

Your EST Home Energy Check report

Thank you for using the Home Energy Check tool. We have analysed your answers to put together your personalised home energy report. This report tells you our estimate of how much energy your home is using and how much that energy costs. The energy you use in your home leads to carbon emissions that contribute to climate change. The report tells you how much carbon your home is currently emitting. We also give you an indication of the Energy Performance Certificate rating that your home might currently achieve.

Most importantly this report tells you about the home improvements you identified in the Home Energy Check. We tell you how much these improvements could save both in energy bill and carbon terms, and how they could improve your energy performance certificate rating. We give you a quick guide to what you need to think about in installing these measures – how much they might cost and how much hassle is involved in fitting them.

Your selected home improvements

Type	Description	Cost	Estimated annual saving	Potential income from generation
	Draught proofed doors	£60	£10	£0
	Loft insulation top-up	£250	£50	£0
	LPG condensing boiler	£2,090	£160	£0
	Solar panels (photovoltaic cells)	£6,370	£210	£520

Installing these measures could reduce your fuel bills by : £410
These measures could also generate a total additional income of : £520
Combined annual benefit : £930

IMPORTANT: USING THE INFORMATION IN THIS REPORT

We hope that the Home Energy Check inspires you to think about home improvements, but the Energy Saving Trust cannot be liable for any decisions or actions you may take on the basis of information provided in this report. Every home is different and we make a number of assumptions about your home and family in putting together the advice in this report. It's therefore important that you only use this guidance as a first indication of improvements that might be right for your home. Consult expert installers and energy assessors before deciding to purchase any new energy saving measure. Our energy saving figures are calculated on the basis that home improvements are correctly installed and maintained. The amount of heat you use will affect how much you save from different improvements: our default assumption is that you heat your home to 18 degrees in bedrooms and 21 degrees in living areas, though you can change this in the "In your home" section of the Home Energy Check. We also assume that - after having your home improved - you keep your heating at the same level.

Home Energy Check Report

Your fuel bill

Based on what you've told us about your home and household, we've estimated:

Your estimated current fuel bill: **£1,720**

After installing energy saving measures: **£1,310**

Potential additional income: **£520**

Carbon emissions

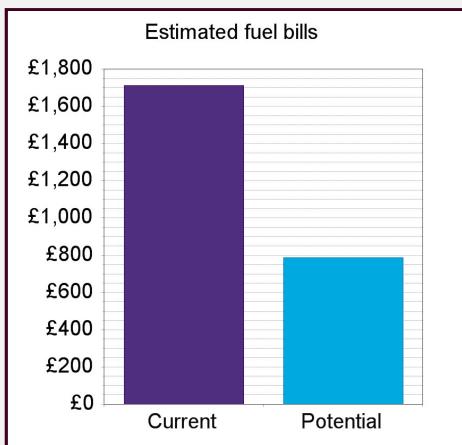
The carbon dioxide that causes climate change is a result of generating energy to heat and power homes. By saving energy in the home, we help prevent climate change. The average UK home emits five tonnes of CO₂ each year (1 tonne = 1,000Kg CO₂).

Estimated current carbon emissions: **4,520 Kg CO₂**

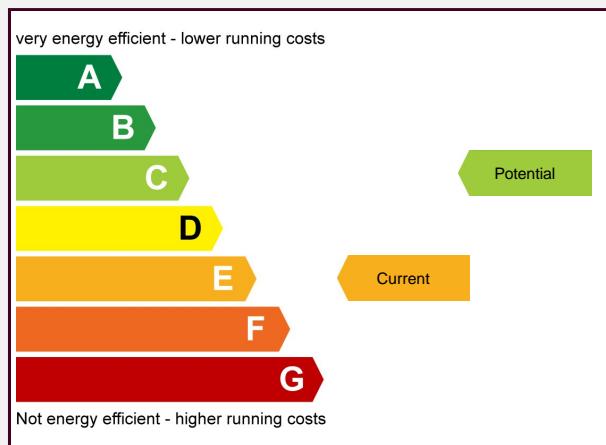
After installing energy saving measures: **2,150 Kg CO₂**

