TOP TIPS FOR SUSTAINABILITY IN SCHOOLS

This collection of top tips suggests practical ways for schools to become more sustainable, should they choose to, whilst at the same time saving money.

Sustainable development means meeting the needs of all people now – including protecting the natural habitats that are essential to our survival – without compromising the ability of future generations to meet their own needs. Sustainable development is part of the <u>Coalition Agreement</u>, which states that we 'need to protect the environment for future generations, make our economy more environmentally sustainable, and improve our quality of life and wellbeing'.

The Department for Education is committed to sustainable development and believes it is important to prepare young people for the future. Our approach is based on the belief that schools perform better when they take responsibility for their own improvement. We want schools to make their own judgements on how sustainable development should be reflected in their ethos, day-to-day operations and through education for sustainable development. Those judgements should be based on sound knowledge and local needs.

Multiple sources of <u>evidence</u> suggest that being a sustainable school raises standards and enhances young people's well-being. Research supports the idea that this is because sustainable schools engage young people in their learning, thereby improving motivation and behaviour, and also promote healthy school environments and lifestyles. Saving resources such as energy and water can also save schools significant sums of money. There are also physical and psychological benefits related to walking or cycling to school, eating more healthily and spending time in nature.

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Top Tips to reduce carbon in schools

This top tips on reducing carbon in schools suggests why schools would benefit from reducing carbon emissions, and explains the context for carbon reduction in England. It then gives some high level tips for reducing carbon, before describing the roles of individuals in reducing school-related carbon emissions. Finally, a summary of tips for each of the three main areas for carbon reduction is listed (energy, purchasing and travel), with links to more detailed tips later in the document.

Why should schools reduce their carbon emissions?

- Saving energy saves money. Current school energy costs are estimated to increase to £652m per year, and this is predicted to rise still further. The average cost of energy per school is £27,000, although secondary schools can have bills of over £80,000 double the amount spent four years previously. Case study evidence suggests that an average secondary school could save up to 20% off its energy bills through replacement of heating, lighting and cooling equipment.
- Many pupils hold strong concerns about climate change, and they are right to do so. Current projections¹ indicate that the impact of climate change will grow over the course of this century and it is they and their children, rather than present day adults, who will face the most significant impacts.
- Reducing emissions by adopting active modes of travel (cycling, walking) has significant health and wellbeing benefits and helps reduce travel costs.

The law, and definition of a carbon footprint

- The 2008 Climate Change Act requires the UK to reduce its greenhouse gas emissions by at least 34% below 1990 levels by 2020 and by at least 80% by 2050.
- A carbon footprint is most commonly defined as the total set of greenhouse gas (GHG) emissions caused directly and indirectly by an individual, organisation, event or product. It is labelled a carbon footprint as commonly the total GHG emissions are converted to CO2 equivalent (CO2e) emissions.

How much carbon do schools generate?

Schools account for around 2% of UK greenhouse gas emissions, roughly the same as all the energy and transport emissions of Manchester, Newcastle and Bristol combined. This is equivalent to 15% of the country's public sector emissions.

How do schools generate carbon?

Greenhouse gas emissions from the schools sector are divided into four main sources:

- energy use in school buildings:
- pupil and staff travel to and from school, and other journeys undertaken on school business;
- emissions produced by companies that supply goods and services to schools, for example, a school food provider. This could include emissions related to their use of energy to run their buildings and produce their food products, as well as the emissions associated with transporting their products to school sites; and
- emissions from waste produced by schools.

¹ See further http://ukclimateprojections.defra.gov.uk/content/view/515/499/

Why are schools' carbon emissions increasing?

- Schools' emissions increased by 12% overall between 1990-2006, with energy and travel now making up a greater proportion of the whole.
 - Electricity increased by 31% primarily due to greater use of ICT and the extension of school hours.
 - o Emissions from school travel and transport increased by 59% between 1990 and 2006: journeys to school³, and private car use for those journeys⁴, increased considerably.

A snapshot: a school with a low carbon footprint could have...

- Renewable technologies that exported surplus energy to the national grid and generated funding through feed-in tariffs and renewable heat incentives.
- Children and staff travelling to school by walking and by bike, facilitated through improved active travel infrastructure and through increasing parental, pupil and school staff awareness of the benefits of active travel.
- A wide range of their waste recycled or composted and, in some cases, act as hubs for community recycling schemes.
- Individual members of staff who were responsible for monitoring energy use to ensure money and carbon were not wasted.
- Sustainable procurement choices as a first choice option.
- Pupils who were empowered to act on climate change, both within the school by reducing emissions and in their home environment.

1. Make a commitment to reduce carbon emissions

Publish this commitment in the school ethos and policies and ensure it is part of discussions with governors and amongst school leadership teams.

2. Understand the business case for carbon reduction

Different actions will have different costs associated, and there are significant financial savings to be realised by the school and by parents.

3. Recognise differing roles of school staff to reduce emissions

Change is not dependent on everyone taking action – even one person can make a difference – but the more people that can act in a co-ordinated fashion, the more effective the result, and the more likely that action will be sustained – see further the list on the last page of this top tips on reducing carbon.

4. Empower individuals

While the most effective approaches will involve more than one individual, it will be important to ensure that someone is responsible for leading and maintaining progress. The individual will need strong backing by the leadership team and carbon reduction must be accorded the necessary status to ensure that others listed in the table above take note and engage.

Make sure that those participating in carbon reduction projects have access to information, training and opportunities to network.

² In 2006, schools' greenhouse gas emissions stood at 7.3 million tonnes of carbon dioxide equivalent (mtCO2e). We tend to discuss greenhouse gas emissions related to a 1990 starting point; this is the date used in the major international climate change agreements, such as the Kyoto Protocol, and it is useful to see how emissions have changed in the schools sector since then.

The National Translational Translation

The National Travel Survey suggests that the distance of pupils' home to school journeys has increased by

^{25%} since 1990. 4 By 2006, private cars accounted for 41% of primary and 20% of secondary school journeys, up by more than 40% since 1990.

5. Link action to reduce emissions with the school curriculum

 Linking what is taught in the classroom to carbon reduction activity underway in the wider school environment can build momentum for change through pupil leadership and involvement.

Roles of individuals in reducing school-related carbon emissions

Head Teachers

Head teachers need to visibly endorse action to reduce carbon emissions. They don't need to do the work themselves, but without their support it is unlikely that sustainability will be embedded in the school.

School Leadership Team

The School Leadership Team needs to actively support carbon reduction, including reviewing progress as part of SLT meetings, and providing support and status to those running projects within the school.

