



## **Kitchen Appliances**

### Microwave ovens

Microwaves often provide a much more energy efficient way of cooking food than in the oven. This is because microwaves oven use energy to directly heat your food, whereas electric ovens must also heat the air inside the oven.

### Dishwashers

Dishwashers can take up a significant chunk of your electricity bill, costing on average £45 a year to run. The most efficient dishwashers on the market have an A+++ rating, they cost around £6 less to run than the lowest rated dishwashers that you can buy of the same size, and they use less water.

### Fridges, freezers and fridge-freezers

These are switched on 24 hours a day, 7 days a week, so it's well worth finding models that are energy efficient. Typically choosing an A+++ fridge freezer over an A+ unit will save you about £200 in energy bills over the lifetime of the product. However, as the energy rating is based upon classification by size, choosing a smaller fridge will use less energy than a larger fridge with the same energy rating. You can compare the total energy consumption of appliances by looking for their yearly energy consumption in kWh / annum displayed on the bottom right of the energy label.

### Kettles

Kettles are one of the most commonly used appliances in the kitchen. ECO kettles that only boil the amount of water required can use 20 per cent less energy than a conventional electric kettle. On average a UK household boils the kettle 1,500 times a year.

## **Entertainment Equipment**

### Televisions

Televisions can be the most power-hungry of all entertainment equipment, particularly the larger ones. The larger a television is the more energy it will consume, regardless of its energy rating. For instance, an A-rated 22" LCD TV would typically cost £6 a year to run whereas an A-rated 60" TV would cost £33. Choosing a smaller TV generally means choosing a more efficient TV.

HD TV: These are now the most common type of television available. HD TVs have more pixels per square inch of screen area and therefore tend to consume more energy than SD (Standard Density) televisions. A smaller SD TV is likely to use less energy than an HD TV.

LED, LCD and plasma screen are most common forms of flat-screen TVs on the market. LED and LCD TVs are not as good for seeing the screen from sideward angles, but otherwise there is little difference between the picture quality of these and plasma screen TVs. However, plasma screen TVs tend not to come in smaller sizes, and generally use more energy than similar sized LED or LCD TVs.

### **Computer Equipment**

Desktop, laptop PCs and tablets Laptops typically use 85 per cent less electricity over a year than desktop PCs. Choosing a laptop over a desktop and reducing standby could save up to £17 per year.

Tablets have even lower energy usage - on average, tablets use 70 per cent less power than laptops.

The University's IT Services Team have produced further [guidance on sustainability](#) and their commitment to the environment.

### **What should I do with my old appliances?**

The University provides [guidance on recycling and reuse of equipment](#), and also a useful [A-Z of Waste Types](#).

### **Disposing of waste electrical and electronic equipment**

Electrical items should be disposed of carefully due to the nature of their materials.

The University has a process for [disposal of IT equipment](#).

Items which have the image of a wheelie bin with a cross on them should not be disposed of using the general household rubbish collection. These items include everything from large white goods to energy saving light-bulbs. By keeping waste electrical equipment separate from other waste, the hazardous substances can be removed and other parts can be recycled rather than sent to landfill.



### **Disposing of waste electrical and electronic equipment (WEEE)**

If you are buying new electrical appliances, retailers are obliged by law to either:

Take your old appliances off you for free in store.

Tell you where you can take your old item for recycling free of charge.

## **Energy efficiency labels on office equipment**

When you invest in new office equipment or upgrade existing items, you can significantly reduce your energy consumption and costs by choosing energy-efficient appliances. Even though some energy-saving products may cost a bit more to buy, their significantly lower running costs can lead to considerable savings over their lifetime.

### **Energy labelling schemes**

Energy labelling schemes make it easy to identify energy-efficient equipment that can help you make savings. There are two main energy labelling schemes covering office equipment and electrical appliances:

#### **ENERGY STAR**



[ENERGY STAR](#) is a widely-recognised international labelling scheme for office equipment. Items that carry the ENERGY STAR label use significantly less power than standard models. For example, ENERGY STAR labelled computers use 70 per cent less electricity than standard, while printers use at least 60 per cent less energy and have an automatic low-power setting that they switch to after a period of inactivity.

#### **European Ecolabel Scheme**



[Ecolabel](#) is a Europe-wide scheme that endorses products and services which have a reduced impact on the environment. Ecolabel products and services are assessed on their 'cradle to grave' environmental impact, taking into account raw materials used, production, distribution and disposal. As well as covering electrical appliances, which have to achieve very high levels of energy efficiency, the scheme applies to a range of other product groups including cleaning products and paper.