

A guide to Retrofitting your home

The Retrofit Journey





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Our homes use 35% of all the energy in the UK and emit 20% of the carbon dioxide emissions.

Introduction

If you're reading this, there's a very good chance that you're thinking about carrying out improvements to your home and making it more energy efficient, greener, more comfortable, healthier and lowering the emissions produced. And it couldn't be more timely.

We are all aware of the need to play our part in reducing greenhouse gas emissions and reduce the amount of energy and resources we use. The Government has set a target for the UK to reach net zero in carbon emissions by 2050 and reduce emissions by 78% by 2035. Our homes use 35% of all the energy in the UK and emit 20% of the carbon dioxide emissions¹ so if we are going to achieve those targets and impact climate change, household emissions need to be addressed.

With around 28 million homes in the UK, and the average Energy Performance Certificate (EPC) rating of D or below², there is a great opportunity to raise the standard of energy performance in our homes. That is where Retrofit comes in.

This booklet aims to explain what Retrofit is, why it's needed and how it benefits homeowners. It guides you through how the process works, the quality standards that should be met when carrying out these works and the competent, professional people who are involved.

Getting your project completed to high quality standards is so important. TrustMark is the only Government-endorsed quality scheme covering work a homeowner chooses to have carried out in or around their home, whether that's installing energy efficiency measures or landscaping a garden.

We're passionate about quality, raising standards and ensuring consumers have appropriate protection in place and we work closely with our Scheme Providers and Registered Businesses to help make this happen. By choosing a TrustMark Registered Business to carry out your retrofit works, you have the reassurance of their commitment to high standards of technical competence, customer service and trading practices, all underpinned by our Customer Charter, the Code of Conduct and the Framework Operating Requirements.

I hope you find this useful,

Simon Ayers,
CEO TrustMark

1 From CLC National Retrofit Strategy V2

2 <https://www.ons.gov.uk/peoplepopulationandcommunity/housing/articles/energyefficiencyofhousinginenglandandwales/2020-09-23>

What is Retrofit?

Retrofit is simply the process of making changes to existing buildings so that energy consumption and emissions are reduced.

It should also bring the benefit of a more comfortable and healthier home. This can include a number of measures, for example installing loft or wall insulation, double or triple glazing or replacing an existing gas boiler with a ground or air heat-source pump. Sometimes, another home improvement such as a new kitchen or bathroom being installed or having a loft extension can prompt the opportunity to think about carrying out other energy-reducing improvements at the same time.

There are two approaches that you'll hear about when people refer to Retrofit: **"Fabric First"** and **"Whole House"**.

Fabric First

"Fabric First" is a simple, straightforward approach aimed at upgrading the fabric (e.g. walls, lofts, floors) of the building first, together with making sure there is the right amount of ventilation, before tackling more complex things such as heating, hot water, or lighting systems. This can be done by improving insulation around the building and reducing heat loss through any 'leaky' parts of the house, for example, windows, doors and other gaps. However, care still has to be taken not to cause damp or mould due to lack of ventilation, so plugging every nook and cranny isn't necessarily the right thing to do.

Whole House

"Whole House" is where an assessment is carried out by a qualified Retrofit Professional on the whole house - the fabric (e.g. walls, lofts), services and systems (heating, hot water and lighting) and the energy used. Recognising that every home is different, it also takes into account how the occupants live in and use their home. A plan is then produced which is usually split into phases.

Each phase includes estimated costs of work that can be undertaken, estimated energy savings for each set of measures and the amount of carbon reduction that can be made in each phase. It's then up to the homeowner to decide which measures are undertaken and when. The plan is developed and managed by a qualified and accredited Retrofit Professional.

Improving the building fabric to minimise heat losses and maximise air tightness is sensible because insulation has a relatively low cost, a long-life and should only be required once before 2050 for most properties. Services and systems, by contrast, have a shorter lifespan and will almost certainly need to be replaced every 10-15 years.

Why is it important and what are the benefits to me?

There are three main reasons why Retrofitting our homes is so important.



Firstly, Climate Change and the UK Government's target of the UK reaching net zero by 2050.

We are all aware of the need to reduce our energy consumption and the emissions we produce. Our homes use 35% of all the energy used in the UK and emit 20% of the carbon dioxide emissions, so reducing these wherever possible is paramount.



Secondly, energy costs are rising and are likely to continue to do so.

Measures that help to reduce the amount of energy used not only help to reduce emissions but also lower household energy bills.

One example is installing 270mm insulation in an uninsulated loft will save on average each year*:

- £215 in a 4 bed detached house
- £130 in a 3 bed semi
- £115 in a 3 bed mid-terrace
- £185 in a 2 bed detached bungalow



Thirdly, introducing these measures can help make our homes warmer, more comfortable and healthier to live in.

