

Downloadable ESD publications and Resources

Below is a list of useful links related to the themes of education for sustainable development.

UN Websites

Official site for the UN Decade of Education for Sustainable Development:

http://portal.unesco.org/education/en/ev.php-URL_ID=27234&URL_DO=DO_TOPIC&URL_SECTION=201.html

UNESCO vision and definition of ESD:

http://portal.unesco.org/education/en/ev.php-URL_ID=27279&URL_DO=DO_TOPIC&URL_SECTION=201.html

UNESCO list of useful sites on ESD:

http://portal.unesco.org/education/en/ev.php-URL_ID=27606&URL_DO=DO_TOPIC&URL_SECTION=201.html

Sustainable lifestyle training kit: A training kit on responsible consumption developed by UNESCO/UNEP: <http://www.youthxchange.net/main/home.asp>

Guidebook on climate change and lifestyles: A YouthXchange Guidebook, UNESCO/ UNEP

<http://unesdoc.unesco.org/images/0021/002128/212876e.pdf>

The Earth Charter: The Earth Charter is a declaration of fundamental principles for building a just, sustainable, and peaceful global society in the 21st century. This site has useful resources for exploring sustainability issues with groups: <http://www.earthcharter.org/>

The official site for the UN Millenium Development Goals: <http://www.un.org/millenniumgoals/>
By 2015 a number of goals are to be attained, for instance, halving extreme poverty.

Education for Sustainable Development Toolkit: http://www.esdtoolkit.org/esd_toolkit_v2.pdf.
An ambitious ESD Toolkit, produced by the University of Tennessee. This is a manual for beginning the process of combining education and sustainability, and contains e.g. background, exercises and useful links related to ESD.

The UNEP Resource Kit on Sustainable Consumption and Production http://www.unep.fr/copy%20of%20pc/sustain/10year/scp_resource_kit_f.htm This UNEP Resource Kit is composed of 12 fact sheets on different topics, such as water, energy and life styles. It is user friendly and pedagogical if you want to raise awareness on a specific issue in a project, and is available in English and French.

UK Websites

Sustainable Schools

<http://www.education.gov.uk/aboutdfe/policiesandprocedures/a0070736/sd>

<http://sustainable-schools-alliance.org.uk>

<http://se-ed.co.uk/edu/sustainable-schools>

Global learning

<http://globaldimension.org.uk>

<http://www.think-global.org.uk/pages/?p=3857>

<http://www.britishcouncil.org/learning-international-school-award.htm>

EcoSchools

www.eco-schools.org.uk

Growing Schools

www.growingschools.org.uk

Healthy Schools

<http://www.education.gov.uk/a0075278/healthy-schools>

http://www.uclan.ac.uk/schools/school_of_health/research_projects/hsu/files/national_healthy_schools_status_guide.pdf

Fair Trade Schools

www.fairtrade.org.uk/schools

Rights Respecting Schools

www.unicef.org.uk/rrsa

Cooperative Schools

www.co-op.ac.uk/tag/co-operative-schools

Forest Schools

www.forestschoools.com

OSIER Community – The Higher Education Academy Network on the teaching of Education for Sustainable Development and Global Citizenship.

<http://osier.ac.uk>

Ideas and resources from Universities on the teaching of Education for Sustainable Development and Global Citizenship.

EAUC The Environmental Association for Universities and Colleges

With a membership of over 300 universities and colleges, the EAUC is the environmental and sustainability champion within Further and Higher Education in the UK.

<http://www.eauc.org.uk/home>

People & Planet

The largest student-based environmental and human rights organisation in the UK, with groups in many universities, colleges and some secondary schools.

