



CALCULATING ENERGY RATINGS

Each piece of equipment in the school has a power rating measured in watts (W). For example, a 100 watt light bulb consumes one hundred watts of power per hour. The energy consumed will depend on how long the piece of equipment is used.

For example a 100 watt light bulb used for 10 hours will use 1 kWh (kilowatt hour) of energy.

100 watts x 10 hours = 1000 watt hours or 1 kWh.

Other power-using equipment to consider includes computers and monitors, interactive whiteboards, photocopiers and drinks fridges. The table below shows the typical energy consumption for different pieces of equipment.

Equipment type	Average power consumption when in use (watts)	Standby energy consumption (watts)
PC (processor only)	74	36
PC monitor	100	7
Inkjet printer	17	9
Laser printer	280	18
Fax machine	82	7
Photocopier	400	103

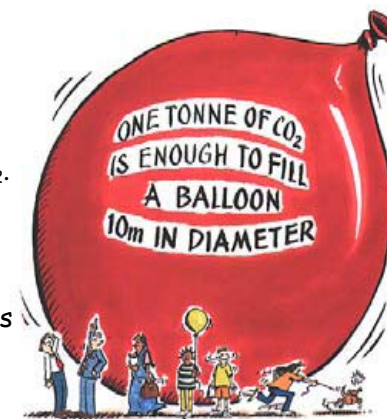
Try adding up how much energy is wasted over the year by forgetting to turn off lights and leaving equipment on standby. Then work out how much this costs (electricity usually costs around 8 pence per kilowatt hour) and think of what you would rather spend the money on.



HOT ENERGY FACTS

COST OF ENERGY USE

- 30% of energy used in the UK is wasted.
- Schools in the UK release approximately 5 million tonnes of CO₂.
- Schools in Richmond upon Thames spend over £1million on energy each year.
- Typically schools spend three times as much on energy as they do on books.
- The cost of energy per pupil per year is around £68 (heating, lighting and power).



HEATING

- Heating accounts for at least half of the school's annual fuel use.
- Reducing the temperature by 1°C can save 8% on heating bills.

LIGHTING

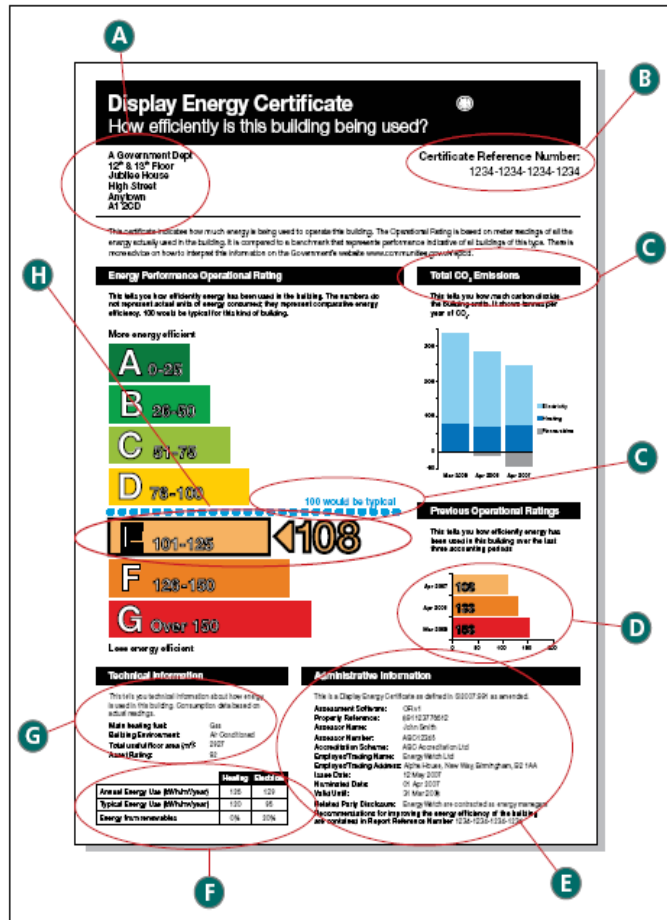
- Lighting accounts for 20-25% of the energy used in schools.
- Encouraging everyone to turn off lights when they leave a room could reduce lighting costs by 15%.

EQUIPMENT

- PC monitors account for almost two thirds of a computer's energy use.
- If left on 24 hours a day, a computer will cost £25 a year to run. Multiply that by the number of PCs in your school - it soon adds up!

ALL SCHOOLS SHOULD HAVE A DISPLAY ENERGY CERTIFICATE WHICH LOOKS LIKE THIS.

FIND OUT WHERE YOURS IS AND CHECK OUT THE RATING!



WHAT TO LOOK FOR ON A DEC

A Display Energy Certificate shows the energy performance of a building based on how much energy it uses each year (the Operational Rating).

- A This provides information about the building that the DEC applies to.
- B Every DEC has a unique number.
- C The energy used by the building is converted into an amount of carbon dioxide (CO₂). Different types of fuel emit different amounts of CO₂. The smaller the bar, the better the performance.
- D This section of the DEC shows Operational Ratings from previous years.
- E This shows key information about how the certificate was prepared.
- F This provides technical information about energy use. Further details are available in a full technical table.
- G This shows the relevant elements of technical information used to produce the certificate.
- H This is the Operational Rating for this building. The rating shows the energy performance of the building as it is being used by the occupants.