Before you Start

Once you have addressed any maintenance issues, you need to think about the type of building that you own. This will have a significant effect on what products will be suitable for your property and whether you might need to seek permission for the works from the Council (for more information, go to the Permissions page). If you are unsure about this, then you should seek advice from an expert or use the Council's **pre-application advice service**.

Some of the things that you should think about first are:

- Is my building listed?
- Is my building located in a conservation area?
- What is my building made from? *E.g. stone, timber, brick. Is it a solid wall or cavity wall construction, or a mix of both?*
- Is my building in good repair?
- Where is my building located? *E.g on a hill, in a valley? Is it exposed to the weather? Is it detached, semi-detached or mid terraced?*
- Are there any grants available and are they suitable for my project?

Once you have done this, you should then think about the type of retrofit you would like to do to your building and what your budget is. You might want to think about:

- The types of measures you want to implement
- The **u-values** you want to achieve (making sure this is suitable and achievable in your building)
- The **EPC** you would like to aim for (noting that listed buildings are exempt from EPC improvements which would have a detrimental impact on their architectural and historic interest)
- Are the materials/products compatible with the building e.g. are they breathable?

In deciding on energy efficiency improvement measures, its important to be aware of the advice set out in Part L of the Building Regulations:

"*The energy efficiency of historic and traditional dwellings should be improved only if doing so will not cause long-term deterioration of the building's fabric or fittings. In particular, this applies to historic and traditional buildings with a vapour permeable construction that both absorbs moisture and readily allows moisture to evaporate. Examples include those built with wattle and daub, cob or stone and constructions using lime render or mortar.*"

A whole house plan is the most effective form of retrofit and can identify which measures are the most cost or carbon effective. It looks at every building element (windows, doors, floors walls, ceilings, roofs, heating and ventilation) and also takes into consideration how the building is used. This is an integrated approach which requires the expertise of a suitably qualified retrofit professional. Whilst the most effective means of retrofit for reducing energy usage and emissions, it is also the most expensive. This approach can be carried out in a step by step process to spread the cost, however, it will require a qualified retrofit specialist to provide a schedule of what works should be done when.

The piecemeal approach looks at upgrading individual building elements as and when, without looking at how this might affect other building elements. This could involve installing draughtproofing, then at a different stage upgrading windows or doors or installing roof insulation. This approach will help to improve a building's energy efficiency and reduce carbon emissions. However, because it is not an integrated approach, this can result in unexpected expense later down the line, or products not working as expected. However, depending on budget or the overall goals, this might be the most appropriate retrofit approach for you.

More detailed guidance

Historic England

Historic England provide useful and detailed guidance on all types of retrofit. It provides information about what types of measures are suitable for all traditional buildings, not just those that are listed. This can be found on their Energy Efficiency and Retrofit in Historic Buildings page.

Historic England list all of the different conservation accredited groups (architects, engineers, surveyors etc.). It is strongly advised that if you are planning any work to a listed building, then you employ a conservation accredited professional. It is also advised that you use conservation accredited specialists if you are planning work to an unlisted traditional building, as they will understand the building's construction and how it performs. The webpage is Conservation Accreditation for Professionals.

Sustainable Traditional Building Alliance (STBA)

The STBA provides in-depth advice about retrofitting traditional buildings and related things to consider. This resource is most appropriate for professionals and technically minded individuals.

Website: https://responsible-retrofit.org/

Bath and North-East Somerset

Bath and North-East Somerset Council has produced a very helpful supplementary planning guidance on different retrofit measures you might want to carry out, including diagrams to show how the measure is fitted.

Website: https://beta.bathnes.gov.uk/energy-efficiency-retrofitting-and-sustainable-construction-supplementary-planning-document

Bath Preservation Trust

In 2011 Bath Preservation Trust with the Centre for Sustainable Energy produced a very good guide, Warmer Bath, which includes details about practical, low-cost measures that can be implemented to improve a building's energy efficiency. This is still a very good guide for those early measures.