the question, "How does a beautiful World Heritage site like Bath, known globally for its historic and cultural importance, retain the integrity of its built heritage while at the same time improving their energy efficiency?" At the start of the project, feelings on this issue were running high. Some argued that no changes at all should be allowed to the fabric of the city's architectural heritage, whilst others pointed out that the city has always adapted to change and that many of Bath's listed buildings are uncomfortably cold, expensive to maintain, and that no city is exempt from playing its part in tackling carbon emissions.

Perhaps unsurprisingly, the general consensus was that efforts should be made to mitigate climate change through improvements to Bath's homes and public buildings whilst at the same time protecting the city's unique heritage. One of the most striking findings was that more than 75% of people living in listed buildings in Bath said they felt cold in the winter, with almost half of them stating that this was a severe problem for them. This was four times the rate among Bath residents living in unlisted buildings. Building on this work, the consultation was widened to explore people's views on what kinds of low carbon building improvements should be permissible in Bath's designated buildings, gathering views on issues such as ventilation, draught-proofing, insulation, heating systems and solar panels. The project culminated in the publication 'Warmer Bath: A guide to improving the energy efficiency of traditional homes in the city of Bath', which provided householder-level guidance on the best ways to improve traditional dwellings without unduly harming their significance, along with a series of recommendations on how local people would like to see policy develop in the city. Warmer Bath can be downloaded from the following link: www.cse.org.uk/warmerbath.pdf

Bath and North East Somerset Council used the document as the basis for two supplementary planning documents, published in light of the increased profile of this issue that resulted from the Low Carbon Bath project: www.bit.ly/2i9Ryju

Box 4: Oxford Heritage Energy Efficiency Tool (HEET)

The Oxford Heritage Energy Efficiency Tool is a methodology and set of resources to assist property owners in assessing the potential for energy efficiency improvements in traditional buildings. The methodology leads property owners through a step-by-step process of understanding the significance of their building, carrying out a health check of the building condition, with simple maintenance tasks that can improve energy efficiency, and exploring possible energy efficiency measures that could be installed. The Tool also refers to possible forms of renewable and low carbon energy technologies and the potential for their use in traditional buildings. It gives case studies of energy efficiency retro-fitting in Oxford.

See: www.oxford.gov.uk/info/20064/conservation/325/heritage_energy_efficiency_tool_heet

3.3 Statements of Common Purpose

In many local authority areas, there will be little available funding, political support or widespread community concern regarding the integration of sustainable energy and heritage conservation. In such cases, securing funding to develop an SPD is unlikely and it would be a more realistic option to develop a more informal document setting out a positive vision for promoting the sustainable use of energy in traditional dwellings.

A positive vision could be created through the development of a Statement of Common Purpose. Though such a document does not require statutory consultation and would not carry a great deal of weight in planning terms, it can still create useful opportunities for dialogue and finding common ground between the different local authority officers who deliver the requirements of the varying (and often conflicting) pieces of legislation and policy examined in section 2. It could encourage conversations between heritage, housing and sustainability officers when applications are received to ensure these agendas are fully addressed. Additionally, it can create opportunities for informal engagement with interested parties from across the community, and result in a single reference document for an authority's officers to refer to.

A Statement of Common Purpose will have more impact if it draws heavily on other documents that do have weight in planning considerations. A useful starting point would be to incorporate high level statements from the NHPP and NPPF, for example framing the Statement of Common Purpose around the principles that:

> "*The local authority will always work proactively with applicants jointly to find solutions which mean that proposals can be approved wherever possible, particularly where that improves the economic, social and environmental conditions in the area. We will recognise and reinforce the historic significance of places, while accommodating the changes necessary to make sure that people can continue to use and enjoy them.*"

It is vital that Statements of Common Purpose are developed with the community, since the ability of a local authority to adopt any such voluntary statement depends on the willing co-operation of those who will be impacted by it. They could call on the same local groups as would be approached during the development of an SPD (as detailed above).

4 TEMPLATE POLICIES

Listed below are template policy phrases that cover issues regarding the sustainable retrofit of traditional dwellings and the deployment of large-scale renewable energies, specifically where this is proposed within the vicinity of heritage assets. These draft policies have been developed through drawing on the legislation and guidance discussed in Section 2. Local Authorities should fully familiarise themselves with the detail of those sections before adopting or adapting these draft policies.

