

What sort of house do you live in?

- There are around 12,000 households in Bedminster, Southville and Ashton
- Most homes were built between 1871 and 1945. (735 new dwellings built since 1980)
- Our housing is mainly terraced properties (61%), with quite a lot of Flats (23%) and semi-detached homes (14%) and only a few detached houses or bungalows
- We have a roughly 60:40 split of owner occupied properties to rented homes



Did you know...

Almost half of the homes are terraced houses with mains gas heating and solid walls. About 8% are semi-detached with mains gas heating and solid walls. About 7% are terraced houses with mains gas heating and cavity walls. Other main types of housing...

- Semi-detached houses with cavity walls and mains gas heating = 6%
- Flats with solid walls and electric heating = 6%
- Flats with cavity walls and electric heating = 6%

These case studies show three of the property types that are most common in our area. The case studies are taken from surveyed homes and show improvements which you may be able to make to your own place. Your home may not be exactly like the case studies but you'll be able to see examples of possible improvements, and what difference they would make.

Terraced houses with solid walls and gas heating



5,569 houses (48% of community) in Bedminster, Southville and Ashton

Recommended improvements

- Internal solid wall insulation
- Top up loft insulation
- Upgrade to a condensing boiler
- Hot water cylinder insulation
- Install TRVs to your radiators

Estimated costs

Total cost: £9,172

Eligible For Green Deal: YES

Eligible For ECO Funding: YES

Expected impact of improvements

If you did all of this, your energy use could drop by 48%. Say your bills are currently around £1,600 per year, they would be expected to drop by about £400 a year, and your SAP rating should go up from about 40 (band E) to 69 (band C). Your household carbon emissions would be reduced by about a third.

Semi-detached houses with cavity walls and gas heating

900 houses (8% of community) in
Bedminster, Southville and Ashton



Recommended improvements

- Cavity wall insulation
- Top up loft insulation
- Upgrade to gas condensing boiler

Estimated costs

Total cost £3,040
Eligible For Green Deal Finance: YES
Eligible For ECO Funding: NO

Expected impact of improvements

If you did all of this, your energy use could drop by about 40%. Bills for this example would drop from £1,200 per year to £990. The SAP rating would go up from about 58 to 73, which is band C. Household carbon emissions would go from 6.6 tCO₂ per year to 5.2 tCO₂. Other lower cost (and free) improvements like replacing all your lightbulbs with energy efficient ones, using your tumble dryer as little as possible or only boiling as much water as you need in your kettle, could save you even more.

Terraced houses with cavity walls and gas heating



809 houses (7% of community) in
Bedminster, Southville and Ashton

Recommended improvements

- Cavity wall insulation
- Top up loft insulation
- Upgrade to gas condensing boiler
- Upgrade of heating controls

Estimated costs

Total cost £3,915

Eligible For Green Deal Finance: YES

Eligible For ECO Funding: NO

Expected impact of improvements

In this house, all of these improvements would give you a whopping 50% reduction in energy demand and would bring energy bills down by just over £400 per year. The SAP rating is estimated at only 39 before any improvements have been made, which is the bottom of band E. Improvements would bring the SAP rating up to 66, or band D. Carbon emissions would drop by 2.7 tCO₂ per year.

More on costs

Here are typical costs for some home energy efficiency improvements

Improvement	Average cost (£)	System Size
Cavity Wall Insulation	429	n/a
Internal Solid Wall Insulation	7,404	n/a
Loft insulation FULL	286	n/a
Loft insulation TOPUP	240	n/a
External Solid Wall Insulation	13,099	n/a
Hot water cylinder insulation (80mm jacket)	up to 70	n/a
Time and temperature zone controls	675	n/a
Air source heat pump	7,462	9.5 kW
Biomass boiler	7,579	15 kW
Gas condensing boiler	2,571	15 kW
Ground source heat pump	9,061	5 kW
Log Stove	1,683	5 kW
Oil condensing boiler	7,649	15 kW
Solar water heating	4,636	2 kW
Micro wind turbine	2,463	1.5 kW
1kW solar PV system	4,506	1 kW
2kW solar PV system	8,822	2 kW

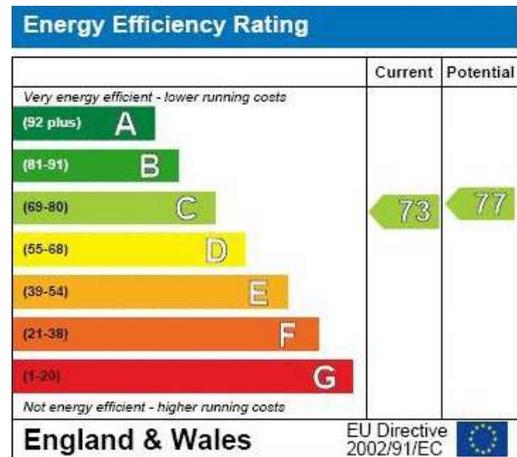
Funding and Finances

The Green Deal and ECO might be ways which you could use to help cover the costs of improvements to your home. Where the case studies give Green Deal and ECO eligibility it's only an estimate, to find out exactly what you could get you would need to have a Green Deal assessment from an accredited adviser. Of course, there's nothing to stop you getting quotes for work from a local company, and paying for improvements yourself or by extending your mortgage.

Explaining the jargon

SAP energy efficiency rating

SAP ratings are used to rate energy efficiency of properties on an A to G scale. A-rated properties are the best; G-rated properties are very inefficient. The average SAP score of houses in Bedminster is 58, or band D. The average energy efficiency for homes in England and Wales is 60, band D. You can check yours by getting an EPC or Green Deal report.



Green Deal and ECO.

The Green Deal is a government initiative designed to offer energy saving improvements to your home through accredited contractors, with a way to pay for improvements from the resulting future fuel bill savings. The Green Deal links in with the Energy Company Obligation (ECO), which provides grants for improvements which haven't been widely subsidised before, like insulation for older, solid walls without cavities.

Cavity walls and solid walls

Cavity walls have two layers with a gap (cavity) between them. The gap traps air and so provides some insulation, but filling the gap with insulation makes it even better at keeping your house warm. Solid walls do not have a gap, making it easier for the heat from your home to get out. You can often spot the difference in wall type from the brickwork. In solid walls bricks are placed both lengthways and head-on (long and short) whereas in cavity walls they are usually all placed lengthways. As a rule of thumb, if your home was built before 1920, it is more than likely that the walls are solid walls rather than cavity walls.

More on improvements

- Solid wall insulation can be applied to the outside or the inside of the house. In terraced properties or houses in conservation areas, it can be tricky putting insulation on the outside but internal insulation can be applied from inside the house (and is a little cheaper too). There are a range of natural and synthetic materials you can use for both internal and external insulation.
- Insulating your loft is one of the best value improvements you can possibly make in terms of savings on energy bills. It's a relatively easy (and cheap) DIY improvement, or you can get a quote to have it installed by a professional. It should be top of everyone's list.
- Boiler upgrade: gas condensing boilers are the most efficient boilers and over the long term (especially if you service them regularly) you will save money on your energy bills since your boiler won't have to work so hard.
- TRVs are Thermostatic Radiator Valves – the dials at the bottom of the radiator. They mean you can set the radiator thermostat in separate rooms and avoid over-heating the rooms you use less.
- A standard boiler will have a hot water tank, often located in an airing cupboard. You can get hot water tank jackets to stop the hot water from cooling down before it needs to be used. The recommended thickness is at least 75mm and they normally cost about £15.



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Images Hannah Broadway

