

energy watch

ENERGY EDUCATION



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HOT SPOT

Latest News

(being energy smart)

Physics On Stage

John Rodway, CREATE's Education Officer, has been invited to 'Physics on Stage', a festival of physics teaching to be held at the European Space Agency in the Netherlands in November 2003.

At the event 300 teachers from more than 22 countries will meet to share ideas and experiences and enjoy performances on the theme "Physics and Life".

For more information about this exciting event visit the website www.physicsonstage.co.uk

Cash Awards

BT Schools Awards offers 240 awards of £2,000 each, to be made this academic year. There will also be three £10,000 National Awards for the best projects overall. Successful projects will show a great enthusiasm for Citizenship, excite and stimulate pupils, involve regular communication and have a long term impact on the community.

To find out more go to www.bt.com/education/schoolsawards

Promote Physics The Institute of Physics is offering grants of up to £500 to support individuals organising events, particularly those to be held in National Science Week, 12 - 21 March 2004.

Application form available from <http://physics.iop.org/iop/grants.html> or email caitlin.watson@iop.org

Volvo Young Environmentalists Awards

...offers ten awards of £500 each to schools and youth groups undertaking a practical environmental project within their community.

For an entry kit send your name and email address to volvoawards@fstrk.com

'A' Grade Energy Users

The Rt. Hon Charles Clarke MP, Secretary of State for Education, visited Elmgrove First and Middle Schools in the London Borough of Harrow in September, to launch a new energy certification scheme for schools. Elmgrove has already benefited from reduced costs and a more comfortable environment by improving energy management, when they participated in the SchoolEnergy programme, which was managed by CREATE. They will be among the first in line for this new award, which continues to encourage a 'whole school approach'.

Schools can register for the scheme at www.est.co.uk/schools

Get Switched On

'Switched On' is a new CD ROM for Citizenship and Personal and Social Education, available free from Ofgem (The Office of Gas and Electricity Markets). Aimed at 14 - 16 year olds, this multimedia resource encourages the development of key consumer skills through class and home based tasks.

You can try out some of the activities online and order your free copy of this valuable new teaching tool at: www.switchedon.gov.uk/switchedon

Government Action Plan

The DFES launched its Sustainable Development Action Plan for Education and Skills on September 23, at the Sustrans conference in Leicester.

The document is available at: www.dfes.gov.uk/sd

Make a Difference

Need volunteers to help reduce energy use in your community? Then why not use 'Make a Difference Day' to launch a long term energy project?

Free resources and easy to adopt activity ideas to support citizenship are available from the CSV (Community Service Volunteers) website www.csv.org.uk

Brian Sherratt and Ken Dunn, share ideas about renewable energy projects in schools. Brian Sherratt, Head teacher at Great Barr School, chaired the last Being Energy Smart Conference in Birmingham, Ken Dunn so inspired delegates at that conference that he has been asked to return to Being Energy Smart 3.



We can't guarantee the sun that shone in March at the Being Energy Smart Conference in Birmingham, but we can promise you an inspiring line up of speakers at our next event. Being Energy Smart 3 will be held on November 12 at the Manchester Museum of Science and Industry.

This conference will focus once again on renewable energy. The key aim is to generate further action and inspire more schools and communities to take the lead from those already forging a way for renewable energy technology and promoting its benefits through local projects.

Practical suggestions will be on offer to help those interested in developing projects to take their ideas forward into action. Anthony Heywood, Clear Skies Assessor, will give an update on the latest funding opportunities.

Supported by the Government Office for the North West (GONW) and Renewables Northwest, this conference will be an opportunity to share experiences and ideas for local renewable energy projects.

Delegates should leave Manchester armed with the tools needed to engender action in their own area: knowledge, advice, contacts and above all the inspiration and enthusiasm to get things moving!

For further information and to book a place at this one day conference visit the CREATE website www.create.org.uk/events or telephone 01942 322271

Case studies will be presented by:

- Nidderdale High School - a recipient of Clear Skies funding
- Arts Factory - a community wind project, generating income for local clubs
- CLAREN - renewable energy heating projects in the North West
- Royston High School - stimulating the curriculum and sharing the benefits of renewable energy at home and abroad

It should help answer questions like:

- Who should manage the project?
- What systems would be suitable for us?
- When will the benefits be realised?
- Where can we find the money and technical support?
- How do we get started?

To find out more about Clear Skies, which offers grants for renewable energy installations visit www.clear-skies.org

Stop Press - Kick-start Funding. . Stop Pres

United Utilities is generously offering a prize of £3,000 to kick-start a school or community renewable energy project.

To be eligible to win this one off cash injection, you must embark on a new project that installs renewable energy technology and demonstrates a commitment to education and community participation. The money may be used to supplement any other grant or sponsorship. This is a unique opportunity to get a renewable energy project off the ground. To apply, all you have to do is submit a summary of your project (no more than 2 sides of A4) indicating your plans, together with information about partners involved and funding sources secured or applied for.

