

Further information and guidance on saving energy and water and other sustainability issues can be found at the following:

Sustainability

<p>Department for Education and Skills - Sustainable Development www.teachernet.gov.uk/sustainableschools/</p>	<p>Information on the Department's Sustainable Development programme and guidance on sustainability issues http://</p>
<p>Department for the Environment and Rural Affairs - Sustainable Development Unit http://www.sustainable-development.gov.uk/</p>	<p>The DEFRA website for sustainable development. Contains the government's approach to sustainable development and information on the various issues within sustainability.</p>
<p>Department for Trade and Industry - Sustainable Construction www.dti.gov.uk/sectors/construction/sustainability/page13691.html</p>	<p>Information on sustainable construction</p>
<p>BREEAM Schools www.breeam.org/schools.html</p>	<p>BRE's Environmental Assessment Method for all new schools buildings and major refurbishments</p>
<p>SUSShool www.suschool.org.uk/</p>	<p>Information, inspiration, resources and workshops for Education For Sustainable development</p>
<p>Sustainable Learning www.sustainablelearning.info</p>	<p>This site is the home of Sustainable Learning, a programme providing a structured, task based approach to the way energy and water is used in schools.</p>
<p>Department for Education and Skills - Growing Schools http://www.teachernet.gov.uk/growingschools/</p>	<p>Information for teachers on how to use the 'outside classroom'.</p>

Energy

<p>The Carbon Trust www.carbontrust.co.uk</p>	<p>Helps business and the public sector cut carbon emissions, and supports the development of low carbon technologies. School specific information can be found at http://www.carbontrust.co.uk/schools</p>
<p>The Energy Saving Trust www.est.org.uk and grants.</p>	<p>Information and advice on saving energy, including renewables, technologies, techniques</p>
<p>Renewable Energy Association http://www.r-p-a.org.uk/portal.fcm</p>	<p>Information on renewable energy</p>

Water

<p>Environment Agency www.environment-agency.gov.uk/savewater</p>	<p>Information and advice on saving water, including information on technologies available.</p>
<p>Waterwise www.waterwise.org.uk</p>	<p>Information and advice on saving water</p>
<p>Sustainable Water Management in Schools http://www.ciria.org/downloads.htm</p>	<p>Report from CIRIA on measures that can be taken for sustainable water management.</p>



Value for Money

<p>www.teachernet.gov.uk/schoolfinance/</p>	<p>Schools Financial Benchmarking</p>
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Year of Action for Sustainable Schools - TOP TEN TIPS

Energy and water are a major proportion of non-staff costs in schools. Over recent months utility prices have risen much faster than other goods.

Some schools will have greater scope for savings than others but, overall, more than 20% of energy is wasted, and simple good housekeeping can reduce fuel bills by 10%.

	Energy*		Water*	
	Secondary	Primary	Secondary	Primary
Highest 10%	£6.90/m ²	£7.30/m ²	£1.65/m ²	£2.25/m ²
Highest 25%	£5.65/m ²	£5.80/m ²	£1.110/m ²	£1.55/m ²
Average	£4.70/m ²	£4.70/m ²	£0.75/m ²	£1.05/m ²
Lowest 25%	£3.95/m ²	£3.75/m ²	£0.50/m ²	£0.75/m ²
Lowest 10%	£3.10/m ²	£2.95/m ²	£0.35/m ²	£0.50/m ²

How Do You Compare?

On average, primary schools spend £5.75/m² for energy and water. The chart above shows the range of performance for primary and secondary schools.

What can you do?

In this year of action on sustainable schools, this leaflet contains ten tips that will help you to

- save money, year on year
- create a healthier school environment
- reduce demand on finite resources
- have a positive impact on climate change by reducing emissions of carbon dioxide from energy use
- enhance sustainable development

How can you pay for this?

Every school receives an annual capital grant that can be used for capital improvements. A typical primary school of 250 pupils, for example, will receive £34,000 next year; a typical secondary school of 1,000 pupils, £113,000. Schools have also saved considerable amounts of capital which could be used: £259 million at 31 March 2004. Revenue budgets can also be used.



TIP

1 Upgrade heating controls



RATIONALE

Reducing the temperature within a building by 1°C will save 5-10% of the heating bill.

Operating the heating systems for an hour less each day will save a similar amount.