<http://peopleandplanet.org>

Vocational Learning

LSIS Excellence Gateway

<http://www.excellencegateway.org.uk/sustainability>

EAUC Sorted Resources

<http://www.eauc.org.uk/sorted/home>

Happy planet: sustainable development and citizenship

www.eauc.org.uk/sorted/files/happy_planet.pdf

Every child's future matters, Sustainable Development Commission, 2007

www.sd-commission.org.uk/publications.php

A governor's guide to sustainable schools (00445-2007BKT-EN), DfES, 2007

<http://publications.teachernet.gov.uk>

Valuing our future: a toolkit for developing sustainable schools, NCSL, 2008

www.nationalcollege.org.uk/index/leadershiplibrary/leadingschools/leadingchange/key-initiatives/sustainable-schools/developing-sustainable-school.htm

Planning a sustainable school: driving school improvement through sustainable development (DCSF-00245-2008), DCSF, 2008

<http://publications.teachernet.gov.uk>

Sustainable development in action. A curriculum planning guide for schools (QCA/08/4039), Qualifications and Curriculum Development Agency, 2009;

<http://orderline.qcda.gov.uk/bookstore.asp?Action=Book&ProductId=978184721905>

Websites

www.teachernet.gov.uk/sustainableschools

This gives information on the Sustainable Schools Programme, including links to publications, tools and other resources.

www.schoolsnetwork.org.uk/Pages/default.aspx

This is the website of the Specialist Schools and Academies Trust. The programme, Leadership for Sustainability, launched by the Specialist Schools and Academies Trust, helps those with responsibility for leading the agenda for sustainable development in schools to develop their own action plans for progress within and through the eight 'doorways'.

www.ncsl.org.uk/sustainableschools-index

This provides information on sustainable schools from the National College for Leadership of Schools and Children's Services.

Learning Through Landscapes

www.ltl.org.uk

Campaign for School Gardening (RHS)

www.rhs.org.uk/schoolgardening

Oxfam – Cool Planet

www.oxfam.org/uk/coolplanet/kidsweb

Some Online ESD Resources on Climate Change for schools

The following list provides some suggestions as to useful and engaging materials that could be used in using and developing learning resources about climate change. It is not intended to be an exhaustive list, and learning resource developers should undertake their own research to ensure the materials are accurate, cover latest issues and debates on the topic, and are presented in an engaging way for the target audience.

The activities are written to fit certain subjects but many can be adapted to suit others. The resources are not prescriptive. They can provide ideas to help teachers integrate the theme of climate change into each subject area.

Teachers will need to consider their pupils' ages and abilities and adapt these activities accordingly. They may wish to involve pupils in a short stimulus or starter activity to provide the background knowledge and put each lesson in the context of the wider global issue.

Sections

- **Films**
- **Directory of resources**
- **Curriculum**
- **Community**
- **Campus management of buildings**
- **Funding for low carbon technologies**
- **Other online resources**

Films

Sustainability Matters film

An interview featuring Jake Reynolds, senior adviser for sustainable development at DCSF, and Charles Dickens Primary School, London.

www.teachernet.gov.uk/sustainable-schools/about/about_detail.cfm?id=127&levelselected=1

Green.tv

This is a broadband TV channel for environmental films, bringing together films from a range of organisations and independent filmmakers. Included in the current listing are films of the sustainable energy activities at Eastchurch Primary School, Kent and Seaton Primary School in Devon. Both schools participated in the Sustainable Learning programme.

http://static.green.tv/static/videos/seaton_primary_school/seaton_primary_school.mp4

http://static.green.tv/static/videos/ashden_awards06_switchedonkids/ashden_awards06_switchedonkids.mp4

Green Energy for School – PV Panels

<http://www.co-operative.coop/ethicsinaction/climatechange/climate-change-projects/green-energy-for-schools/Green-Energy-for-Schools-film/>

Solar4Schools

5 min. film about school PV Panels.

www.solar4schools.co.uk

Nuff films

25 films made by young enthusiastic story tellers show a worldwide and large spectre of the issue of man-made climate change.

www.nuffglobal.net

Global warming animation

<http://www.coolkidsforacoolclimate.com/Explained/Explainedindex.htm>

Home

A new 90 minute film in high definition by the master of aerial photography French photographer Yann Arthus-Bertrand, famous for enormous coffee-table books filled with photography so rich as to be overwhelming. He has now made the jump to high-definition cinematography and directed a documentary about the major environmental issues on earth, as seen from the air.