Studies and reports from numerous organisations including the World Health Organisation, the NHS, Universities and All Party Parliamentary Groups all highlight the impact of cold, damp and mould and poor indoor air quality on health.

* Figures from [which.co.uk](https://www.which.co.uk) and Energy Saving Trust

Case Study



Neil and Karen, Somerset

Neil and his partner Karen, along with Neil's 84-year-old mother, moved to a detached house in Somerset in October 2019.

Like many new homeowners, Neil received an Energy Performance Certificate (EPC) when he moved into his new home. The EPC showed that loft and cavity wall insulation would greatly improve the property's energy performance.

"I was talking to my neighbour, as he had recently had insulation installed. I was very keen to benefit from insulation too, not only to help keep my home warmer in the winter months, but I also am a great advocate for energy efficiency. It was a priority, but I hadn't got round to looking into it."

Dyson Energy Services, a TrustMark Registered Business, advised Neil that he may be eligible for funding through the Energy Company Obligation scheme. They carried out a free no obligation survey, to check the property was suitable for cavity and loft insulation and that he and his partner met the qualifying criteria.

On the planned date, Neil and Karen had cavity wall and loft insulation installed on the same day, by two teams at Dyson Energy Services.

Neil explained, "We are over the moon with what they've done and how they went about it. They did everything they said they were going to do. We couldn't ask for more, as the work was carried out professionally and to a very high standard."

"We have to do our bit for future generations, especially with what is going on with climate change. We are much warmer; we've reduced our carbon footprint and reduced our energy bills."

To read the full story: dysonenergyservices.co.uk

How does Retrofit work?

A typical project would include the following steps:

Step 1 – Assess the property

A qualified Retrofit Professional will visit your property to find out everything they need to know about your existing energy usage and the building itself.



They'll talk to you about the type of improvements you want to carry out and what you're looking to achieve.



● They'll also want to understand how you and any other occupants use your home.

Step 2 – Prepare a Whole House plan

This is one of the most important parts of the process. A report will be produced that will show you what you can do to reduce your energy bills and emissions and make your home more comfortable and healthier to live in.

It is a bespoke plan and design for the whole of your home, detailing all the measures you could take to make your home as energy efficient as possible.



It will also include recommendations on which measures are the most cost-effective, have the most impact and in which order to carry them out.

● The most important thing about the plan is that it does not have to all be done at once, but it identifies measures that can be carried out in different stages to suit your budget, lifestyle and what you want to achieve.

Step 3 – Agree the plan and gather quotes

The Retrofit Professional will agree the plan with you, explaining anything you're not sure about and clarifying any details.



This may cover just one phase of the works, as explained above, if that's what you choose to carry out.



The Retrofit Professional can also oversee the project and they'll be able to explain how they will work with you until it is completed.

If you're happy to proceed, they can then gather quotes for the works from approved retrofit contractors so you can be sure that work will be carried out to the right quality standards.

● It is always your decision who you appoint to carry out the works.

Step 4 – Sign contracts and start work



Once you've decided on which contractor you want to carry out the works, it's always advisable to have a contract in place so that you are both clear on what is agreed and you are protected.

Once signed, works can commence. Your Retrofit Professional can manage the project from start to finish, monitoring work along the way. They are responsible for protecting your interests.



If you already have a project manager for example, an architect or surveyor that is overseeing the works, you may prefer that they do this for you.

Step 5 – Evaluation and completion

When the work is completed, the Retrofit Professional or your project manager should check that work has been delivered as expected and completed to all the required quality standards.



A new, overarching British Standard for energy efficiency retrofit – PAS 2035 – was introduced in 2019.

It is strongly recommended that you appoint trained, professional people who are experienced and skilled in the appropriate areas.

Who can carry out the work?

It's always advisable to appoint people who are trained, skilled and competent to carry out any assessments and work in and around your home.

All trades should work to high standards of quality and many are members of professional trade associations or accreditation bodies. Businesses registered with TrustMark are not only validated by their trade associations but also commit to adhering to high standards of technical competence, customer service and trading practices, set out in our Customer Charter, Code of Conduct and the Framework Operating Requirements. They are also required to have financial protection mechanisms in place for their customers' protection. This applies to any works a TrustMark Registered Business carries out, whether that's energy efficiency improvements, electrical works, landscaping or cleaning carpets.

A new, overarching British Standard for energy efficiency retrofit – PAS 2035 – was introduced in 2019, which provides a framework for delivering domestic retrofit projects in the UK. It is designed to overcome the previous issues of poor design and quality and energy efficiency measures being introduced in isolation, often causing more problems than they solved.

