## 1950s mid terrace

Do you have a house like this? See how your home could benefit from energy efficiency improvements.



## A House Like Mine: Charlbury

EPC rating: Current 69 C Potential 93 A

Occupants Owner occupied

Details Mid terrace, 3 bedrooms

Floor area 112 m2

Walls Cavity, unfilled and timber frame

Floors Solid

Roof Pitched with loft, flat roof

Windows Double glazed, uPVC

Energy Typical annual energy use: 18,216 kWh

Annual energy use by area: 163 kWh/m<sup>2</sup> Carbon emissions per year: 3.8 tonnes









# What you can do...

Do you want to reduce your energy bills and cut carbon emissions? Would you like your house to be a healthier and more comfortable place to live? There are many different ways to make a building more energy efficient, whatever the house type, your personal circumstance and budget. Get ready to see the potential of your home...

**Key:** Low impact • High impact • • • • •

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Loft insulation. Extra layers of insulation (up to 300mm) are rolled out between and over the joists.



**External wall insulation** boards
covered with a special render applied to the outside of the house.



Solar PV panels. Convert sunlight into electricity and help to reduce energy bills.

## What is an EPC?

Renewables

Solar PV

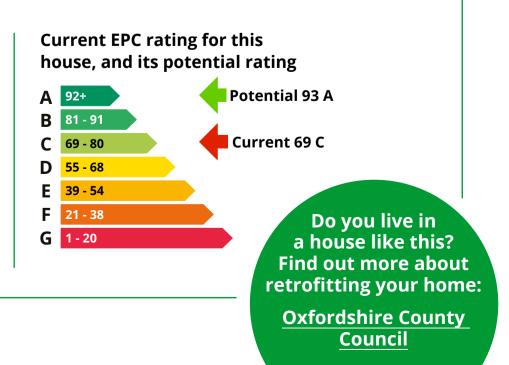
**Generate low carbon electricity** 

An EPC is a great milestone, but it's just the start. While it measures energy efficiency, it doesn't guarantee maximum comfort, warmth, or cost savings – those come from a complete retrofit of your property.

An Energy Performance Certificate (EPC) rating tells you about the energy efficiency of your home.

- The score is out of 100 (the higher, the better).
- It's divided into performance bands A-G.

A higher score means a more energy-efficient home with lower running costs.



# ...and unlock the full potential of your home

Making improvements to the energy performance of your house is a journey. The table below shows the difference each energy saving action could have on this particular house's EPC, fuel bill and carbon footprint.\* Grants may be available for some of these measures.



#### **Installing solar PV**

If you install solar PV, you could reduce your fuel bill to £807, your carbon emissions to 3.42 tCO₂ and improve your EPC to 81 B. Cost: £4,500 - £6,000



#### **Installing a heat pump**

Or, if you install a heat pump, you could reduce your fuel bill to £1,182, your carbon emissions to 0.66 tCO₂ and improve your EPC to 76 C.

Cost: £7,500 - £12,500





#### Solar PV + heat pump

Install both solar and a heat pump and you could reduce your fuel bill to £674, your carbon emissions to 0.31 tCO₂ and improve your EPC to 88 B. Cost: £12,000 - £18,500 ▲

## For even greater comfort and health...

|                                                                                                   | Estimated cost range | EPC rating | Estimated<br>fuel bill | Estimated CO <sub>2</sub> (tonnes) |
|---------------------------------------------------------------------------------------------------|----------------------|------------|------------------------|------------------------------------|
| Where you are now                                                                                 | Per measure          | 69 C       | £1,295                 | 3.77                               |
| Cavity wall insulation with external wall insulation                                              | £16,800 - £22,000    | 74 C       | £1,082                 | 2.99                               |
| Increase loft insulation to 300mm                                                                 | £1,400 - £1,800      | 74 C       | £1,070                 | 2.95                               |
| New uPVC triple glazed windows                                                                    | £12,600 - £19,800    | 76 C       | £989                   | 2.63                               |
| New insulated doors (front & rear)                                                                | £4,200 - £5,400      | 77 C       | £977                   | 2.59                               |
| Humidity controlled extractors in kitchen, utility & bathroom, passive ventilation in other rooms | £1,900 - £2,200      | 77 C       | £977                   | 2.59                               |
| Air Source Heat Pump with enhanced existing radiators and new hot water tank                      | £7,500 - £12,500 GR  | ANT 81 B   | £942                   | 0.53                               |
| Solar PV (3 kWp system)                                                                           | £4,500 - £6,000      | 93 A       | £437                   | 0.18                               |

<sup>\*</sup>Savings are dependent on the retrofit measures being installed in the order shown. Cost to commission a new EPC at any stage to reflect retrofit updates, approx. £100.



# **Get started**

### The difference a retrofit can make



**Geordie Stewart**Cosy Homes Oxfordshire
Scheme Manager

"External wall insulation is ideal for houses where the walls are rendered because if the colour of the new render is well matched then it doesn't change the appearance too much."



**Natasha Ginks**Cosy Homes Oxfordshire
Retrofit Coordinator

"Often houses might only have 100mm of loft insulation, but 300mm is recommended. If you store things in the loft, consider a loft boarding system to avoid compressing the insulation and losing its effectiveness. You should also check that the loft space is properly ventilated so that moisture doesn't build up and rot the roof timbers."

### Find more inspiring case studies at cosyhomesoxfordshire.org











Scan the QR code to visit houselikemine.org



### **Get grant funding**

Whether you own your home or rent – you may be eligible for a grant for insulation, heat pumps or even a whole house upgrade.

### Talk to someone about energy bills

Struggling with your energy bills or not sure where to start?

Better Housing Better Health is a free advice service for local residents.

This Whole House Plan case study template was developed for the A House Like Mine project – an Oxford City Council initiative delivered in partnership with Cosy Homes Oxfordshire and Low Carbon Hub. It builds on the original Charlbury Home Comforts Project, which is now being re-energised under the A House Like Mine Charlbury framework – helping residents plan for warmer, healthier, more energy-efficient homes.

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