1960s bungalow

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 67 D
Potential 100 A

Occupants	Owner occupied
Details	Detached, 3 bedrooms
Floor area	55 m2
Walls	Cavity, filled
Floors	Solid
Roof	Low pitched with loft
Windows	Double glazed, uPVC
Energy	Typical annual energy use: 11,360 kWh
	Annual energy use by area: 211 kWh/m^2
	Carbon emissions per year: 2.4 tonnes

"I've already done a lot to the house to make it warmer and more energy efficient, but I wanted to get a whole house plan to see what more I can do to reduce carbon emissions. It's given me a full picture of all the options and what impact they would have."

Matthew, Charlbury

Sustainable Charlbury
Reducing carbon, restoring nature

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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	●	●
Increase loft insulation to 300mm	●●●●	●●
Insulate and draught proof loft hatch	●●●●	●
Cavity wall insulation	●●●●●	●●
New insulated front door	●●●●●	●●
Ventilation improvements	●●●●●●	●●
Major retrofit measures **Transformative, but more costly and disruptive**		
External wall insulation to cavity walls	●●●●●	●●●
Insulate solid floor	●●●●●	●●●●●
New double or triple glazed uPVC windows	●●●●●●	●●●●
Air source heat pump	●●●●●●	●●●●
Renewables **Generate low carbon electricity**		
Solar PV	●	●●

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

Photo: Riki Risnandar/ Pexels

Low energy lighting such as LEDs are 70% more efficient than traditional light bulbs.

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

What is an EPC?

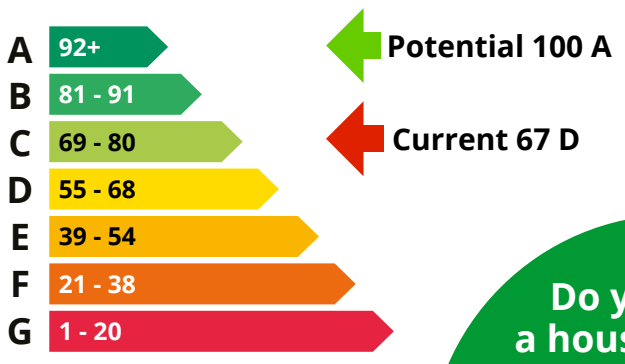
An EPC is a great milestone, but it's just the start. While it measures energy efficiency, it doesn't guarantee maximum comfort, warmth, or cost savings – those come from a complete retrofit of your property.

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



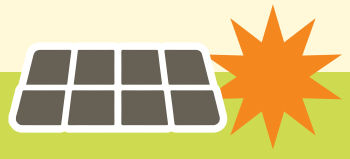
Do you live in a house like this? Find out more about retrofitting your home:

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**	**67 D**	**£838**	**2.36**
Low energy lighting	£50 - £100	**68 D**	£822	2.35
Increase loft insulation to 300mm	£1,900 - £2,450	**69 C**	£784	2.21
Humidity controlled extractors in kitchen & bathroom, passive ventilation in other rooms	£1,000 - £1,300	**69 C**	£784	2.21



Installing solar PV

At this point, if you install solar PV, you could reduce your fuel bill to **£228**, your carbon emissions to **1.79 tCO_2** and improve your EPC to **92 A**.
Cost: £5,250 - £7,000

Installing a heat pump

Or, if you install a heat pump, your fuel bill could rise slightly to **£813**†, your carbon emissions should reduce to **0.46 tCO_2** and your EPC improve to **74 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 **£225**, your carbon emissions to **0.03 tCO_2** and improve your EPC to **97 A.**
Cost: £12,750 - £19,500

GRANT FUNDING

For even greater comfort and health...

	Estimated cost range	EPC rating	Estimated fuel bill	Estimated CO_2 (tonnes)
After Fabric Measures to C	**Per measure**	**69 C**	**£784**	**2.21**
External insulation (100 mm) to cavity walls	£20,000 - £25,000	**72 C**	£704	1.92
Insulate solid floors	£12,000 - £15,000	**75 C**	£634	1.66
New uPVC triple glazed windows	£8,000 - £12,500	**75 C**	£619	1.61
New insulated front door	£2,100 - £2,700	**75 C**	£610	1.58
Air Source Heat Pump with enhanced existing radiators and new hot water tank	£7,500 - £12,500 GRANT FUNDING	**84 B**	£514	0.29
Solar PV (3.4 kWp system)	£5,250 - £7,000	**100 A**	£0	0.00

*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.

†The running costs of a heat pump can often be mitigated by utilising off-peak tariffs

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

"Although the cavity walls of this bungalow have been filled with insulation applying external wall insulation will reduce heat losses even further by improving airtightness and reducing draughts."

Natasha Ginks
Cosy Homes Oxfordshire
Retrofit Coordinator

"1960s houses can contain asbestos within their structure due to the period they were constructed. Asbestos testing and specialist removal may need to be factored into the cost and sequencing of any retrofit improvements."

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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