Send your application to: CREATE, Kenley House, 25 Bridgeman Terrace, WN1 1TD by Friday 30 January 2004. Full competition conditions are available from CREATE. Information about funding for projects can be found at www.create.org.uk/funding



Delivering Best Practice

Brunel University student Tim Rogers is on a 4 year Geography degree course, which includes a year on work placement. When Harlington Community School and the London Borough of Hillingdon approached the University, looking for a student to run a renewable energy project, Tim put his name forward.

He said:

"The benefits are great. Personally, I have gained new skills, in communication, dealing with people and time management. I have been able to develop a lot of my own ideas and learnt how to run a large project. The school has received useful and exciting new educational resources. The local authority is pleased too, because the project has raised awareness about the environment and energy efficiency".

A Best Practice Guide for Schools - Investigating Renewable Energy

In October 2002 Tim embarked on an ambitious project, to secure funds to install renewable energy systems and promote renewable energy technology through the school curriculum and to the local people. One year on and Tim has returned to University having achieved everything he set out to do and more! He told EnergyWatch that although the school initially funded his placement, he has managed to raise enough money through grants and from local businesses, to pay for renewable energy systems, educational resources and his position as project manager!

Another excellent outcome from Tim's placement is a guide for schools investigating renewable energy. He has produced this comprehensive sixteen-page document to help other schools that are embarking on a renewable energy project. It provides background information, advice and useful contacts, everything you will need for setting up a project in 'your back yard'.

Tim will be presenting his Best Practice Guide to help inspire others at the Being Energy Smart conference in Manchester on 12 November 2003.



To find out more about this document you can email Tim at: trogers@hillingdongrid.org

Clear Skies Success for School

Nidderdale High School And Community College, North Yorkshire was awarded just over £13,000 in the first round of the DTI's Clear Skies - renewable energy grants programme. This award provided the final piece in the mosaic of support for the school's wind project, supporting funds already secured from the New Opportunities Fund (£50,000) and NPower (£30,000). North Yorkshire County Council gave guidance, staff time and expertise to assist throughout the project. Alan Harrison, Director of Yorkshire Water and supporter of the school's renewable energy project, was invited to switch on the new wind turbine.

The school is the first of 22 community projects being supported by Clear Skies to install their wind turbine, which will meet about 15% of the site's electricity needs. It will save the school £3,000 a year and has an expected lifespan of 20 years. With an annual mean wind speed of 6.5 metres per second at hub height, the gazelle wind turbine is designed to produce over 50,000 kWh per year. This is about equal to the electricity used each year by a small primary school. Councillor John Fort, North Yorkshire County Council's executive member for environmental services and chair of governors at the school said:

"The wind turbine project is an excellent example of how North Yorkshire County Council works with partners in the private sector to deliver real benefits for local communities. As well as generating some of the electricity needed by the school, the wind turbine will be used to demonstrate how other schools, farms, factories or businesses in North Yorkshire can benefit from green, clean electricity."

Jerry Harvey, Deputy Head at Nidderdale will be presenting a case study, 'From Inspiration to Installation' at CREATE's Being Smart conference in Manchester in November.



Left to right are Rose Gardner, Npower, Clifford Wilson, North Yorkshire County Council, Alan Harrison, Yorkshire Water switching on the wind turbine, Stuart Mason, Head teacher, Nidderdale and Chris Roberts, Clear Skies.



Schools and local authorities are encouraged to apply to Clear Skies for a renewable energy grant. The deadlines for community applications for the next two rounds are: October 31 2003 and January 30 2004. You can apply for up to £100,000 or 50% of the total project cost whichever is the lowest. Funding is also available for feasibility studies, up to 75% of the cost, up to a maximum of £10,000. Visit www.clear-skies.org for more information.

(education and training)

Energy Institute

providing education,
training and careers
advice services



The newly formed Energy Institute (EI) was officially launched on 1 September 2003. The Energy Institute was established by merging the Institute of Energy and the Institute of Petroleum. It is the only professional body serving society with independence, professionalism and a wealth of expertise in energy matters. The purpose of the merged body is the promotion of the safe, environmentally responsible and efficient supply and use of energy in all its forms and applications.

Membership of the EI is almost 12,000 individuals and over 400 companies and Universities. These members represent every sector of the energy industry and include engineers, researchers, marketeers, policymakers, consultants, academics and more.

The Institute has also introduced a fast-track 'Affiliate' route to membership, for those whose work is not primarily in energy but who have an interest in the sector.