Total annual carbon savings: **2,370 Kg CO₂**

Potential fuel bill savings



Your Energy Performance Certificate banding

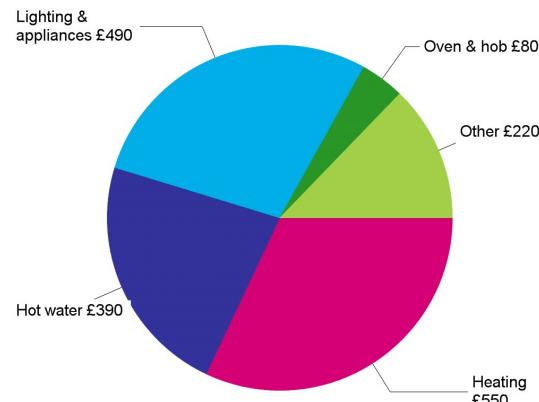


How much information you have provided:

100%

How you currently use energy in the home

	Your current bill (estimated)
Cost of heating	£550
Cost of hot water	£390
Cost of lighting and appliances	£560
Additional standing charges	£140
Savings from energy generated and used on site*	N/A
Income from exported electricity*	N/A
Feed in tarrifs*	N/A
Additional annual maintenance	£90
Total fuel cost	£1,720
Energy use	14,908 kWh



* Savings from energy generated and used on site, income from exported electricity and feed in tarrifs will only be displayed if suitable renewable technologies (such as Photovoltaic panels) have been installed in the home

Improvement information

For more information on any of these measures visit www.est.org.uk

Draught proofed doors

Badly fitting doors, windows and loft hatches are all sources of heat loss. Draught proofing doors is an easy to install measure and the benefits are quickly realised in terms of comfort. It prevents heat loss and draughts by blocking small gaps and spaces around doors with draught-proofing strips, sealants and excluders. Draught-stripping is inexpensive and simple to install and can greatly improve the comfort of your home as well as reducing fuel costs.

Contribution to savings: ★

Level of work involved ↗

Draught proofing doors requires sticking draught-proofing strips around the door, filling the gap between the door and the doorframe. Self-adhesive foam strips are cheap, and easy to install, but may not last long. Metal or plastic strips with brushes or wipers attached last longer but are slightly more costly. Compression seals are particularly well suited for external doors as the initial 3mm of the draught stripping allows for seasonal movement of the door. Items like letterbox excluders can easily be screwed into place on the internal side of the letter box.

Comfort ★★★

Draughts are one of the biggest sources of discomfort in the home. Without draughts, most people feel quite comfortable keeping their home at a lower temperature – so you will be able to turn down your thermostat. It may also help alleviate condensation problems associated with unwanted ventilation.

Payback ★★★

The savings on your fuel bill won't be huge but draught proofing is a low cost insulation measure which is quick and easy to do.

Practicalities

Draught proofing is a simple DIY task.

After some sealants have been applied around doors, care may be needed when painting to avoid damage to brushes and some types of rubber.

The appearance of your home

Draught proofing your doors will have minimal impact on the appearance of your home.

Why not also consider...

Fitting a new insulated door and frame will give you more draught proofing and mean you are losing less heat through the door itself. Apart from doors, draughts can come through a number of places in your home. Draughts can come through windows, including keyholes and letter boxes, loft hatches, electrical fittings on walls and ceilings and through holes around pipework leading outside. The work involved is largely the same as it is for doors.

Loft insulation top-up

Full loft insulation is an easy and cost effective way of stopping heat escaping from your roof. Loft insulation is easy to install and will last over the lifetime of the property.

Contribution to savings: ★★

Level of work involved ↗↗

Installation is typically quick and easy. In homes with a pitched roof and a loft, loft insulation can be installed either professionally or you can do it yourself.

Loft insulation involves laying down rolls of mineral wool, known as quills, between and over ceiling joists and only takes a few hours. If having the work done professionally, all you will need to do beforehand is make sure your loft space is clear.

Comfort ★

Installing loft insulation will mean that you will be losing less heat through your roof so you will see that your home will heat up quicker and stay warmer for longer. Rooms, especially upstairs rooms, will feel warmer and more comfortable.

Payback ★★★

Loft insulation has a great payback rating because it is cheap to install and you will only have to install it once.

The savings on your heating bill should be significant and in a typical three-bedroom gas heated home loft insulation should pay for itself in under two years.

Practicalities

Installing loft insulation requires a clear loft. This could be a good opportunity to assess what you've got and get rid of things you don't need. If you require help with clearing your loft, there are clearance service companies that will be able to help you. Once the insulation is installed you will not be able to use your loft for storage, if you are worried about losing precious space it may be possible to board over part of the insulation and use it as storage.

