1900s mid-terrace

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

Landlords
Find out how you could improve the energy efficiency of your property.

A House Like Mine case study

EPC rating: Current 62 D
Potential 100 A

Occupants:	Tenants, 2 adults, 2 children
Details:	Mid-terrace, 3 bedrooms
Floor area:	64 m² / 689 ft²
Walls:	Solid brick
Floors:	Suspended timber
Roof:	Pitched with loft
Windows:	Mostly uPVC double glazed with some single glazing; bay windows
Energy:	Typical annual energy use: 13,736 kWh
	Annual energy use by area: 216 kWh/m2 / 20 kWh/ft²
	Carbon emissions per year: 2.8 tonnes

“As a responsible landlord, I obviously want to be compliant with the new legislation coming in.
I’d encourage all landlords to get a survey as it gives you a huge amount of information about your property and really gives you the opportunity to put a plan in place for the legislation and beyond.”

Christian, Landlord, Littlemore, Oxford

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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	●	●
Insulate and draught-proof loft hatch	●●●●	●
Replace single glazed window with double glazing	●●●●●●	●●
Increase loft insulation to 300mm	●●●●	●●
Suspended timber floor insulation (using robot)	●●●●●	●●
Insulate timber frame bay window wall	●●●●●	●●●
Ventilation improvements	●●●●●●	●●

Major retrofit measures
Transformative, but more costly and disruptive

External wall insulation	●●●●●	●●●
New insulated doors - front and rear	●●●●●	●●●
New double or triple glazed uPVC windows	●●●●●●	●●●●
Air Source Heat Pump	●●●●●●	●●●●

Renewables
Generate low carbon electricity

Solar PV	●	●●

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

Heating controls
Install smart radiator valves to control temperature in individual rooms.

Photo: Thermalhood

Thermal covers
installed in lofts over the back of LED downlights prevent heat escaping.

What is an EPC?

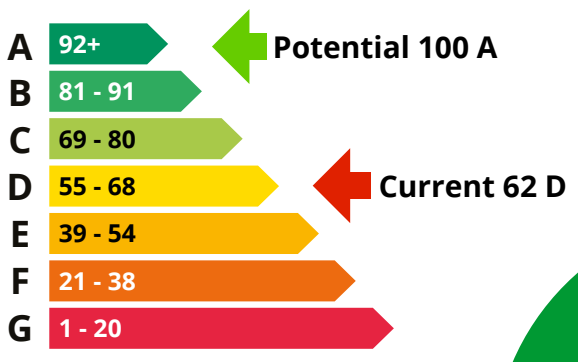
An EPC is a great milestone, but it's just the start. While it measures energy efficiency, it doesn't guarantee maximum comfort, warmth, or cost savings – those come from a complete retrofit of your property.

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? You could qualify for a free government grant.

Find out more at oxford.gov.uk/retrofit

...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**	**62 D**	**£1,244**	**2.84**
Low energy lighting	£50 - £100	**63 D**	£1,213	2.84
Increase loft insulation to 300mm	£2,000 - £2,500	**67 D**	£1,067	2.42
Insulate suspended timber floor (using robot)	£3,000 - £4,000	**69 C**	£1,015	2.27
Humidity controlled extractors in kitchen and bathroom, passive ventilation in other rooms	£1,500 - £2,500	**69 C**	£1,015	2.27

Installing solar PV

At this point, if you install solar PV, you could reduce your fuel bill to **£458**, your carbon emissions to **1.89 tCO_2** and improve your EPC to **88 B.**
Cost: £4,500 - £6,500.

Installing a heat pump

Or, if you install a heat pump, you could reduce your fuel bill to **£966**, your carbon emissions to **0.46 tCO_2** and improve your EPC to **75 C.**
Cost: £13,500 - £17,500.

GRANT FUNDING

Solar PV + heat pump

Install both solar and a heat pump and you could reduce your fuel bill to **£374**, your carbon emissions to **0.07 tCO_2** and improve your EPC to **94 A.**
Cost: £18,000 - £24,000.

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**	**£1,015**	**2.27**
External wall insulation (100 mm) to solid walls	£10,000 - £12,500	**74 C**	£824	1.73
Insulate timber frame bay window wall (first floor)	£2,000 - £4,000	**74 C**	£816	1.71
New uPVC double glazed windows	£9,500 - £12,500	**76 C**	£763	1.56
New insulated doors (front and rear)	£4,000 - £6,000	**76 C**	£739	1.49
Air Source Heat Pump with enhanced existing radiators and new hot water tank	£13,500 - £17,500 GRANT FUNDING	**85 B**	£560	0.27
Solar PV (3.3 kWp system)	£4,500 - £6,500	**100 A**	£0.00	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 Up to **£7,500 grant** towards a heat pump

Note: Figures are calculated using Parity Projects software from information gathered during a home energy survey. Parity Projects 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

"Installing LED lights can help reduce energy bills. They have a long lifespan so are much lower maintenance for landlords. Thermal covers can be placed over the back of them in lofts to create an airtight seal and enable loft insulation to be continuous with no gaps in it."

Natasha Ginks
Cosy Homes Oxfordshire
Retrofit Coordinator

"This property has suspended timber floors which are cold, draughty and lose heat. A low disruption option for landlords is for foam insulation to be sprayed on the floorboards from below using a small robot."

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.

A **House Like Mine** is an Oxford City Council initiative, delivered in collaboration with Cosy Homes Oxfordshire and Low Carbon Hub. Its aim is to help everyone in Oxford get access to the information and support they need to live in a healthy and energy efficient home.

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