Pupils

Pupils are both the most significant users of the building and the most enthusiastic about change. They can also drive change, communicating with fellow students, monitoring progress, celebrating successes and organising events, e.g. inter-class room competitions or whole school 'lights off' days.

Teachers

Teachers help drive and embed behaviour change through integrating learning about this area into teaching, both at a theoretical and practical level. They can also be role models in changing behaviour, for example, by cycling or walking to school.

Bursars/Business Managers

Bursars/Business Managers oversee school budgets and expenditure and are likely to be concerned with energy bills. Along with the Head, they will liaise with Governors and may be the key contact for Local Authority Energy/Sustainability Managers.

Building Managers/Facilities Managers/Caretakers/ICT Technicians

A highly important group of people, who need to be experts in managing heating, lighting and other systems, and training users of the building. These groups are often active in equipment specification and liaison with suppliers, and may be the key contact for Local Authority Energy/Sustainability Managers.

Governors

Governors are an important influence on SLT priorities and budgets and will reinforce action if sustainability becomes a regular update at governors' meetings.

Catering and cleaning staff

Another vital group, whose decisions have a big impact on a school's use of energy and management of waste, as well as making a difference to procurement-related emissions.

Parents, families and the wider community

Parents, families and the wider community can be inspired to take action themselves by the work of the school and, in turn, add energy and enthusiasm to the work the school is doing.

Local and regional government
Local authorities and regions give expertise and time to schools to both inspire and
facilitate action. Local authorities are important in sharing best practice between schools
and are the source of expertise most frequently used schools.

Summary of Top Tips to reduce energy use in schools

(see further page 7 for more information about these tips)

- 1. If you only do one thing, education the staff and children to turn off energy-using appliances when not in use.
- 2. Use your building systems properly to save energy
- 3. Share information with pupils and school staff
- 4. Upgrade heating controls
- 5. Use energy efficient lighting
- 6. Install smart metering
- 7. Manage ICT (Information and Communications Technology) loads
- 8. Draught strip windows and doors
- 9. Renewable energy
- 10. Understand your bill and how much energy is used in school

Top Tips for sustainable purchasing in schools

(see further page 11 for more information about these tips)

- 1. Develop procurement expertise nominate and train someone to coordinate everything centrally
- 2. Plan ahead: identify what you need early to get the best deal
- 3. Buy energy efficient and sustainable consumer goods
- 4. Don't buy unless you need to does anyone have a spare?
- 5. Don't spend hours saving a pound
- 6. Look for alternatives to branded products
- 7. Think sustainably about the paper your school buys and uses
- 8. Buy food locally and seasonally
- 9. Improve your buying power and work collaboratively
- 10. Know what you want get the best deal for your money
- 11. Get it in writing read and understand the small print
- 12. Share best practice if you've made a good sustainable deal, let other schools know about it

Top Tips for sustainable school travel

(see further page 14 for more information about these tips)

- 1. Encourage cycling by providing secure bike storage and lockers.
- 2. Set up a 'walking bus' or an alternative scheme
- 3. Incorporate sustainable travel activities across the curriculum
- 4. Hold special promotions for active travel
- 5. Arrange training for walkers and cyclists on independent travel
- 6. Spread the message to pupils and parents
- 7. Liaise with feeder schools to agree guidance for new pupils on sustainable travel
- 8. Find ways to involve pupils obliged to travel by car
- 9. Work to improve bus provision and behaviour on school transport
- 10. Work with your local authority to identify safer routes and possible highway improvements
- 11. Reduce emissions from school business journeys

Top Tips to reduce energy and water use in schools

Energy and water are major non-staff costs in schools and a major part of schools' environmental impact. 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%.

Here are thirteen tips that will help you to:

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

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

2. Use your building systems properly to save energy

- Simply knowing how to manage heating or lighting controls can slash energy wastage, save money and reduce emissions. Your local authority or the Carbon Trust may be able to advise you on simple building management techniques to help you save energy.
- If your heating or lighting system is relatively new, talk to the company that installed it to make sure that you are using it effectively.
- Start with the basics, e.g. switching off lights and electrical equipment when not in use. Many schools have groups of 'eco-champions', who check at the end of each day for equipment or lights that have been left on, switch them off and place penalties (e.g. a 'red-card') on the staff responsible.
- Recognise success. Where monitoring shows that a difference has been made, then celebrate and help to maintain enthusiasm for going further.

3. Share information with pupils and school staff

- Encourage and reward ideas and activities which will reduce energy use.
- Teachers can bring energy information into lesson plans, most obviously within science or maths lessons. Engaging pupils with meter readings, energy management statistics and comparisons of numerical data helps them not only to improve numeracy skills but also to develop their own understanding of energy and how it is used, an understanding which can go on to influence longer term behaviour both at school and in the home.
- Many school energy schemes have been devised and are managed by pupils themselves, making the most of their enthusiasm and creativity.

4. Upgrade heating controls

- Reducing the temperature in 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.
- Modern heating controls are accurate, tamperproof and have the facility for 7-day programming – the heating can be set to operate at different times of day for each day of the week. See further www.thecarbontrust.co.uk.

5. Use energy efficient lighting

- Lighting accounts for around half of the electricity used in a typical school. Lighting controls are often very economical. In areas which are infrequently used, install lighting sensors. See further www.est.org.uk.
- Failed lamps can be replaced with energy efficient lamps, which last longer, at minimal cost.
- 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.

6. Install smart metering

- Smart metering provides information about how much energy is used and when it is used, helping you 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 (e.g. equipment left running) when buildings are unoccupied. The data they provide can also be used for teaching and learning. www.est.org.uk

7. 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 be set up to allow users to quickly and conveniently manage blinds and lighting. See further www.energystar.gov and http://efficient-products.defra.gov.uk/cms/market-transformation-programme/.

8. 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.est.org.uk.

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. Information on renewable energy systems is available from the Carbon Trust.

10. Understand your bill and how much energy is used in school

Energy use in school buildings is very much under the control of the individual school. Every school should know how much electricity it uses, alongside other fuels for heating and hot water. Understanding energy bills is the first step – are they accurate and based on actual meter readings? Is energy up or down compared to the previous year? Many schools will also be able to use their Display Energy Certificate [see further here], produced annually, to compare their energy use to national averages and to see how energy use has changed from the previous year.

- 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.
- Think about having an energy audit done. See further www.thecarbontrust.co.uk.

11. 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 selfclosing taps save water and money. They are all proven, simple to apply and economic. See further www.environment-agency.gov.uk/savewater.

