

## Cutting your energy bills.

In the absence of government guidance, Stewart Edge and Philip Oliver of the Farnham u3a Climate Change group offer the following advice:

1. **Draughts.** Walk round the house with a candle and look for drafts. If you've an unused open fireplace, buy a chimney balloon to block it up. Heat loves a chimney as an escape route from your house. Fit new seals to any leaky windows and doors and fit a brush flap over your letterbox. Drafts will cool your house very quickly.
2. **Insulation.** If you can, insulate your roof space with 11" of insulation, (3 or 4" is not enough) and stick some solid foam on top of the loft hatch. Glass is a bad insulator so double or triple glazed windows help a lot. You can buy and fit interior glazing kits ('secondary glazing') now for many windows. You can remove some of them in the summer.
3. **Space heating.** Don't heat rooms you don't use. Turn the radiator valve off and shut the doors. Set your room temperatures to a level you are comfortable with when wearing a sensible amount of clothing. Bedrooms should be cooler than living rooms.  
If you have a condensing boiler lower the flow temperature to your radiators. To do this, locate the thermostat on the boiler (not the room thermostat) which is marked for heating. On some boilers there is only one, on others there is one for Hot Water and one for Heating. Some boilers have a flap hiding these controls. Turn the Heating temperature down a little each day until you are unhappy with it then turn it up a bit. (Around 50deg will probably work best.) In so doing you will force the boiler to start condensing if it isn't doing so, and this alone will reduce your heating bill by 5-10%.
4. **Bleed your radiators.** A key for this will cost you a pound and will save many times this. Simply feel if the radiator is hot all the way from top to bottom. If there's more than a small drop from bottom to top there will be air in it. Use the key on one end of the top of the radiator and open the valve slowly (anticlockwise) and you will hear the air hiss out. Hold a towel under the valve and close the valve when the hissing stops and bubbles appear.
5. **Hot water.** This is nearly always too hot. If you have to add cold water, it probably is. If you have a combi boiler (no tank), then on the boiler (often under a flap) is a HW temperature control. Keep turning it down a few degrees each day until you are not happy with the hot water temperature, then turn it up a bit. If you have a tank, the hotter the tank the faster it loses heat. Make sure the tank has a jacket (or two). Again, turn the HW control down but not too low as you need the return temperature to be 50C or above to avoid Legionnaire's disease.
6. **Boilers.** Have your boiler serviced regularly by a trusted, recommended, boiler engineer. Ask them if weather compensation is on: this moderates the temperature of the water in your radiators depending on the outside temperature and will save you 5+% of your bill.
7. **Lights.** Change to low energy LED light bulbs. They will pay for themselves in less than a year and can now be fitted to all the common fittings.
8. **Electrical items - Freezers and Fridges** run 24 hours a day. If you are buying a new one buy A++ energy rating: a good fridge freezer will cost £40 a year to run - a bad one nearly £200. Don't overload fridges and freezers. Chest freezers are better as the cold air doesn't fall out every time you open the door. A chest freezer in a garage is best of all. Don't position them next to hot things, notably boilers or cookers. Keep the door seals clean, and keep the back dusted if you can get at it as the dust slows the cooling of the radiator on the back.
9. **Cooking** Microwave cookers are the most efficient and induction hobs are very good. Ranges and Agas are very wasteful. Slow cookers and pressure cookers (remember them?) are excellent. Only fill the kettle with the water you need!
10. **Dishwashers, Washing machines and tumble dryers.** Run the washing machine and the dishwasher only when they are full. Tumble dryers are very expensive to run, use a wire drying rack if you can and put it outside if it's not raining!