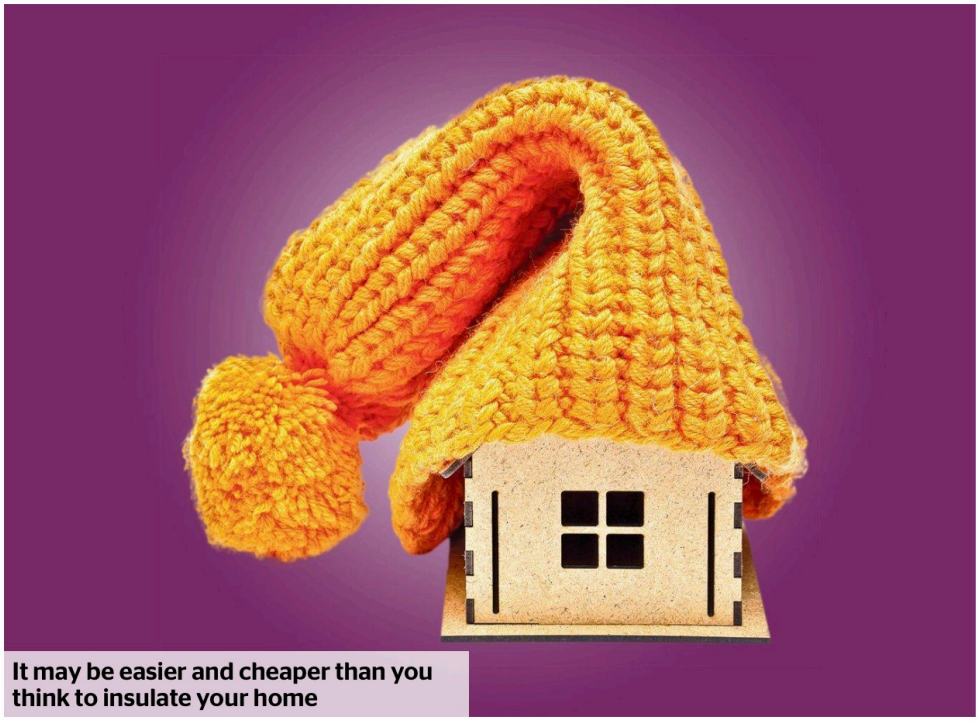
Against the current

Panicking about your bills this winter? Here are some cost-effective ways to boost your home's energy efficiency. By Sarah Lonsdale

As higher energy bills start popping into inboxes and dropping onto doormats and the temperature starts to fall, it's easy to feel a little panicky about what grievous financial distress this winter will bring. Yet there are simple and relatively cost-effective fixes to improve your home's energy efficiency.

The latest English Housing Survey published by the government this summer calculates that the average cost of upgrading a D rated home to C — representing £300 or more per year of energy savings — could be as little as £1,000. Some energy efficiency projects such as internal wall insulation do require specialist advice as this could set up problems by creating colder external walls that create damp issues. However, many small jobs are fairly straightforward as long as you follow some simple rules about ventilation and airflow. So, with seven weekends to go until late November, here are seven easy fixes that will have a real impact on your bills before winter.



It may be easier and cheaper than you think to insulate your home

1 Eliminate as many draughts as possible with draught-proofing around windows and doors. Using either a candle or a smoke stick (arctic-hayes.com), find where warm air is escaping around your door and window frames. "Draught excluder strips, using foam or brushes can be quite easily fitted around doors and windows," says Russell Smith, managing director of Parity Projects, a specialist domestic retrofit company (parityprojects.com). "Windows are slightly trickier than doors and you may want to engage a specialist carpenter, but for front doors, draught strips and a good old-fashioned sausage dog across the threshold can actually make a big difference. If you get all doors and windows done you could be reducing heat loss from your home by as much as 15 per cent."

2 Top up loft insulation: you may feel your loft is well stuffed but the English Housing Survey estimates that only one third of homes have more than 200mm of insulation in their lofts. The government recommendation is 270mm minimum but experts say you should aim for 300mm. "It's a fairly straightforward weekend job to top up your roof insulation with another 100mm layer of mineral wool," says Paul Mallion of Conker Conservation, which specialises in energy efficient and sustainable homes (conker.cc). "The only thing you need to be aware of is to leave a small gap between the insulation and the eaves to allow for airflow." He

says an easy way to find out where the air circulates is to look out for spiders, which spin their webs in corridors of air circulation. Leave about two inches of space between the insulation and the eaves. "Always remember," Mallion says, "don't insulate unless you ventilate, otherwise you might be creating more problems than you solve." Don't forget the loft hatch: stuff a strong shopping bag with insulation material and staple it to the back of the hatch door. If you have a cold water tank in your loft, leave an uninsulated patch underneath your tank to allow heat from the house to prevent water freezing in a really cold winter.

3 Improve your window and door coverings. Another simple but effective weekend job is to hang thick thermal-lined curtains over front and back doors, which are often the Achilles' heel of a home, with letterboxes, keyholes and catflaps creating gaping holes in the door fabric. "Where you have a radiator under a window don't have a floor-length curtain, but extend your windowsill and have the curtain rest on that. Otherwise you're heating the sky by allowing the heat from the radiator behind the curtain and up and out through the windows," Mallion says. "Interior designers may prefer long curtains but they isolate the radiator from the room." Letterbox and keyhole covers can also help.

4 Caulk ground-floor timber floorboards using specialist gap fillers, which often come with an applicator that quickly presses the strip into the gap between boards (draughtex.co.uk). "If you have an accessible basement beneath your ground floor, you can also suspend a layer of insulation beneath by fixing chicken wire beneath the floorboards and inserting a layer of insulation between the wire and the floorboards," Smith says. "Stone floors are harder to treat, but generally speaking warm air flows out around the sides, so a rug in the middle of the floor won't help much. Smaller rugs around the edge of the floor area will do more good." While you're doing this, walk around the house to check ground-floor air bricks haven't been blocked either by plant material or insect infestation — you must ensure good airflow beneath timber floorboards.

5 Secondary glazing. Replacing windows with double or triple glazing is expensive and at present there are long lead times for carpenters and fitters to do the work. However, even Perspex or acrylic sheets fixed with magnetic strips or adhesive will help to reduce heat loss. Measure your windows and have sheets cut to size and delivered to your home (sheetplastics.co.uk). Make sure you don't block any permanent ventilation or trickle vents as you still want to maintain an airflow to avoid condensation on cold surfaces, which can lead to damp problems and mould. "Leave one window still easily openable, or don't seal with draught stripping along the top to keep air flowing," Mallion says. "To maintain good airflow you have to participate actively in your home's ventilation. It may be simply a case of opening a window first thing in the morning to get a blast of fresh air once a day."

6 Block the chimney when it's not in use. Hot air can disappear straight up an open fireplace or large chimney breast. A quick and simple method is to stuff loosely bunched newspaper up the chimney void, although if you do have fires, you must remove it before you light the fire. A more fail-safe alternative is to use a specially made chimney blocker such as a Chimney Sheep (chimneysheep.co.uk). Made from sheep's wool insulation, they come with a helpful hanging "Dangle" that will always remind you to remove the insulation before lighting your fire.

7 Reflective radiator panels. Edwina Currie may have come in for some stick recently by claiming energy bills could be fixed with simply applying foil behind radiators (SuperFOIL Radpack Radiator Insulation Foil; £21.49, amazon.co.uk), but as part of a package of measures they can actually help, Smith says. "These panels do work by reflecting heat back into the room and are another simple weekend job that anyone can do safely and cheaply." ■