12. Insulate hot water pipes

- 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. Lagging pipes not only saves energy but also reduces the risk of pipes freezing in the cold months. See further www.est.gov.uk.
- It is also possible to obtain more environmentally friendly insulation. Speak to your local authority or purchasing consortia for advice.

13. 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 you suspect a leak, 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. Ask your local water company about their free leak detection service. See further www.water.org.uk/home/resources-and-links/links/water-operators.

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

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The Carbon Trust www.carbontrust.co.uk	Helps business and the public sector cut carbon emissions, and supports the development of low carbon technologies. School specific information can be found at www.carbontrust.co.uk/schools .
The Energy Saving Trust www.est.org.uk	Information and advice on saving energy, including renewables, technologies, techniques and grants.
Renewable Energy Association www.r-e-a.net	Information on renewable energy.
Carbon Detectives www.carbondetectiveseurope.org/	Provides support and ideas for actions that your school can take to shrink their carbon footprint. It also provides tools to allow schools to monitor their progress and report their savings.

Water

Environment Agency www.environment- agency.gov.uk/savewater	Information and advice on saving water, including information on technologies available.
Waterwise www.waterwise.org.uk	Information and advice on saving water.

Top Tips for sustainable purchasing in schools

All procurement decisions will have some impact on sustainable development. A good procurement decision is one that evaluates these impacts in the same way that other procurement factors are evaluated. Initial cost, quality, durability, running costs, management, and disposal issues need to be assessed, and will all influence the final procurement decision.

Forty-two per cent of carbon emissions from the schools sector come from procurement – the day-to-day buying choices and decisions made by each school. **This is nearly one per cent of** *total carbon emissions* in the UK.

1. Develop procurement expertise – nominate and train someone to coordinate everything centrally

 Developing professional skills in any area of your work helps to improve your efficiency and effectiveness.

Further information: to support schools in understanding procurement and procurement law, the Department for Education has written The 'Essentials' Procurement Guide for Schools. This can be downloaded from the Department's website here.

2. Plan ahead: identify what you need early to get the best deal

Thinking about basic procurement questions before buying can help you to incorporate sustainable factors into any purchase.

- Is your purchase really necessary?
- What alternative solutions may be available, e.g. sharing equipment or services with another school?
- Can you time your purchasing to avoid peak buying periods (such as the end of the financial year)? High demand reduces your scope to secure good deals with suppliers.
- Could you gain from economies of scale by delaying short-term purchases where possible? Bundling together purchases from the same supplier can cut down delivery costs – less mileage means less fuel consumed to supply you.

3. Buy energy efficient and sustainable consumer goods

- Schools can already routinely purchase many products and services, including:
 - recycled paper and stationery products;
 - cleaning products with reduced environmental impacts;
 - office machinery which is energy efficient (look for the Energy Star label);
 - kitchen equipment which is energy efficient (look for the A-G energy rating);
 - vehicles which are fuel efficient (denoted by an A-M rating); and
 - water efficiency equipment.

4. Don't buy unless you need to – does anyone have a spare? Before going ahead with a purchase:

- Check whether someone else can spare or loan you the item you need. Don't just look within your own school – can specialist equipment be shared between schools (for example, equipment for field trips)?
- Hold a 'stationery amnesty' collecting in unused pens, staplers, highlighters and other supplies from classroom cupboards and desks, to restock the main stationery cupboard. Think about other commonly-used materials and supplies that may have been mis-stored and lost (cutlery, IT accessories, books) – is there scope for regular amnesties or scavenger hunts?

5. Don't spend hours saving a pound

Your time is a procurement cost – it's a false economy when a tiny purchase price saving takes many hours to achieve. Sustainable procurement means focusing your efforts on the areas of greatest potential impact over time, like energy and water efficiency, purchasing of paper, ICT and furniture, rather than the most visible or dramatic 'green' purchases.

6. Look for alternatives to branded products

- Our familiarity with big-name brands doesn't guarantee that they offer best value for money. Less well-known brands may be as good and reliable as their welladvertised rivals – and at a more competitive price.
- Why not carry out market testing in your own school?

7. Think sustainably about the paper your school buys and uses

- More than half of the waste produced by schools is paper or card. Take simple action: buy recycled paper, use paper wisely (only printing when necessary, printing on both sides), replace paper communications with e-mail where appropriate, and make sure that any remaining waste paper is recycled.
- If these were standard practice across the school sector, we could see a reduction in carbon emissions of over 150,000 tonnes by 2020. That equates to over 7% of procurement emissions saved, from paper alone.

8. Buy food locally and seasonally

- School food accounts for 22% of the procurement carbon footprint. Reduce carbon by buying locally and encouraging suppliers to provide fresh and seasonal produce.
- Some organic products are also less carbon intensive than nonorganic foods. Find out more about healthy and sustainable options from the <u>School Food Trust</u>.

9. Improve your buying power and work collaboratively

Group together with other local schools in your area to get better purchasing deals. Many local authorities have set up consortia arrangements to help schools achieve good deals. Schools working together can benefit from:

- Increased purchasing power and more sustainable goods and services when they are requested:
- Improved collective ability to source goods and services some companies see individual schools as too small to bother with; and
- Experience and understanding of sustainable development issues a consortium enables all schools in it to benefit from the shared specialist knowledge of individuals.

10. Know what you want - get the best deal for your money

- Sustainable procurement is about getting the best price for the right product goods and service with high standards of environmental, social and ethical performance. This may mean a bigger discount in return for bulk buying, or arguing for an additional service such as ongoing maintenance support,.
- With contracts, the quality of the service plan you agree can be critical in improving sustainability. A contract incorporating regular and reliable servicing will help to ensure, for example, that copiers and printers don't waste paper and ink by repeatedly jamming or ruining print runs.

11. Get it in writing - read and understand the small print

- It's what's in writing that matters. If you rely on verbal agreements with a supplier that a particular purchase will be delivered in a specific way, for example, or services will include certain maintenance commitments you have no effective way of ensuring that you get what you've paid for.
- Understand your contract.
- Make sure you're getting what your contract entitles you to such as regular servicing of kitchen, lab or IT equipment.

12. Share best practice – if you've made a good sustainable deal, let other schools know about it

- Find out if your existing suppliers are offering deals on sustainable products to other local schools. This opens up possibilities to pull together to get an even better deal from the supplier.
- Market testing for new sustainable products, the experiences of other schools are essential in informing your own decisions, and vice versa. Do 'green' cleaning products and paints work well? Have low-energy IT or other equipment purchases resulted in reduced power bills?
- Have you found a good and reliable sustainable supplier whose business can be expanded by making them known to a wider potential market?