www.youtube.com/users/homeproject

Directory of Resources

Teach Climate Change - Classroom Resources for Teachers

Teachers want to have access to relevant materials to strengthen and enhance their teaching across all key stages. This website, developed in the NW region by DEP and others, is a comprehensive and authoritative tool allowing teachers to select the most appropriate resource for their needs. This website aims to be a comprehensive and authoritative tool allowing teachers to select the most appropriate resource for their needs. The resources are searchable by key stage, subject and climate change category.

www.teachclimatechange.org

Curriculum

North East Climate Change Lead schools

Currently, the Climate Change Schools Project operates solely in the North East of England. However, the success of the Project has spread far and wide, and many individuals and organisations have expressed interest in finding out more about our work and what the Climate Change Lead Schools do. Our Climate Change Lead Schools are those pioneering and visionary schools who would like to embed climate change teaching, learning and positive action into a whole-school ethos and, in particular, put climate change at the heart of the national curriculum.

<http://www.slcn.org.uk/ccsp/index.php>

Schools Carbon Footprinting

UK Schools Carbon Footprint Scoping Study

This scoping study by the Sustainable Development Commission explores carbon emissions from schools. A report by Global Action plan, Stockholm Environment Institute and Eco-Logica identifying and measuring the carbon emissions from schools.

<http://www.sd-commission.org.uk/publications.php?id=389>

KS1,2

Green Day: A climate change activity kit for schools

Green Day is a one-day event for schools about climate change, sustainability and the built environment. It is a fun and flexible way to integrate these themes into lessons and whole school activities. It should not be an isolated event but aims to act as a springboard to make schools more

sustainable in the long term. Green Day is promoted by CABI, the government's independent adviser on architecture, urban design and public space.

www.cabi.org.uk/greenday

Renewable Energy Resources from Practical Action

Free downloadable posters, wordsearch, references, songs, activities, science challenges.

<http://www.practicalaction.org.uk/education/renewable-energy-resources>

http://www.practicalaction.org.uk/education/climate_change

Climate Choices - Children's Voices

Created by Practical Action, a charity that works with people in developing countries to help them create local, sustainable solutions using appropriate technology. Site development has been in partnership with the Chemical Industry Education Centre (CIEC) at the University of York.

Climate Choices - Children's Voices is aimed at teachers of children aged 9-11 years (UK years 5 and 6) who want to help children begin to understand the challenging and complex issue of climate change. In addition to introducing climate change, the site looks at how food choices impact on climate change and how climate change is affecting food supply. A range of resources, including video clips, presentations, games and worksheet-based activities are provided for you to use as appropriate. The site content links to several curriculum areas and initiatives, including Excellence and Enjoyment, Every Child Matters and Sustainable Schools.

<http://www.climatechoices.org.uk/index.htm>

Friends of the Earth

Shout about climate solutions together – Activity pack for 11 to 13 year olds.

www.foe.co.uk/resource/guides/shout_about_climate_solutions.pdf

Oxfam Climate Change Resources

<http://www.oxfam.org.uk/education/resources/category.htm?20>

Oxfam Climate Chaos Day 1 to 5

A week of activities about climate change for ages 9-11

http://www.oxfam.org.uk/education/resources/climate_chaos/day_one/index.htm

PowerDown primary toolkit

PowerDown is a set of primary and secondary resources that explore the causes and impacts of climate change. Use our lesson ideas, images and videos to get your pupils learning about climate change, investigating energy use and taking action to be part of the solution. Browse resources linked to the three steps: learn, investigate and act or search from the complete range. See what other people are downloading in the Top downloads section and sign up for e-updates.

The PowerDown toolkit brings to life some of the causes and impacts of climate change, and explores the extraordinary potential for schools to shape some of the solutions. The free toolkit includes 1) over 20 photo cards 2) teacher's booklet with curriculum links, lesson ideas and activity sheets 3) DVD-ROM with 'Be the Solution' film, digital teaching guide and digital photos. Our PowerDown e-newsletter will inform you of future resources and other offers from ActionAid. If you would like to receive it, please tick to receive electronic communications when filling in your details.