It is suggested that, wherever possible, policies are worded positively, as statements of support rather than restriction. To ensure policies are positive and enable a solutions-based approach (in line with the NPPF) inflexible and restrictive phrasing which is unjustifiably closed-ended should not be used.

4.1 Template policy statements: General

Overarching statements:

"The council will encourage and enable the sensitive retrofitting of energy efficiency measures and the appropriate use of micro•renewables in traditional buildings and in conservation areas."

Supplementary text for this policy should make reference to the national legislative requirements to concurrently mitigate climate change, protect and enhance cultural heritage, and ensure minimum standards within public and private housing.

Proactive positive approach:

"A proactive, flexible, and solutions-based approach will be sought, with positive engagement between applicants, local authority officers, and, where appropriate, experts."

Significance:

"A comprehensive understanding of the significance of heritage assets will underpin decision making, with reference made to the degree, nature and extent of significance."

Impact on significance:

"Where proposals would cause harm to the significance of a heritage asset, this will be weighed against the public benefit that would flow from the proposal, and only refused where the harm is considered to be disproportionate to the public benefit."

Evidence:

"The council commits to ensuring officers are aware of, and, actively responsive to the evolving technical evidence base regarding the sustainable retrofit of heritage dwellings within their policy and decision-making responsibilities."

4.2 Template policy statements: Sustainable retrofit of heritage dwellings

Energy hierarchy:

"Proposals to sustainably retrofit traditional dwellings should, where possible, be consistent with the energy hierarchy – firstly reducing energy demand in the dwelling, secondly increasing energy efficiency, and finally looking to generate renewable energy."

Supplementary text for this policy should emphasise that the energy hierarchy should not be applied in isolation; rather it should be regarded as an integral element of the 'whole house' approach. This is an all-encompassing approach, which acknowledges the 'whole house' as an integrated environment of building, occupants and setting. The ways in which these elements are connected and how interventions may impact them can then be considered in a comprehensive and logical way in order to achieve a balanced outcome, achieving energy efficiency improvements whilst also conserving the heritage asset, and the health of the occupants (refer to A Guide to Responsible Retrofitting by STBA for further details: www.stbauk.org/resources/stba-guidance-and-research-papers).

Hierarchy of measures:

"Where harm to significance is expected from proposals, and where this is being weighed against the public benefits of the proposal, applicants will need to demonstrate that the same level of public benefit could not be achieved through less intrusive, energy efficiency measures which would incur less harm to the heritage asset's significance."

Monitoring and maintenance requirements:

"Proposals will be required to demonstrate an awareness of the maintenance needs of measures post-installation, where maintenance is required to ensure negative impacts on significance are avoided."

Supplementary text for this policy should detail this further, referencing guidance which outlines potential impacts of measures and what further monitoring and maintenance of measures will be required to ensure negative impacts are avoided.

4.3 Large-scale renewable energy installations

Significance:

"Impact to significance will be the basis for assessing proposals for large-scale renewable energy installations in the vicinity of heritage assets. Proposals within the setting of and within viewpoints to and from heritage assets will be supported except where the proposals would harm the significance of the asset" [with specific reference made to the level of importance, and the nature and extent of significance].

Public benefit:

"Where harm will incur, this will be weighed against the public benefit that would flow from the proposal. Proposals which would incur substantial harm to a designated asset will only be considered where such harm is necessary to achieve substantial public benefits which outweigh the harm. Proposals which are fully or partially owned by the local community will be considered as having a high level of public benefit. Within an assessment of public benefit, consideration will be given to the reversibility of the installation and the energy output of the proposal, recognising that a scheme with larger energy outputs, whilst potentially having a greater negative impact, has a much greater public benefit flowing from it."

5 CONCLUSIONS

Local authorities are responsible for implementing a diverse range of legislation, policies and guidance relating to sustainable development, fuel poverty, housing standards, carbon reduction, and conserving heritage assets. Apparent or actual conflicts between differing requirements can lead to tensions within local authorities that play out on the ground in daily decision making. Without good inter-departmental understanding and communication there is a danger that one legislative responsibility will overshadow another, so that local authorities may under-perform in some of their duties. They may also give contradictory advice to the public, dependent on which department is the first point of contact. It is clear, therefore, that a joined up approach between different council departments – principally housing, planning, conservation and sustainability – is necessary. It is hoped that the research outputs contained in this report will help local authorities develop ways of fostering communication and understanding, both across their organisations and with interested local stakeholders.

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