Further information and guidance:

The Department for Education's website has a wide variety of tools and resources to help your schools buy goods and services more effectively.

You can access a Top Tips guide, 'Buying goods and services? Make the most of your school's budget by following our Top Ten money saving tips' here.

The Department has also launched BuyWays, an interactive e-learning course developed for anyone involved in procurement in schools. It is a free resource which can be accessed and used by anyone working in a school in England. Over six modules, BuyWays takes users through the basics of procurement – what the basic terms and concepts mean, the key planning steps involved in any successful procurement, the impact of contract law and contract management, and how effective procurements can prevent costly legal challenges as well as helping schools to get the best possible value out of their budgets.

To find out more about BuyWays please visit the website at www.buyways.co.uk.

Top Tips for sustainable school travel

1. Encourage cycling by providing secure bike storage and lockers.

- Cycle parking should be secure, visible to school staff, durable, well lit, easy to use, accessible and sheltered.
- Check out the Sustrans information sheets Cycle Parking for Schools and Cycling to School at www.saferoutestoschools.org.uk.

2. Set up a 'walking bus' or an alternative scheme

- A group of children can walk to or from school supervised by volunteer adult escorts. Both adults and children wear high visibility jackets. The 'bus' follows a set route with agreed pick-up points.
- In a 'buddies' scheme, pupils walk with friends, siblings and/or older/younger pupils.

3. Incorporate sustainable travel activities across the curriculum

- Involve pupils in monitoring your current travel-to-school practice and identifying possible solutions.
- Look for other links to sustainable travel as a topic across the curriculum.

4. Hold special promotions for active travel

- Nominate one day a week as walk/cycle-to-school day. Once a week can later be extended to two days or a whole week.
- Devise a pedometer challenge where pupils or classes try to achieve targets or beat their personal best.
- Hold a bike MOT day with local cycle shops to service bikes and raise awareness of bike maintenance.
- Take a look at <u>www.walktoschool.org.uk</u> and <u>www.sustrans.org.uk/bikeit</u> for more ideas.

5. Arrange training for walkers and cyclists on independent travel

- This training could be part of PSHE or be offered as an out-of-school-hours learning activity. Ask your local authority road safety department what training is available. The Government-approved standard – Bikeability – sets out the training and skills essential for cycle trips in today's road conditions. See further www.bikeability.org.uk.
- The widely-used Kerbcraft model developed by Strathclyde University is designed to teach pedestrian training skills to 5-7 year olds by practical roadside training. See further www.kerbcraft.org.uk.
- While involvement in national or local schemes is important, schools also need to move from 'occasional' campaigns to a more consistent programme of activity throughout the year.

6. Spread the message to pupils and parents

It is often parents who make the decision about how their children will travel to school. Fears about traffic and stranger danger, plus parental concerns about timekeeping and the need to balance other activities (e.g. the commute to work) can make the car the default option. If parents have a better understanding of different routes to school, the time they take and the safety measures that have been put in place, then more children will walk or cycle to school. See www.sustrans.org.uk/what-we-do/safe-routes-to-school.

7. Liaise with feeder schools to agree guidance for new pupils on sustainable travel

- Encourage pupils and parents to think how they might travel to their new school.
 Help them identify sustainable methods and most appropriate routes from Day
 One
- Provide all relevant information to help parents and pupils choose to walk, cycle or use public transport.

8. Find ways to involve pupils obliged to travel by car

- 'Park and stride' schemes encourage parents to park a little way from the school and walk the rest of the journey. These schemes can be set up from local car parks, supermarkets and leisure centres where there is a convenient route to school.
- Pupils can play a vital role in encouraging parents to take part and asking organisations for the use of their facilities.
- Encourage car sharing with 'postcode coffee mornings' to help parents identify others who make similar journeys.

9. Work to improve bus provision and behaviour on school transport

- Talk to bus operators about modifying services, routes and timetables so that more pupils can choose public transport for school journeys.
- Poor behaviour and fear of bullying are given as reasons for not using public transport. Senior pupils can act as monitors on school services, identifying and eliminating unsocial behaviour.
- Have a look at www.wymetro.com/BusTravel/SchoolTransport/SAFEMark/SAFEMark.

10. Work with your local authority to identify safer routes and possible highway improvements

- Many local authorities support 'Safer Routes to School' projects to encourage more pupils to walk, cycle or use public transport.
- Involve pupils, parents and carers in identifying the most popular routes, the main barriers to walking or cycling and any safety concerns.
- Sustrans has <u>online maps of local pedestrian/cycle routes</u> and can refer you to your local school travel contact.

11. Reduce emissions from school business journeys

There are many 'hidden' journeys taking place during the school day. These range from school minibuses travelling between sites/facilities to school trips and excursions, to journeys for meetings with governors or the local authority. Take action to minimise their carbon impact, e.g. combining journeys or encouraging walking, cycling or use of public transport. Staff who are driving minibuses can be supported by guidance or training on 'smarter driving' which has a significant effect on fuel efficiency, saving up to 15p in every £1 spent on fuel. For more information, see www.energysavingtrust.org.uk/Travel.

Top tips to reduce waste in schools

Why should I do this?

Schools in England throw away the equivalent weight of 185 double decker buses of waste every school day. A lot of rubbish ends up in landfill sites, meaning we lose valuable resources. The majority of waste in schools is recyclable. However, primary schools currently only recycle 13% of their waste, and secondary schools 20%. A large proportion of waste from schools is food, paper and card (75% by weight from primary schools and 70% by weight from secondary schools). It is generally more expensive to dispose of waste in landfill sites than it is to recycle.

1. Try to stop producing waste in the first place!

- Work with students to carry out a school waste audit on how much waste is produced, then classify the types of different waste and identify waste 'hot spots' within the school. See further www.recyclenow.com/schools.
- Develop an action plan to tackle your school waste. Track your progress with regular measuring and monitoring. See further www.recyclenow.com/schools.

Further Information: reducing your waste is a much better option, environmentally and financially, than recycling or any other waste disposal. You may also reduce your waste collection costs.

2. Reuse – think before you throw things away

- Encourage pupils to use reusable bottles for drinks. Install water fountains around school and encourage pupils to drink tap water.
- Refill and reuse your old printer cartridges. It is often cheaper to refill than buy new. Cartridges can also take hundreds of years to decompose in landfill.
- Stationery: reuse old envelopes for internal mail or stick a new label over the old address. Do the same for old paper or plastic folders.
- Furniture: repair or repaint items of furniture to prolong their life.