<http://powerdown.actionaid.org.uk>

Friends of the Earth

Lesson Plan for introducing What is climate change for KS2

Cool it - Climate change in the curriculum

The activities provided in the 'Cool It!' resource pack have been designed in accordance with the National Curriculum, The Primary Framework for Literacy and SEAL; Social & Emotional Aspects of Learning, in order to compliment and enhance the existing schemes of work used in schools. With this in mind, each activity included in this pack links directly to one or more aspects of the curriculum, as well as other government documentation such as SEAL and The Primary Framework for Literacy.

www.rbkc.gov.uk/coolit

www.rbkc.gov.uk/coolit_resources/general/teachres02a02.pdf

KS3,4

Countdown to Copenhagen schools pack

'The Big Climate Change Debate – how to play your part'. Encourages young people to find out more about climate change and look at the issues from different perspectives.

<http://wales.gov.uk/walescarbonfootprint/home/youngpeople/teachershelp/copenhagenpack/?lang=en>

Climate change: Post Copenhagen

This is a summary and activities for schools exploring the results of the Climate Change conference in Copenhagen. It includes a discussion of the Copenhagen summit designed for teachers and more able students who already have some knowledge of the issues. Classroom activities for KS3 and KS4 accompany this resource.

www.oxfam.org.uk/education/resources/climate_change_post_copenhagen

Climate Challenge Game

A game where you are president of the European Nations and you must tackle climate change but also stay popular enough with the voters to remain in office.

With the current level of debate in mind, the BBC decided a game might be a good introductory route into climate change and some of the issues this creates for governments around the world. The producers' primary goal was to make a fun, challenging game. At times it was necessary to strike a compromise between strict scientific accuracy and playability. For this reason, Climate Challenge should not be taken as a serious climate change prediction.

Wherever possible, real research has been incorporated into the game. This document describes the scientific sources used to create Climate Challenge and some of the compromises made by the producers. These sources are a good starting point for someone interested in learning more about climate change. This document also describes some of the compromises the producers made for the sake of playability.

Apart from the primary goal of creating a fun game, Climate Challenge's producers aimed to 1) give an understanding of some of the causes of climate change, particularly those related to carbon dioxide emissions 2) give players an awareness of some of the policy options available to governments 3) give a sense of the challenges facing international climate change negotiators. Players must respond to catastrophic events caused by climate change as well as natural and manmade events, which may or may not be linked to climate change. This aspect of the game is meant to give some idea of what could happen as the Earth's climate changes and also introduce the unpredictable nature of some natural events.

www.bbc.co.uk/sn/hottopics/climatechange/climate_challenge/aboutgame.shtml

www.bbc.co.uk/sn/hottopics/climatechange/climate_challenge/index_1.shtml

Logicity interactive computer game

LogiCity is a fun interactive computer game with a difference. Aimed at young people under 25,

it's a game set in a 3D virtual city with five main activities where players are set the task of reducing the carbon footprint of an average resident. As players work their way through the game they will pick up information about Climate Change, and some of the main ways in which everyone is currently contributing to the emissions of the main greenhouse gas (CO₂) that causes Climate Change. It places individuals in a virtual environment and lets them experiment and experience the potential effect that individual actions can have on the planet before it's too late. Users can travel to the future to see the direct results of their actions in real time by quickly fast forwarding to the year 2066. The game is part of Defra's Climate Challenge programme to increase public awareness of Climate Change across the country. The National Energy Foundation, Logicom and British Gas are also providing some support to the game's development.

LogiCity is designed to be both fun and educational. Although it's aimed at older children (KS3+ and young adults), the gameplay and the concepts are suitable for most children from 10 or 11 years upwards. The game itself is split into 5 activities ranging from a family role-play about what forms of transport to use to a decision oriented game where players have to maximise carbon savings from a limited cash budget to a race against the clock round a fictitious office switching off electrical equipment.