FURTHER INFORMATION

Modern heating controls are accurate, tamperproof, and have the facility for 7-day programming - i.e. the heating can be set to operate at different times of day for each day of the week.

www.thecarbontrust.co.uk

2 Energy efficient lighting



Lighting accounts for around half of the electricity used in a typical school.

Failed lamps can be replaced with energy efficient lamps (which also last longer) at minimal cost. Lighting controls are often very economical.

In many cases, 38mm diameter fluorescent tubes can be replaced with 26mm versions which use 8-10% less electricity. Compact Fluorescent Lamps (CFL) use 80% less than tungsten bulbs and last much longer.

www.est.org.uk

In areas which are infrequently used, install lighting sensors - see www.dfes.gov.uk/valueformoney/docs/VFM_Document_9.doc.

3 Install smart metering



Smart metering provides information about how much energy is used and when it is used, helping to understand energy use and how it can be saved.

Automated meters can take readings at specified intervals, providing information on patterns of use, and levels of demand (i.e. equipment left running) when buildings are unoccupied.

The data they provide can also be used for teaching and learning www.esta.org.uk

4 Water economy



Water is a scarce resource and costs are rising rapidly. A school that is equipped with water conservation devices may use less than half the amount of water used in other schools.

Installations such as cistern dams, urinal controllers, flow restrictors and self-closing taps save water and money. They are all proven, simple to apply, and economic.

www.environment-agency.gov.uk/savewater

5 Manage ICT (Information and Communications Technology) loads



The use of ICT in schools is growing rapidly. ICT equipment not only uses electricity directly, but often places further demands on electricity needed for lighting and cooling.

The electricity used by ICT can be significantly reduced by selecting energy efficient equipment and enabling power management features. Rooms with interactive white boards should allow users to quickly and conveniently manage blinds and lighting.

<http://www.energystar.gov/>
www.mtprog.com

TIP

6 Insulate hot water pipes



RATIONALE

Keep runs of pipe work short and lag pipes properly - a great deal of tepid water may be lost before the hot water comes through.

FURTHER INFORMATION

Lagging pipes not only saves energy but also reduces the risk of pipes freezing in the cold months.

See www.est.gov.uk.

It is also possible to obtain more environmentally friendly insulation - see <http://www.greenbuildingstore.co.uk/>

7 Draught strip windows and doors



Eliminating unwanted draughts is one of the most effective ways of saving money and improving comfort.

Depending on the time of year the gap between a door, or window, and its frame can vary by 3mm. On a standard door this is a hole equivalent to a house-brick. Draught stripping solves this problem.

Further information is available from www.dfes.gov.uk/valueformoney/docs/VFM_Document_9.doc and www.est.org.uk.

8 Check for (and repair) water leaks



Underground leaking pipes can mean a huge loss of water, which will cost your school money.

Check your water meter regularly; If a leak is suspected, take a meter reading last thing at night when everyone has gone home and first thing in the morning before everyone arrives. If the reading has changed, indicating consumption, this is likely to be a leak. Any known night use will have to be shut off or accounted for. Ask your local water company about their free leak detection service. <http://www.water.org.uk/home/resources-and-links/links/water-operators>

9 Renewable energy



Small scale renewable energy systems are pollution free and will help to reduce energy bills. They can also generate interest in energy efficiency amongst pupils and provide a valuable teaching resource.

Renewable energy systems that can be appropriate to schools include wind turbines, biomass, solar heat and power, and heat pumps. Funding for renewable energy systems in schools is available from the DTI's Low Carbon Buildings Programme. www.lowcarbonbuildings.org.uk

10 Understand your bill



The amount you pay for electricity may depend on when you use it, and not just how much you use. Using off peak (night time) electricity through timers and reducing peak demand can save significant amounts of money.

When you receive a bill check it to make sure the cost relates to the consumption and that it is correctly related to the tariff. Check consumption to see if it seems reasonable for the time of year, the severity of the weather or the consumption of water related to the number of people. See www.dfes.gov.uk/valueformoney/docs/VFM_Document_9.doc

IF YOU ONLY DO ONE THING, EDUCATE THE STAFF AND CHILDREN TO TURN OFF WATER AND ENERGY USING APPLIANCES WHEN NOT IN USE!