3. Recycle – recycling old products into new ones saves raw materials and energy

- Find out from your waste services provider what recycling services they offer some of these might be free.
- Start with the biggest or most popular streams like paper, cardboard, cans, glass containers, plastic bottles and cartons.
- You can set up schemes for smaller, more specialised streams like ink cartridges, light bulbs, batteries and CDs.
- Make it easy to recycle by placing recycling bins in sensible areas, such as next to printers and photocopiers, classrooms, and in the staffroom! These areas can be identified from a waste audit.
- Use clear posters and signs to encourage everyone to use recycling bins, and use them correctly, so this becomes second nature (you can find help with this at www.recyclenow.com/schools).
- There is no limit to how much you can recycle. With careful purchasing, determination and good recycling services you could aspire to be a zero-waste school!

4. Swap it or give it away!

• Make it easy for pupils and their families to swap, donate and exchange second hand uniforms.

- Set up a scheme to collect old ink cartridges and mobile phones from the local community – some charities are keen to accept these to help raise funds (see the further information section).
- Old books and computers can be sent abroad though donation schemes, but check there are procedures for maintaining the equipment and disposing of it correctly at end of life (see the further information section).
- Could someone else use your unwanted items? Why not donate them to a local charity shop, advertise on Freecycle or Freegle, or exchange them in 'swap shops' or 'give and take' days.

5. Get to grips with your paper and card waste

- Put scrap paper trays in each classroom, and in the reception office, the copier room and other places where lots of paper is generated.
- Make double-sided printing and photocopying the default, or add clear instructions next to printers on how this can be done manually. Run short training sessions for staff so this approach becomes routine.
- Make black print the default setting on printers, photocopiers and multi-functional devices – this will significantly reduce your costs per copy and also the amount of expensive colour toners you will need to purchase.
- When recycling cardboard boxes, flatten them first to minimise space.
- You can also feed cardboard into your compost bins.

Further Information: paper and card contributes around one third of all school waste. It is easy to make more efficient use of paper and card, and to recycle it when you're done. It saves money too.

6. Reduce your school's food and packaging waste

- Incorporate composting into science lessons or eco/gardening clubs.
 Understanding that there is no waste in nature only food for other species can be inspiring for all.
- You may be able to arrange a food waste collection through your waste services provider. (Not all take meal leftovers or meat and fish products.)
- Encourage waste-free lunches by cutting down on food packaging, single-use and disposable items, and so on.
- Get free online tools and guidance from WRAP by signing-up to tackle waste and share good practice at www.wrap.org.uk/hospitality (launched spring 2012).
- Encourage healthy eating in the school by recommending no crisps, sweets or fizzy drinks days. All of these items produce waste.
- Avoid using plastic cups, cutlery and plates at school as recycling these is difficult.
 Use china cups and reusable cutlery in staff rooms and in refreshment and eating areas.
- Use pupil feedback to develop new menus, portion sizes, and favourite fruit and vegetables as this will cut down on food waste.

Further Information: food waste makes up over one third or more of the school waste by weight. It rots in landfill producing methane, a gas more potent than carbon dioxide in creating climate change.

7. Purchasing

 Purchase paper, pencils and other stationary products made from 100% recycled materials if possible.

- Ask your suppliers to deliver items in returnable containers, or ones which can be recycled – they should be helping you to reduce your waste, not adding to your waste problem.
- Look out for 'scrapstores' that collect items from local businesses and make them available to schools at very low cost.

Further Information: procurement is responsible for a large share of carbon emissions from schools – that is emissions bound up in the manufacture of the goods and services schools purchase. Sustainable procurement is now recognised as good for efficiency, value for money, fair trade and the environment – in short it is the best option for schools.

8. Use the power of the web

- Encourage staff to save and read documents electronically.
- Send newsletters by email, and keep your website useful and up to date. The use
 of email, document scanning, intranets, and online information can help to
 decrease paper use (and paper purchasing costs) if responsibly managed.

9. Think whole school – and think big

- Pupil-led initiatives work well, with pupils taking charge of waste audits, monitoring and publicity campaigns.
- Regularly announce and celebrate waste successes in school assemblies, staff meetings, newsletters and on the school website.
- Use notice boards and displays around the school to make waste minimisation central to the school's ethos.
- Get the cleaners on your side: ensure they are familiar with what can be recycled, and that they are emptying them into the correct external bins.

Further Information: successful school waste initiatives are supported by the whole school, and depend on everyone being aware and getting involved.

10. Create ripples beyond the school gate

- Be vocal about the message: pass information to parents and carers, and show them what the school is doing and what impact it is having.
- Contact local community and environmental groups and draw on their knowledge in school initiatives. They may be able to help with composting, school gardens, or have ideas for how to use waste materials.

Further Information: working with the school's wider community can provide pupils with an opportunity to bring positive change to a much wider group of people. Important life skills can be gained and the school can develop its local, and perhaps even national, reputation.

Further information and guidance

Recycling and donating

Recycle Now Schools	A mix of information and advice to help schools put
www.recyclenow.com/schools	recycling into practice as well as downloadable materials such as lesson plans, assembly materials and videos. Wider site contains a recycling bank
	locator.

Recyclezone www.recyclezone.org.uk	Downloadable information sheets on composting, glass, paper and plastics. Great source of information on every aspect of waste.
www.cartridgeworld.co.uk or call 0800 1833800	Refilling your old cartridges is easy and cost effective. This site helps you to find your nearest store.
www.recycool.org	The Recycool programme is a great scheme for schools to collect mobile phones and cartridges for recycling.
RHS school gardening campaign www.rhs.org.uk/schoolgardening	Information on how to make compost and build an organic garden.
www.childrensscrapstore.co.uk	This site stocks items for creative play, such as paper and card, foam, plastic pots, tubes and tubs, netting, fabric, books, CDs, as well as off-cuts and leftovers from business.
www.thinkcans.com www.alupro.org.uk	If your waste services provider does not collect aluminium cans you can set up a scheme and raise funds for charity.
www.digital-links.org	An example of a UK-based charity offering collection and redistribution of computers to developing countries.
Education for All www.educationforall.com	Charity that redistributes furniture and education resources from the UK to projects in developing countries.
Freecycle http://uk.freecycle.org	Don't dump it, give it away. Find out about your local Freecycle. You may find something you need too.
Freegle www.ilovefreegle.org	Like Freecycle, but home grown in the UK.