The game can help pupils at Key Stages 3 & 4 Citizenship investigate issues surrounding sustainable development, using IT to experiment with alternative lifestyles, as well as assisting with their knowledge and understanding of environmental change and sustainable development (attainment target 4) in the geography curriculum. The geography component is particularly relevant to the targets at level 5, where pupils are expected to suggest explanations for the ways in which human activities cause changes to the environment and the different views people hold about them.

www.logicity.co.uk/game/main.htm

UPD8 Climate Futures pack

Climate change is a complex issue. In this introductory activity, students are asked to look at four photographs depicting issues related to climate change and to think creatively about how the people in the pictures might feel. Students discuss their opinions in pairs and fours, before discussing emerging dilemmas as a class. The appropriate collage of images is then used to introduce one of the four main activities: Green Biker, Garbage Guru, Food for Thought and Smart Energy

<http://www.upd8.org.uk/activity/281/Climate-Futures-Introductory-Task.html>

Climate Change Local and Global: An enquiry approach

This teachers resource draws upon the ideas of many Tide~ teacher groups working with Key Stages 2 and 3 in the West Midlands and offers key challenges about climate change for teachers and learners.

<http://www.tidec.org/Tidetalk/articles/Clim%20ch%20feature/clim%20change.html>

Climate4classrooms

This site has been developed by the British Council, Royal Geographical Society and Royal Meteorological Society. Through some of the latest scientific data and projections Climate4classrooms provides curriculum linked teaching resources about climate change for pupils aged 11+. Its resources include:

- * Interactive data sets showing the latest global and national climate predictions
- * climate science brought to life by the experts
- * Case studies investigating global, national and local impacts and solutions.
- * Guidance for teachers on using the resources.

The resources on this site have been developed in collaboration with climate scientists and using data from the latest research, including the Intergovernmental Panel on Climate Change (IPCC).

The following sections are useful starting points:

- * Climate Change: detailed information on this process, the scientific evidence for change and

global predictions

- * Learning Modules: curriculum linked resources for geography, science, and citizenship/civics lessons

- * National Futures: national climate change predictions for England, China, Indonesia and Mexico.

www.climate4classrooms.org

Forestry Commission Climate change Information Pack

<http://www.forestry.gov.uk/forestry/INFD-7S7FC7>

Earthwatch Climate Change Learning Resources - Impact, Mitigation and Adaptation

This resource for post-16 students is split into six sections, which explore different aspects of climate change. They include background information, Earthwatch case studies, suggested classroom discussion topics and links to scientific and popular websites. Sample datasets from Earthwatch projects and suggested statistical tasks allow students to analyse and interpret scientific data as evidence. They can be taken as a series of lesson ideas or used individually to provide support for teachers and students following the latest versions of various specifications.

http://www.earthwatch.org/europe/get_involved/involved_learning/learning_resources/resources_climatechange

Campus Management of buildings

Valuing our Future

Valuing Our Future is a new toolkit for developing sustainable schools produced by the National College for School Leadership (NCSL). It comprises a set of booklets used for training purposes with senior leaders in schools – including Bursars, and includes a booklet on each of the Doorways featured in the DCSF Sustainable Schools Strategy and large inter-active charts and activity items.

www.nationalcollege.org.uk

Energy Display Meter – Free to schools on first come-first serve basis

The meters are being provided and installed free of charge by British Gas, on behalf of the DCSF/PfS. State schools will need to register your interest online in getting a meter installed at your school. British Gas will aim to install your meter within three months of receiving your completed application. If demand is high, you may need to wait a little longer, so register now to make sure you get yours as soon as possible.

Real time feature - Track and display your school's electricity usage in real time. See the impact of turning equipment on/off and immediately witness the results of any energy saving measures.

Comparison feature - Make direct comparisons of electricity usage to see if you are using more or less than the day, week or month before. Observe trends and encourage smart energy usage.

Targets feature - Use the customisable settings to define your own energy usage targets for your school. The display will then show your pupils if you are using less or more energy than targets.

Settings feature - The perfect aid to teaching smart energy usage. Set the level of detail with the 'Primary' or 'Secondary' school settings and customise your Energy Display Meter to meet the educational requirements of your class or school.

www.energydisplaymeter.co.uk

Sustainable Learning

An energy and water management programme for schools developed by CREATE and BRE

Your school can take back control of its energy and water use, reduce costs and make a difference by demonstrating citizenship, stewardship of finite resources and reducing the schools' environmental impact.

Simple methods and activities can be free to implement and can be a great way to make a start. This site will help you to take these steps by breaking these actions down into a number of more manageable tasks.

