Pre-1900s mid terrace (listed)

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**	**60 D**
	Potential	**89 B**
Occupants	Owner occupied	
Details	Mid terrace, 3 bedrooms, listed	
Floor area	115 m^2	
Walls	Solid and timber frame	
Floors	Solid	
Roof	Pitched with rooms-in-roof	
Windows	Timber, single glazing and secondary glazing	
Energy	Typical annual energy use: 25,560 kWh	
	Annual energy use by area: 223 kWh/m^2	
	Carbon emissions per year: 4.7 tonnes	

“Our house is listed so we’re restricted on what improvements we can make. The Whole House Plan laid out various measures including their cost and the types of materials that should be used. Having this plan is going to help us going forward in planning our next steps.”

Megan, Charlbury

Sustainable Charlbury
Reducing carbon, restoring nature

cosy homes oxfordshire

low carbon hub

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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 ●●●●●●

Minor retrofit measures* **Affordable and non-disruptive**	**Comfort and health**	**Disruption**
Low energy lighting	●	●
Create access to loft and add 300mm of insulation	●●●●	●●●
New insulated loft hatch	●●●●	●●
Secondary glazing to single glazed windows	●●●●●●	●●
New insulated front door	●●●●●	●●
Ventilation improvements	●●●●●●	●●
Major retrofit measures*		
Internal wall insulation	●●●●●	●●●●●●
Upgrade room-in-roof insulation	●●●●●	●●●●●
Solid floor insulation	●●●●●	●●●●●●
Air source heat pump	●●●●●●	●●●●
Renewables* **Generate low carbon electricity**		
Solar PV	●	●●

Install new insulated and draught-proofed **loft hatch** to prevent heat escaping to the loft.

Secondary glazing. Cost-effective, internal layer added to windows to prevent heat loss and draughts.

Hot water tank jacket. Install a new super-insulated jacket around older hot water tanks.

*All retrofit improvements will need listed building consent prior to being installed.
Consult your local conservation officer for advice.

What is an EPC?

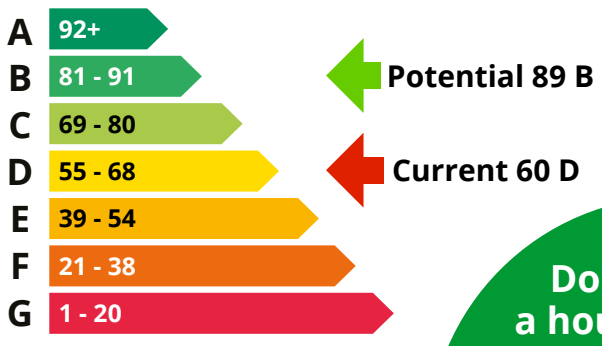
An EPC is a great milestone, but it's just the start. While it measures energy efficiency, it doesn't guarantee maximum comfort, warmth, or cost savings – those come from a complete retrofit of your property.

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.

Current EPC rating for this house, and its potential rating



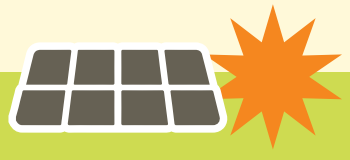
Do you live in a house like this? Find out more about retrofitting your home:

Oxfordshire County Council

...and how you can achieve EPC rating C

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.

How to achieve EPC C rating	Estimated cost range	EPC rating	Estimated fuel bill	Estimated CO_2 (tonnes)
Where you are now	**Per measure**	**60 D**	**£1,829**	**4.75**
Low energy lighting	£50 - £100	**61 D**	£1,795	4.74
Create access to loft and add 300mm of insulation	£1,500 - £2,000	**62 D**	£1,711	4.49
Upgrade insulation in room-in-roof	£10,000 - £20,000	**73 C**	£1,199	2.98
Humidity controlled extractors in kitchen and bathrooms, passive ventilation in other rooms	£3,500 - £4,500	**73 C**	£1,199	2.98



Installing solar PV

At this point, if you install solar PV, you could reduce your fuel bill to **£843**, your carbon emissions to **2.73 tCO_2** and improve your EPC to **81 B**.
Cost: £3,750 - £5,000

Installing a heat pump

Or, if you install a heat pump, you could reduce your fuel bill to **£1,091**, your carbon emissions to **0.61 tCO_2** and improve your EPC to **78 C**.
Cost: £7,500 - £12,500

GRANT FUNDING

Solar PV + heat pump

Install both solar and a heat pump and you could reduce your fuel bill to **£722**, your carbon emissions to **0.37 tCO_2** and improve your EPC to **87 B.**
Cost: £11,250 - £17,500

GRANT FUNDING

For even greater comfort and health...

After Fabric Measures to C	Per measure	73 C	£1,199	2.98
Internal wall insulation (60mm) to solid walls	£14,300 - £16,900	**76 C**	£1,064	2.58
Insulate solid floor (limecrete)	£23,000 - £28,000	**76 C**	£1,041	2.52
Secondary glazing to remaining single glazed windows	£1,500 - £2,000	**76 C**	£1,035	2.50
New insulated timber front door	£5,400 - £6,600	**77 C**	£1,024	2.46
Air Source Heat Pump with enhanced existing radiators and new hot water tank	£7,500 - £12,500 GRANT FUNDING	**81 B**	£971	0.55
Solar PV (2 kWp system)	£3,750 - £5,000	**89 B**	£604	0.30

*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.

GRANT FUNDING Costs shown include **£7,500 grant** deduction

Note: Figures are calculated using Cotality software from information gathered during a home energy survey. Cotality use nationally accepted methodology for calculations that underpin the Energy Performance Certificate (EPC) regime for all UK homes. Fuel bills are estimated and may differ from actual bills. The cost of the retrofit measures are indicative and based on current best estimates. Actual costs will vary depending on the choice of materials; the escalating costs of construction; and the availability of contractors.

Get started

The difference a retrofit can make

Geordie Stewart
Cosy Homes Oxfordshire
Scheme Manager

"This house is listed so consent from the local council will be needed before any retrofit measures are carried out. The conservation officer will make sure that important historic features are preserved and that the context of the house within its setting is not damaged. Solar panels may only be allowed if they are hidden from surrounding views."

Natasha Ginks
Cosy Homes Oxfordshire
Retrofit Coordinator

"Secondary glazing is a great way of reducing heat loss from windows that can't be replaced. There's a whole range of secondary glazing suited to different types of window and within different price brackets. It's important to choose the type best suited to your existing windows."

Find more inspiring case studies at cosyhomesoxfordshire.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.

Scan the QR code to visit **houselikemine.org**

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.

The Low Carbon Hub IPS Limited is a registered society under the Co-operative and Community Benefit Societies Act 2014.
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