Further resources

Carbon Detectives	Your pupils cans investigate the school's carbon
	footprint and set targets to reduce carbon
www.carbondetectives.org.uk	emissions.
Waste Online	Provides in-depth information on waste, with information sheets and useful facts.
www.wasteonline.org.uk	
Waste Watch	Environmental Organisation and specialising in the reduction of material and energy waste.
www.wastewatch.org.uk	
WRAP	Source of authoritative evidence, advice and solutions on waste issues, including for schools.
www.wrap.org.uk	
Yellow Woods Challenge	Campaign for schools run by Yellow Pages, working with the Woodland Trust and local
www.yellow-woods.co.uk	authorities. Offers cash prizes for collecting and recycling yellow pages.

Top tips for school food and catering services

Food waste production can be reduced by as much as 20% in many schools, often with little or no capital investment. There are many steps we can take, both small and large, that can have a positive and significant effect on the sustainability of the school food system. Many of these will also have a positive effect on school budgets, as in many cases efficiency and sustainability can be pursued at the same time.

- 1. If you only do one thing to make your school food service more sustainable and reduce carbon emissions, align your menus with seasonal production and harvesting cycles.
 - Seasonal and unprocessed / lightly processed food tends to be cheaper, and has lower environmental production costs than non-seasonal food. Download the School Food Trust's seasonality chart www.schoolfoodtrust.org.uk/resources/seasonalitychart
 - Work with your suppliers to identify seasonal cost trends and take advantage of low season prices for meat and poultry.

2. Use the power of aggregated and collaborative purchasing to ensure that sustainable options are provided

- Encourage local/regional food suppliers to bid for your business.
- Work with suppliers to increase the proportion of local/regional produce they offer and reduce the number of deliveries you receive.
- Work with other local schools to explore joint purchasing and delivery arrangements and/or buy into local authority contracts.

Further information: The education sector in England spends an estimate £1bn on the school food sector every year⁵. To take advantage of this bulk buying power the government has set up the FDfS (Food Delivery for Schools) programme. The FDfS is a Government initiative managed by the Pro5 Group of five of the largest public buying organisations in the UK (Central Buying Consortium, Eastern Shires Purchasing Organisation, North East Procurement Organisation, West Mercia Supplies, Yorkshire Purchasing Organisation), working in partnership with the Department for Education, the School Food Trust and LACA (Local Authority Caterers Association). The programme aims to create better value for money in the school food sector by establishing framework agreements in food commodities, school catering services and school food equipment.

To find out more about the framework agreements and to find out what agreements have already been set up, please visit www.schoolfoodtrust.org.uk/procurement

The School Food Trust has written a quick guide to tendering your school catering service. This supports schools who are interested in using the FDfS school catering service framework agreement. To access this guide, please visit www.schoolfoodtrust.org.uk/procurement

3. Consider increasing the proportion of certified/assured products and sustainably-sourced fish in your menu

 Avoid using over-exploited fish stocks. See <u>www.fishonline.org</u> for a list of which fish to use or avoid.

⁵ National Audit Office public sector food expenditure report, 2006

 Ask food suppliers to provide pricing information for certified products to give your school flexibility and choice.

4. Seek opportunities to reduce food and packaging waste, and where waste is unavoidable, try to ensure it is recycled or reused rather than just dumped

- Get free online tools and guidance from WRAP by signing-up to tackle waste and share good practice at www.wrap.org.uk/hospitality (launched spring 2012).
- Regularly review food waste arising from unused or spoilt kitchen stock or uneaten food and take steps to reduce this, e.g. better menu planning to avoid over ordering and avoiding the use of unpopular options.
- Segregate your waste into categories which can be recycled. Mixed waste tends to go to landfill.
- Waste products such as cooking oil, cardboard and aluminium all have a commercial value. You should be able to find collectors who will take this from you for minimal or no cost.

5. Promote more energy and water efficient practices in your school

- When buying new kitchen equipment, choose products with the highest energy efficiency rating, NB for fridges and freezers.
- Fit low cost energy and water efficient devices to existing equipment, including fridges and freezers.
- Simple changes to kitchen behaviour can be even more effective than new technology. Put up posters with top tips and reminders.
- Good maintenance and the appropriate use and positioning of equipment are vital.
 A split door seal on an oven can lose 20% of the oven's heat.

6. Develop an environmental management system (EMS) and improve your environmental efficiency

- This will help you to implement and monitor your progress in a systematic way and will provide your pupils with evidence of positive change. The <u>Eco-Schools</u> scheme is an example of a simple EMS designed for schools.
- Establish a school food policy statement covering food and catering services. This
 is key to a successful EMS.
- Review the use of chemicals in your kitchens/dining rooms, use environmentally benign cleaning products and find opportunities to reduce packaging waste by using refillable containers.

7. Drink tap water

• Tap water in the UK is clean, cheap and comes with no packaging problems.

8. Try growing food to help pupils understand where foods come from

- Visit www.growingschools.org.uk.
- Involve pupils in the decision-making process it can help to make the whole experience a more positive one for all concerned.
- An area for growing vegetables can be created in a garden of any size, from a large, sunny vegetable plot, to a few containers on a patio. It is best to choose vegetables that are easy to grow, reliable and quick to crop. Ideally they should be ones that children like to eat!

 Explore a range of curriculum subjects, including: researching which vegetables grow and when to plant and harvest (ICT); investigating soil conditions and microclimate (geography); crop rotation and pest and disease control (science); and building pest barriers and traps (design technology).

Further Information: Food growing can teach pupils about the lifecycles of the vegetables, the creatures attracted to the garden and about soil and nutrition. A vegetable plot can raise pupils' awareness of the seasonal nature of food and its immense variety.

9. Take pupils to visit a farm

- Think about your visit carefully and make sure you have clear learning objectives.
 Visit the Learning Outside the Classroom website.
- Visit <u>www.growingschools.org.uk</u> and <u>www.thinkfoodandfarming.org.uk</u> to discover local farms to visit (including City Farms) and for further teaching resources.

Sources of further information

The School Food Trust www.schoolfoodtrust.org.uk

• Guidance on how schools have put sustainable food-related activities into practice, NB this pamphlet.

Regional Improvement and Efficiency Centres www.lga.gov.uk/lga/core/page.do?pageld=18437

• Help schools and local authorities achieve savings. Some have specialists to advise on catering, procurement and sustainability issues.