LPG condensing boiler

Boilers account for around 55% of what you spend in a year on energy bills, so an efficient boiler makes a big difference. A condensing boiler is more efficient than an old-fashioned non-condensing one because it recovers more heat and sends cooler gases up the flue. A standard boiler is one that has a separate hot water cylinder (unlike a combi boiler). You might choose a standard boiler if you need to use a lot of hot water.

Contribution to savings: ★★☆

Level of work involved ↗↗

Standard boilers are relatively easy to replace in old-fashioned heating systems without too many pipe-work changes. However, they take up more space than a combi boiler would, due to the separate hot water cylinder.

Comfort ★

Because a standard boiler has a large tank of stored hot water, you can use several taps at once, and these boilers are suitable for larger houses with higher hot water demand. However, the amount of hot water you can use is still limited by the size of your cylinder. For instance you might run a bath, then need to wait for the boiler to heat up the water in the cylinder again before you can run another.

Payback ★★

The costs for replacing a boiler will vary, but a straightforward gas boiler replacement will typically cost around £2,300. The amount you could save depends on how old and inefficient your existing boiler is. A typical household (gas-heated 3 bed semi) could save around £300 per year by upgrading from a G-rated boiler, to an A-rated condensing boiler with a full set of heating controls.

Practicalities

The installer must be Gas Safe registered. Your registered installer will ensure that your system complies with Building Regulations, and will make sure you get all the documentation to prove this. Keep these documents safe – you will need them if you sell the property.

Other types of efficient boiler are also available, including a gas combi condensing boiler.

If you need to replace your boiler anyway, it is a very good idea to get the most efficient boiler you can. However, even if your old boiler does not immediately need replacing, this may still be a good option.

The appearance of your home

A standard boiler will take up more space than a combi boiler.

Why not also consider...

Another option to consider alongside a new boiler is improving your heating controls. The right controls will let you set your heating and hot water to come on and off when you need them, heat just the areas of your home you want, and decide how warm you want each area to be.

You could also consider buying an efficient hot water cylinder. These come already highly insulated and ready to be installed. Upgrading your hot water cylinder can save you around £45 a year.

Other types of efficient boiler are also available, including a gas combi condensing boiler.

Solar panels (photovoltaic cells)

Solar panel electricity systems, also known as solar photovoltaics (PV), capture the sun's energy to generate electricity which can be used to run household appliances and lighting. Solar PV needs light, but not direct sunlight, to work – they can still generate some electricity on a cloudy day. Sunlight is free, so once you've paid for the initial installation your electricity costs will be reduced. You can also get paid for the electricity you generate as the government's Feed-In Tariffs pay you for the electricity you generate, even if you use it.

Our recommendations are based on a 3.5kWp (kilowatt peak) solar PV system. Larger and smaller systems are available, both in terms of the size of the system and the amount of energy they generate.

Contribution to savings: ★★★★

Level of work involved

Any house with an unshaded roof (or similar space) facing broadly South could potentially install a successful PV system. The stronger the sunshine, the more electricity is produced. Solar PV panels can be mounted on your roof or on the ground. You can also fit solar tiles in place of normal tiles on a roof as an alternative to panels, however these are more expensive and normally only considered where panels are not appropriate due to aesthetic or planning reasons.

Most installations can be completed within one to two days, but some will run into three. A competent installer accredited under the governments Microgeneration Certification Scheme will be able to assess your home and help you choose the best setup to meet your needs. Access is needed to both inside and outside of your property; access is also required to your electricity supply.

Comfort ★

Installing solar PV will not change the comfort of your home but it will save – and even earn - you money in the medium to long term. And you'll be making a big reduction in the carbon emissions from your home.

Payback ★★

Solar PV is only beneficial as a long-term investment, as you'll only make a profit once the system has paid for itself. With the Feed in Tariff, payback time could be about 12 years for a 3.5kWh system installed after 1 November 2012.

Practicalities

Solar PV needs little maintenance – you'll just need to keep the panels relatively clean and make sure trees don't begin to overshadow them. In the UK panels that are tilted at 15° or more have the additional benefit of being cleaned by rainfall to ensure optimal performance. Debris is more likely to accumulate if you have ground mounted panels.

If you live in a conservation area or listed building you may need permission from your local planning office to install this measure

The appearance of your home

Solar PV panels will be visible on your roof unless you use solar tiles (see above) or a ground mounted installation.