New roles have also been created to work within and apply this framework: Retrofit Advisor, Retrofit Assessor, Retrofit Coordinator, Retrofit Designer and Retrofit Evaluator. People working in these roles have to be trained and are qualified to required standards to ensure a quality outcome.

If you are paying for your own works with no public funding then whilst it is recommended, it is not mandatory for you to use these individuals. It is strongly recommended however, that you appoint trained, professional people who are experienced and skilled in the appropriate areas. This will help to ensure that works are carried out to high quality standards and you achieve your desired outcome.

If energy efficiency improvements on your home are being funded by any government, local authority or energy supplier schemes, then mandatory requirements are in place as to who should be involved with and carrying out the works.

You can use TrustMark's 'find a trader' search facility to find Retrofit Professionals and contractors.

Using a TrustMark Registered Business gives you the most comprehensive level of protection available when getting work done in and around your home.

How do I find the right person?

You can use TrustMark's 'find a trader' search facility to find Retrofit Professionals and contractors.

These are all competent professionals who commit to adhering to the required high levels of technical competence, customer service and trading practices.

How can I be sure about the quality?

Getting the right installation is vital to achieving the right outcomes and you want to be sure that any work carried out is of high quality, well-thought through and properly planned. Quality Assurance throughout the project is fundamental and is where TrustMark can help. By using a TrustMark registered Retrofit Professional, you have the reassurance that they are skilled, competent and work to the high standards required.

What guarantees/insurance do I have?

Using a TrustMark Registered Business gives you the most comprehensive level of protection available when getting work done in and around your home. Not only do you have the built-in assurance that the tradesperson you engage will work to the standards and requirements of the TrustMark Code of Conduct and Customer Charter, you also have the added security from the financial protections which are in place. These include:

TrustMark Financial Protection Panel

The Financial Protection Panel (FPP) was formed to make sure there were no gaps in the provision of consumer protection when using a TrustMark Registered Business.

Ensure the contractor you appoint provides you with financial protection and guarantees.

Insurance against the tradesperson going out of business.

This can vary between businesses but as a minimum must cover:

- ◆ Prepayments or deposits
- ◆ 2-year post completion of workmanship
- ◆ Rectification of defects or major damage
- ◆ Non-compliance with Building Regulations

Minimum 2-year product warranties and workmanship

Works not funded by any Government programme or Energy Company Obligation (ECO) must still include a minimum of a two-year finance protection mechanism for workmanship and products which meets the TrustMark finance protection requirements.

Minimum two-year product warranties and workmanship.

Energy Company Obligation and other Government programmes

For installations carried out under ECO or certain other Government programmes, it is a mandatory requirement for the business to provide an 'approved' finance protection mechanism.

Minimum 25-year guarantees are mandatory for certain Energy Efficiency Measures under ECO or funded through certain Government programmes.

These include:

- ◆ External wall insulation
- ◆ Internal wall insulation
- ◆ Cavity wall insulation
- ◆ Hybrid wall insulation
- ◆ Park Home insulation
- ◆ Room-in-loft insulation
- ◆ Underfloor insulation

Retrofitting our homes can make them warmer, healthier and more comfortable to live in.

What happens if things go wrong?

As part of the Customer Charter and the Code of Conduct, every TrustMark Registered Business must have a clear, fair and transparent complaints process.

Businesses are monitored by their Scheme Provider and their work and practices are checked to make sure they are maintaining the high standards required, but occasionally things can go wrong. Most things can be resolved quickly and easily with the business directly but if this is not possible, further avenues are open to help resolve a problem, including ultimately, the Disputes Resolution Ombudsman, of which TrustMark is a member.

If you use a business who is not TrustMark Registered, ask to see their credentials, any guarantees and financial protection they have in place before you agree to any works or make any payments.

What will it cost?

Costs will vary according to the size and scale of the project and complexity of the works required but will be proportionate to the plan created for your home.

Can I get help to fund this?

Funding may be available from government schemes running at the time, your energy supplier under the Energy Company Obligation or local schemes run by your local authority or other organisations.

Where can I get more advice?

Simply Energy Advice

<https://www.simpleenergyadvice.org.uk/>
0800 444202

Energy Savings Trust

<https://energysavingtrust.org.uk/>

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Improving energy efficiency by adopting a fabric-first approach is key in ensuring the transition to lowcarbon heating is cost-effective and resilient. ‘Fabric-first’ means focusing on installing measures that upgrade the building fabric (e.g. walls/lofts) itself before making changes to the heating system.”

*Issued by the UK Government,
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www.trustmark.org.uk