How to use your energy data

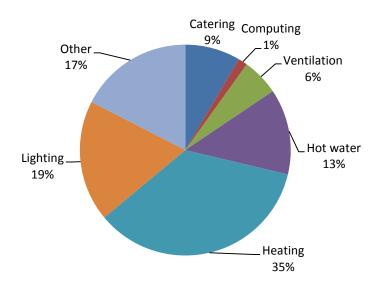
A typical club may spend around £10,000 each year on electricity bills alone, and audits have shown that it could be possible to reduce this by 10-20%. Understanding how much energy your club uses and where, will help you to identify areas for improvement and reduce your bills.

Choosing where to focus your energy reduction efforts

The Energy Calculator will tell you how much money your club spends each year on electricity and gas bills.

The next step is to consider where expenditure is highest (e.g. is your electricity bill much higher than your gas bill) and which systems in the club are using this energy. You can then target these areas for improvement.

The chart below shows a typical breakdown of how energy is used in the UK sports and leisure sector¹.



By understanding more about how energy is being used in your club, you can make decisions about which efficiency measures to invest in. For example, if your club's biggest energy bill is electricity and your hot water and heating are provided by gas, you may wish to focus on making improvements to your lighting, as this could be responsible for around 19% of your club's energy use, and the largest proportion of your electricity bill.

Finding out where electricity is used

In order to understand more about the equipment that is using the most electricity at your club, you may want to invest in a clip-on electricity display monitor to monitor electricity consumption on a real time basis. Monitors cost between £25 and £50 and can be bought from online retailers such as Amazon. A sensor is clipped on to the meter supply cable, and transmits data to a portable energy

¹ The figures given in this chart are taken from DECC data for the UK sports and leisure sector and are indicative only. Energy use split will vary between clubs depending on the specific equipment and systems used as well as the occupancy and any seasonal variation in use.

monitor which provides real time information on electricity usage and costs. Alternatively, a plug-in energy monitor will allow you to monitor the energy consumption of an individual appliance such as a fridge freezer. *If in doubt always contact an electrician or qualified person before installing a device of this nature*.

The information from these devices can be used to understand the electricity consumption of different equipment and to ensure that non-essential equipment is switched off when not required. Choosing an electricity monitor which allows USB connection to a PC will allow you to review electricity use profiles for particular periods on a PC to help understand patterns in use and areas of wastage.

Monitoring and benchmarking performance

It is important to continue to monitor energy use on an on-going basis to ensure that you continue to identify opportunities for improvement. This will also allow you to monitor progress and may help to identify sudden increases in energy consumption, which might be caused by equipment faults, so that they can be quickly resolved. Keep a record of your club's energy use and review it regularly for any changes.

Club D

You may also wish to calculate your club's energy use per square meter of floor area. This will provide a benchmark for energy use that you can compare against other clubs. This will give you an idea of how your club is performing relative to others.

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Club C

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Electricity use kWh/m²

Published benchmarks for electricity and gas consumption in sports clubs are shown in the

table below. Compare your results from the Energy Calculator against these benchmarks to see how your club compares to a typical sports club and one that aligns with best practice in energy management.

Benchmark	Electricity consumption (kWh/m²)	Heating fuel use (kWh/m²)
Typical sports club	164	216
Best practice sports club	93	141

If your club's energy use is greater the best practice benchmark, you should aim to identify areas where you can reduce energy consumption to move towards best practice levels.