Sustainable Learning provides a structured approach to utility management, which can help give the schools in your area a focus. Their progress will result in carbon savings and a national accreditation. It can also help them with activity under the Eco-Schools programme. Registering with this site will allow you to view registered schools in your authority. You will also be able to start or join in discussions with other authorities or with a mix of authorities and schools.

Schools with buildings that have a floor area in excess of 1000m² are required to have a Display Energy Certificate (DEC). This was effective from 1st October 2008. DEC's have been introduced to raise public awareness of the actual energy use and energy efficiency of the buildings they visit.

A DEC certificate presents the actual energy use of a building on an A-G scale where A is the most energy efficient and G is the least. The DEC will have to be displayed in a prominent place visible to the public. It must be updated each year and will need to be accompanied by an 'advisory report' listing measures to improve the performance. This report can last up to seven years before it too will need to be updated, but will not be required to be displayed along with the DEC.

Sustainable Learning has been offering A-G style certificates to our registered schools since September 2007 to give them an indication of their likely DEC rating. The certificates are not compliant but have prepared schools for the process. These A-G certificates are also available to smaller schools that may not be affected by the initial legislation but wish to have an indication of how their school site is performing and how this compares to other similar schools.

Schools are actively encouraged to use their own buildings and their actual energy and water

consumption as learning tools and with a dedicated team, a school can usually meet all the requirements for a Level 1 certificate within a term. Programme managers from BRE are on hand to provide advice and support to participating schools via a dedicated helpline (0870 1 28 28 20) and email service (schools@bre.co.uk). The programme will be the only method available for schools in England to obtain EU compliant Operational Energy Performance Rating. These certificates will sit alongside the existing energy management certificates allowing schools who register and receive their 'Energy Performance Rating' to take part in a programme of activities that can help the school to improve their rating over time. These certificates are not yet available, but all registered schools will be able to download them as soon as they do become available from their individual homepage on the site.

www.sustainablelearning.info

Carbon Detectives Kit

A fun online tool to help Level 2 and 3 pupils calculate their school's carbon footprint and learn how it could be reduced, developed by the Field Studies Council for the DCSF. The carbon footprint calculator works by measuring components of the five DCSF Sustainable School Doorways in your school responsible for CO₂ emissions. Data about these Doorways is collected and entered onto the website and a school carbon footprint is calculated. On the website the Doorways are referred to as Assignments. Some of the assignments are for individuals and some are for the Carbon Detectives Team. The Carbon Detectives Team should work closely with you and other members of staff to calculate the carbon footprint of the school and plan action.

The six assignments for the Carbon Detectives Team are:

- * Energy and water - pupils discover how much water, electricity, gas and other energy the school uses in a year.
- * Food - pupils find out about the food eaten in the school including school meals, packed lunches and snacks, plus drinks.
- * Waste and recycling - pupils measure certain items of waste and how it is disposed.
- * Travel - pupils investigate how people travel to and from school and the trips the school makes.
- * Purchasing - pupils find out how much paper is used, and how many of certain items of equipment the school has and purchases each year.
- * Buildings and grounds - pupils find out about the area of the school and the number of new trees planted each year.

www.carbondetectives.org.uk

Lincolnshire Schools Leaflet – Energy and Water

www.cfbt.com/lincolnshire/PDF/april%20energy%20and%20water.pdf

The [Carbon Trust's](#) free guide '*A Whole School Approach*' (CTV037) provides some introductory information on monitoring consumption and benchmarking your school.

10:10 Campaign for schools

Joining 10:10 makes your school part of the solution to climate change. The aim is to reduce emissions by 10% in one year – or as close as you can get. By reducing emissions you'll be cutting costs and at the same time leading the way on the defining issue of our age. For more ways to get involved, join up to the 10:10 Schools Ning and get help and advice cutting your school's carbon emissions. The 10:10 Schools Ning is a good source of further information and if you post a question, other people in the e-community can help answer it. As well as experienced teachers and headteachers, there are energy experts and other experts who can help you cut your carbon.

You can also request free 10:10 stickers, checklists and buy 10:10 tags through our delivery partner Action Aid. To request free stickers and checklist please email schools@1010uk.org.

www.1010uk.org/education