Public Sector Food Procurement Initiative (PSFPI)

 Advice on the availability of regionally produced food <u>www.defra.gov.uk/foodfarm/policy/publicsectorfood/documents/psfpi-contacts-rev090331.pdf</u>

Food for Life Partnership www.foodforlife.org.uk

 Run by the Soil Association, operates an award scheme for school caterers to get recognition for their use of seasonal, local and organic ingredients, high welfare meat and sustainable fish.

Fish and Kids www.fishandkids.org

 Marine Stewardship Council project providing class and web based activities to help children learn about sustainable fishing and related issues.

Waste Resources Action Programme (WRAP) www.wrap.org.uk

Has a programme of work to help schools improve recycling.

The Energy Technology List www.eca.gov.uk

• Describes an allowance that can be claimed for energy efficient equipment and provides information about the scheme, an eligible products list and performance criteria for each item. It also explains how to claim Enhanced Capital Allowances.

Fair and ethical trading www.fairtrade.org.uk/schools

The Carbon Trust

Provides guidance on efficient management of refrigeration – see
 www.carbontrust.co.uk/energy/startsaving/tech refrigeration maintenance.htm

Top Tips to develop the global dimension in schools

Sustainable development isn't just about the environment – and it isn't something we can achieve in isolation. The air we breathe, the food we eat and the clothes we wear link us to people, environments and economies all over the world. The decisions we make on a daily basis have a global impact. Schools, through their curriculum, campus and community, can help pupils to make sense of the complexity of our world and their place in it.

1. Look for the global dimension in how your school operates

- Involve the whole school community in thinking about a school vision and aims which reflect the implications of living in a complex, interconnected world.
- Designate a specific member of staff to develop the global dimension across the school.
- Consider each subject's contribution to understanding the global dimension.
- Celebrate small steps along the way to reinforce the importance you place on these issues.

2. Find out what impact your school's buying has on other countries

- Purchasing choices made by schools can make a real difference. Debating fairly traded products, ethical banking, green energy, local sourcing, waste disposal options and other management decisions provides a useful way for staff and children to reflect on global issues, and how the school can help address them.
- Use these decisions as a way to involve parents, governors and the wider community in the work you are doing.

3. Use global teaching resources in delivering the curriculum

 Search for books, films, posters and websites with a global dimension at <u>www.globaldimension.org.uk</u>. From climate change to poverty, water to fair trade, this website is a guide to resources for all age groups and subjects.

4. Find out about support from other organisations

 Development Education Centres, non-governmental organisations, local authorities and others can support you with resources, newsletters, speakers, professional development and projects.

5. Look at the work of UNICEF and United Nations bodies

The UN Convention on the Rights of the Child refers to responsibilities of children, in particular to respect the rights of others. This pairing of rights and responsibilities for all children across the world is a valuable subject for young people to explore and to understand their role as local and global citizens.

6. Consider linking your school to another operating in a different culture

- Take advantage of the advice and options available for international linking (see overleaf). A partnership link with another school can help pupils to appreciate global connections and interdependence as well as find out about similarities and differences between places and cultures.
- Consider linking with another school in England or even in your local area. By linking with a school operating in a different context, pupils can start to examine their own values and attitudes and value diversity.

 Try to make sure your school link doesn't reinforce a perception of the global as 'out there' and 'far away'.

7. Make time for professional development and reflection

- Plan continuing professional development for all staff. It takes time to develop a global perspective – a view of the world that makes connections between diverse issues, people and places.
- Provide spaces and opportunities for reflective and critical thinking for the whole school community including governors.
- Support teachers to consider their own perceptions and biases.

8. Promote optimism and action

 A pessimistic view can lead to disempowerment. Greater understanding, especially when it is accompanied by action, can help to change this, leading to optimism and a wish to contribute to positive change in the local / global community.

Further information and guidance on the global dimension:

Find teaching resources:	Use the search facility to look for resources
www.globaldimension.org.uk	by subject, theme, age or keyword. Sign up for the termly newsletter.
Find local support: See: www.globaldimension.org.uk/localsupport for global dimension providers.	Development Education Centres are independent local centres that provide advisory, training and resource support for teachers in learning about global and sustainable development issues and how to 'think globally and act locally'. Many centres offer advice and support, a library service, training and in-school talks.
Find national support: For Think-Global members, see: www.think-global.org.uk/members/decs.asp	Many national organisations provide support for the global dimension through resources, projects and speaker services.
For national organisations providing speaker services, see: www.globaldimension.org.uk/speakers	
Find a partner school in England: www.schoolslinkingnetwork.org.uk	Linking with another school in England can help pupils to appreciate a diversity of perspectives. The Schools Linking Network aims to support schools to find a link school, and offer resources and professional development.
Find a partner school internationally through: http://schoolsonline.britishcouncil.org/home	The Department for International Development's Global Gateway runs a free global school linking service. Your school can link in Europe, India or Nepal, Brazil or
The British Council administers DFID Global School Partnerships: www.britishcouncil.org/globalschools	South Africa, USA, Japan or Australia to relate and debate global issues such as fair trade, energy conservation and climate change.

Top tips for schools to engage with biodiversity

"Every child... born into this world has an innate pleasure..., delight..., interest and curiosity in the natural world." Sir David Attenborough

What is biodiversity and why is it so important?

Biodiversity is life. Scientists use the word to describe the links and variety between all living things on the planet – including humans, nature, wildlife, plants and animals. It's all inter-connected. We all rely on biodiversity for our survival, because of the vast number of goods and services our planet provides for us.

Economic growth and social progress can neglect the essential need to consider and care for the environment. Yet the conservation and sustainable use of biodiversity is critical for both the global economy and for the basic resources needed to support our planet's growing population. By engaging with biodiversity, schools can improve their own performance, while equipping pupils with the skills, understanding, and confidence to adapt to these changes and to succeed in the future. At the same time, they will also be benefiting biodiversity – in the school grounds, local community and all around the world.

1. Notice that nature and wildlife are all around you

- Go outside the classroom and look around at what wildlife, nature, plants and animals are there. You don't need to be an expert in ecology.
- Giving children five minutes each day outdoors to notice environmental changes and animal behaviour can add vital context and interest to lessons.
- Beyond the immediate school buildings and grounds, local communities also offer many opportunities for learning about biodiversity, including parks and canals.
 Further afield, a variety of biodiversity and natural environment organisations offer good quality, safe learning experiences.

