1960s 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**	**70 C**
	Potential	**99 A**
Occupants	Owner occupied	
Details	Mid terrace, 3 bedrooms	
Floor area	94m^2	
Walls	Cavity, filled	
Floors	Solid	
Roof	Pitched with loft plus flat roof	
Windows	Double glazed, uPVC	
Energy	Typical annual energy use: 15,300 kWh	
	Annual energy use by area: 163 kWh/m^2	
	Carbon emissions per year: 2.86 tonnes	

“Retrofitting insulation is so important for addressing climate change and making homes more comfortable.

It’s really great to have a holistic overview of what we need to do and Cosy Homes provided this.”

Dave, Charlbury

Sustainable Charlbury
Reducing carbon, restoring nature

cosy homes oxfordshire

low carbon hub

EVENLODE FOUNDATION
EMPOWERING COMMUNITIES

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

Ventilation. Reduce dampness by improving air circulation and controlling moisture levels.

Flat roofs. When reaching the end of their life, reduce their heat loss by adding insulation to create a "warm roof".

Photo: Thermalhood

Downlight covers installed over the back of LED downlights prevent heat and moisture escaping to the loft.

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 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 **£658**, your carbon emissions to **2.50 tCO_2** and improve your EPC to **84 B**.
Cost: £4,500 - £6,000

Installing a heat pump

Or, if you install a heat pump, you could reduce your fuel bill to **£1,016**, your carbon emissions to **0.57 tCO_2** and improve your EPC to **77 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 **£501**, your carbon emissions to **0.21 tCO_2** and improve your EPC to **91 B.**
Cost: £12,000 - £18,500

GRANT FUNDING

For even greater comfort and health...

	Estimated cost range	EPC rating	Estimated fuel bill	Estimated CO_2 (tonnes)
Where you are now	**Per measure**	**70 C**	**£1,152**	**2.86**
Increase loft insulation to 300mm	£1,400 - £1,800	**71 C**	£1,099	2.70
Insulate ceiling of single storey extension	£900 - £1,200	**72 C**	£1,085	2.66
External wall insulation (100 mm) to cavity walls (main and extensions)	£20,000 - £24,000	**74 C**	£998	2.40
New uPVC double glazed windows	£8,600 - £13,500	**76 C**	£883	2.06
New insulated front door	£2,100 - £2,700	**77 C**	£871	2.03
Humidity controlled extractors in kitchen, bathroom & WC, passive ventilation in other rooms	£1,600 - £1,900	**77 C**	£871	2.03
Air Source Heat Pump with enhanced existing radiators and new hot water tank	£7,500 - £12,500 GRANT FUNDING	**85 B**	£647	0.36
Solar PV (3 kWp system)	£4,500 - £6,000	**99 A**	£140	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.

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

"Mould growth on bedroom ceilings usually indicates cold surface temperatures that need to be addressed. Increasing loft insulation and ensuring it overlaps with cavity wall insulation at the eaves is important. As lofts become more insulated it's vital that the space above the insulation is properly ventilated so that the roof timbers remain dry and free from rot."

Natasha Ginks
Cosy Homes Oxfordshire
Retrofit Coordinator

"Increasing loft insulation makes it a great time to install thermal lighthood covers over the back of any LED ceiling lights. Not only do they enable loft insulation to be continuous with no gaps but they also prevent moisture escaping into the loft and causing condensation problems."

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.
Registration number 31903R. Registered office: Holywell House, Osney Mead, Oxford OX2 0ES

Sustainable Charlbury
Reducing carbon, restoring nature

cosy homes oxfordshire

low carbon hub

EVENLODE FOUNDATION
EMPOWERING COMMUNITIES