

Addingham Environment Group: Home Energy Efficiency Kit



With increasing fuel costs and the drive towards net zero emissions, there has never been a better time to assess how you can save energy and money in your own home. The home energy efficiency kit can help you identify where savings could be made, how to optimise the use of your fridge and freezer, and to learn about which appliances use the most energy in use and on standby. The kit contains:

- Thermal leak detector
- Plug-in energy monitor
- Temperature and humidity meter
- Fridge & Freezer thermometer
- Radiator key

There are user guides available online that describe the use of each item. Links and a quick guide are provided below. **Please keep all of the kit items away from children.**

The **thermal leak detector** enables you to detect energy leakage from your home by showing up temperature differences that are caused by leaks or poor insulation, via a coloured LED light. Simply point the detector around your house, at windows, doors, walls, ceilings, around sockets, and the LED will change from GREEN (reference temperature) to RED for warmer spots and BLUE for colder spots. The LED display also presents the temperature of the surface. This can help you identify where insulation or draught-proofing can help to save energy and money.

The **plug-in-energy monitor** helps you to work out which appliances around your home use the most electricity and can present information on energy use and costs. Simply plug the energy monitor into a power socket and reset it, then plug in the appliance that you want to test, start using the appliance and the monitor will display the kWhs of electricity being used. To work out the cost of using each appliance, you'll need to know the costs of electricity per kWh from your tariff from your electricity supplier.

The **fridge / freezer thermometer** can help to save energy by measuring the temperature in your fridge or freezer, so that you can operate it at the optimum level. Simply place the thermometer on the middle shelf of your fridge or freezer, away from the door, wait for 30 minutes for the thermometer to adjust to the temperature in the closed fridge / freezer. A fridge should operate between 3 to 5 degrees C, whilst a freezer should operate between -15 to -18 degrees C. If your unit is operating outside of those ranges, adjust the setting and measure again.

The comfort and energy efficiency of your home depends on the ambient **temperature and humidity**, for which the kit includes a meter. Simply switch it on and the after a few seconds the display will present the temperature in degrees C and the humidity as a percentage. Allow the unit to operate for a while and it will memorise and present the maximum and minimum values of each. Place the unit on a surface away from sources of heat (radiators, stoves, boilers) or cold draughts (doors and windows) and measure the humidity and temperature in each room. Humidity levels should ideally be between 40-60% and temperature (depends on your preference) around 17-20 degrees C.

Before you use the **radiator key**, please do view one of the online guides below. To regularly check for cold spots where air is trapped in your radiator system, and to bleed the radiators will help them operate efficiently. Never bleed radiators whilst your central heating system is on, as you don't want to risk scalding yourself with hot water! Allow the system to cool first, then go around your lower floor rooms, then upper floor rooms and bleed the radiators. Have towels or a bucket to hand to catch any water that may drip from the radiator valve.

Taking Action

As well as the analysers above, the kit provides some samples to help you start to make the little changes that can add up to save you energy and money, including LED light bulbs and some low-cost draught-proofing solutions.

Useful Links

<https://www.cep.org.uk/resources/factsheets-and-leaflets/>

Useful leaflets from Cornwall's *Community Energy Plus*, including tips on draughtproofing, insulation, low energy lighting, renewable energy options and more.

https://www.codema.ie/images/uploads/docs/2020_Home_Energy_Saving_Kit_Manual.pdf

This link provides a user guide to the toolkit that we've based the Addingham Environment Group kit on. It has step by step instructions for each item in the kit (and a few more besides).

<https://www.homeserve.com/uk/living/heating-and-cooling/how-to-bleed-a-radiator/>

A step by step guide on how to safely bleed your radiators.

<https://energysavingtrust.org.uk/energy-at-home/>

The Energy Savings Trust website provides all manner of links and information on improving energy efficiency, renewable energy options, financial support.

Online user manuals for the tools in the kit *(also provided as documents in the box)*

<https://www.elitechus.com/pages/manuals>

<https://energenie4u.co.uk/catalogue/product/ENER007>

<https://safe-manuals.com/user-manual/black-and-decker/tld100>

Storage and Return

Please keep all items stored in the box when not in use, out of reach of children, and please return it when you're done to Wendy Green, the Assistant to the Clerk of Addingham Parish Council, at:

The Hub, The Old School, Main St, Addingham, LS29 0NS

Email: admin@addingham-pc.gov.uk

We'd love your feedback! If you have any comments or suggestions on how we can improve the energy efficiency kit, what worked well or didn't help.. and if you need any support to take the next steps to save energy, then please get in touch with us at aeg@addingham.info.

Also, if there is anything wrong with items in the kit or batteries are flat, please let us know. You can find more information about home energy efficiency and how we might be able to help point you in the right direction at:

<https://addinghamenvironmentgroup.org.uk/home-energy-efficiency/>

Happy energy saving!

Addingham Environment Group