2. Use biodiversity across all curricula and ages

- Biodiversity fits well with science and geography curricula, and with a little imagination it can easily link in to all subjects.
- Monitoring and recording biodiversity provides a wealth of data which can be used back in the classroom to support numeracy lessons.
- Looking at the seasons and animal migration can help introduce ideas about changes over time.
- For centuries, nature has provided inspiration for poetry, art and literature, with many plants / animals having great cultural symbolism.
- At secondary level, biodiversity can help develop an ecological thinking approach (systems thinking and how everything is connected).
- This can be expanded by looking at the chains within ecosystems for example, the impact of natural processes on human well-being, in relation to food or water, can help pupils to understand the connections and inter-relationship between species, habitats, and people.

3. Create places for wildlife in your school grounds

Creating a place for wildlife in your school grounds has never been easier. Nature
can be nurtured and encouraged in schools for children to enjoy and explore, e.g.
seed planting, creating mini-beast habitats, feeding wildlife, creating wildlife homes
and water habitats. Many organisations offer support to schools on wildlife
gardening (see resources).

4. Understand how all of life is interconnected

- Biodiversity links into local and global institutions and issues. For instance, human rights and responsibilities can be connected to the way we think about nature, or animal rights – at the same time developing critical thinking and communication skills
- Climate change and poverty can also be linked to biodiversity. Taking this
 approach towards biodiversity is valuable in helping young people develop and
 explore their own rights and responsibilities in caring for themselves, others, and
 the environment.

5. Build for a biodiverse future

- It's not just people who get shelter and protection from buildings animals, insects and plants do too. It can be simple to include measures to benefit biodiversity and the school community, whether you're designing and constructing new buildings, or adapting existing ones. For instance, having a 'green roof' on your school provides a home for plants and bugs. These then provide vital food for other wildlife that can also use school buildings to nest and live (especially if specific spaces are built-in), including rare and threatened species of bats and birds. A green roof can also provide insulation and reduce energy costs.
- A green roof might not be possible but there are other measures that you can take in and around your buildings. For example, why not have hanging baskets filled with wild flowers to attract bees or bird boxes for nesting?

6. Recognise the benefits to pupils, teachers and schools

Contacts with nature and natural play have a range of positive learning and health benefits. These include reducing the effects of childhood obesity, and improving mental health and emotional well-being. For instance, findings suggest improved engagement with learning and a reduction in instances of attention deficit hyperactivity disorder (ADHD) amongst pupils following contact with nature.

Specific information and guidance related to the tips

Learning Outside the Classroom

- www.lotc.org.uk
- www.lotcqualitybadge.org.uk

Learning Maths Outside the Classroom at Primary and Secondary levels

www.ncetm.org.uk/resources/9268

Ecosystems Approach

ww2.defra.gov.uk/environment/natural/ecosystems-services/

Breathing Places Schools

www.bbc.co.uk/breathingplaces/schools

Additional online resources supporting biodiversity in schools

Amphibian and Reptile Conservation Trust: www.arc-trust.org/education

The Bat Conservation Trust:

www.bats.org.uk/pages/resources for teachers youth leaders.html

Botanic Gardens Education Network: www.bgen.org.uk
Bristol Natural History Consortium: www.bnhc.org.uk

British and Irish Association of Zoos and Aquariums:

www.biaza.org.uk/public/pages/education/index.asp

BTCV: http://www2.btcv.org.uk/

Buglife: www.buglife.org.uk/discoverbugs

Butterfly Conservation : www.butterfly-conservation.org/learn

Eco-Schools: www.eco-schools.org.uk/nine-topics/biodiversity.aspx

The Eden Project: www.edenproject.com/schools-and-colleges
Farming and Countryside Education: www.face-online.org.uk

The Field Studies Council: www.field-studies-council.org
Forestry Commission: www.forestry.gov.uk/england-learning

The Great Plant Hunt: www.greatplanthunt.org
Groundwork UK: www.groundwork.org.uk
Growing Schools: www.growingschools.org.uk
Kew Gardens: www.kew.org/learn/index.htm
Learning through Landscapes: www.ltl.org.uk

National Association for Environmental Education (UK): www.naeeuk.plus.com

National Parks: www.nationalparks.gov.uk/learningabout

The National Trust: www.nationaltrust.org.uk/main/w-chl/w-learning-discovery.htm

Natural England:

www.naturalengland.org.uk/information for/students and teachers/default.aspx

Natural History Museum: www.nhm.ac.uk/education

Plantlife: www.plantlife.org.uk

Pond Conservation: www.pondconservation.org.uk

RSPB: www.rspb.org.uk/schools

Royal Horticultural Society: www.rhs.org.uk/children/For-schools

SEEd: www.se-ed.org.uk

The Wildlife Trusts: http://www.wildlifetrusts.org/discover-learn

Wildfowl and Wetlands Trust: www.wwt.org.uk/learn

Wildscreen: www.wildscreen.org.uk

The Woodland Trust: www.woodlandtrust.org.uk/en/learning-kids/schools/Pages/stuff-to-

do.aspx

WWF-UK: www.wwf.org.uk/oneplanetschools

Zoological Society of London: www.zsl.org/education

Schools who want to be more sustainable can...

Food and drink	supply healthy, local and sustainable food and drink, showing strong commitments to the environment, social responsibility and animal welfare in their food and drink provision, and maximise their use of local suppliers.
Energy and water	focus on energy efficiency, renewable energy and water conservation, showcasing opportunities such as wind, solar and biomass energy, insulation, rainwater harvesting and grey water recycling to everyone who uses the school.
Travel and traffic	use vehicles only when absolutely necessary and provide exemplary facilities for healthier, less polluting or less dangerous modes of transport.
Purchasing and waste	minimise waste and adopt sustainable procurement practices, using goods and services of high environmental and ethical standards from local sources where practicable, and increase value for money by reducing, reusing, repairing and recycling as much as possible.
Buildings and grounds	manage and, where possible, design their buildings in ways that visibly demonstrate sustainable development to everyone who uses the school. Through their grounds, schools could bring pupils closer to the natural world, capture their imaginations in outdoor play, and help them learn about sustainable living.
Inclusion and participation	be models of social inclusion, enabling all pupils to participate fully in school life while instilling a long-lasting respect for human rights, freedoms, cultures and creative expression.
Local well-being	be models of corporate citizenship within their local areas, enriching their educational mission with activities that improve the environment and quality of life of local people.
Global dimension	be models of global citizenship, enriching their educational mission with activities that improve the lives of people living in other parts of the world.

These eight 'doorways' are taken from the Sustainable Schools Framework. For additional information about Sustainable Schools materials, follow this link: http://www.se-ed.co.uk/sustainable-schools/.