The services that the Energy Institute provides to its members include:

- Professional recognition
- Knowledge and information provision through conferences, technical publications, journals and online activities
- Extensive technical and scientific support across the energy industry
- Education, training and library information services
- Facilitation of best practice
- Policy debate and influence
- Regional, national and international networks including Special Interest Groups

The Energy Institute provides services and a range of information on careers in the energy sector. The education and training services include distance learning courses, a National Vocational Qualification for energy managers and one-day training workshops on various aspects of energy management. Information on higher education and careers in energy, particularly the growing areas of renewable energy technologies and climate change, are also available.

For further information on all these aspects please contact the Education and Training Officer, Nelle de la Monneraye on 020 7467 7178 or education@energyinst.org.uk.
Alternatively have a look at the website for details on the full range of services available www.energyinst.org.uk

New GNVQ Science

A new GNVQ science course, pioneered by Kingshurst City Technology College, Birmingham, has now been piloted by a further 100 schools.

Mark O'Brien, Assistant Headteacher and Head of Science at Park Community School, Hampshire, told EnergyWatch about the achievements of his pupils this year, which have greatly improved since the introduction of this course at his school:

Strengthening the Teaching of Energy

Last year 59% of 14 year olds achieved Level 5 in Key Stage 3 science tests. The Department for Education and Skills (DfES) aims to increase this to 70% by 2004 and 80% by 2007.

An area identified in the tests as scoring consistently low marks was energy and in order to address this, a training package has been developed - Strengthening the teaching and learning of energy in Key Stage 3 science.

Teachers of Science are being encouraged to participate in training days being run by Local Education Authorities across the country.

CREATE urges schools to take this excellent opportunity to raise the standard of energy education, to help ensure that young people are given clearer understanding of the subject and will be able to make informed decisions about the future use of energy resources.

The main messages given through the training are that:

Energy is a key scientific idea, which is first taught explicitly from the age of 11; from then on it permeates the science curriculum.

There are a number of common misconceptions about energy - for example that energy is 'stuff', or that it can be 'used up'.

It is important that the teaching about energy as a key scientific idea is started early in Year 7 in a way that is made explicit to pupils.

Students need opportunities to develop their understanding of energy in a range of topics, such as ecology, heating and cooling, light, sound, chemical reactions and electricity.



If you are looking for ideas and resources to enhance the teaching of energy and help bring this subject to life, visit the teachers section on the CREATE website www.create.org.uk/schools/teachers

No Car Day

CREATE worked with performing arts students, local schools and community groups in North Wales to help produce an inspirational performance to encourage people to leave their car at home.

Mold Town Centre provided the stage for an extravaganza, which focused on sustainable transport and showed the local community the consequences of increased car travel in terms of environmental impact. The event, which was supported by Flintshire Borough Council, was fun and entertaining and ended with a 'no car zone' street party.

"82 of our most able students were selected to take the new GNVQ science course, which is worth the equivalent of 4 GCSE's, all but two passed. The remainder of the cohort sat the usual double science GCSE. This year the school's 5 A*-C passes rose from 28% to 53%! This has been largely due to the success within the science department.

The style of learning for the GNVQ seems to suit our pupils, there is a lot of investigation and independent learning, which motivates them and we are able to track their progress well through the continual assessment process. The students still have to sit two 1.5 hr examinations, but have the opportunity to re-sit if they need to and this seems to give them extra confidence."

WIN £100

Just tell us what you think of EnergyWatch

Since November 2002, EnergyWatch has been sent to every school in England. The government's Department for Environment, Food and Rural Affairs (DEFRA) provides funding for the publication and distribution of this popular newsletter.

CREATE is always keen to ensure that it continues to be of value to its readers and invites you to take part in an 'online' evaluation.

Please go to www.create.org.uk now, to complete a short questionnaire. All respondents will be entered into a prize draw for £100 to be spent on energy efficiency measures at your home or organisation.

Climate Prediction

Estimates of how much the Earth is likely to warm up over the coming century vary hugely. By taking part in the Climateprediction.net experiment you can help improve scientific forecasts of 21st century climate. Individuals, schools and businesses are invited to download a climate model that will run as a background process on their computer, without affecting other tasks or the PC's performance.

As the model runs, you can watch weather patterns over the globe evolve. The results are sent back via the Internet, and an interactive portal is being developed, to allow you to compare your results with other people's as the experiment progresses. The Open University will be offering a short course based on the project.



To find out more visit www.climateprediction.net

CREATE has been working with pupils and staff at Park Community school through the Hampshire Energy Wise education programme, funded by Havant Borough Council, and has provided some useful support and information to help with the renewable energy unit within the AQA GNVQ Science curriculum. Further support will now be offered and it is hoped that the interest generated in renewable energy may result in the installation of working systems for the school and its community.

The GNVQ science pilot has now been extended to between 400 and 500 schools.



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energy watch

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CREATE



People Power for Liverpool

An environmental awareness raising, education and community empowerment programme is under way in a designated regeneration area of Liverpool.

CREATE has been appointed by INclude Neighbourhood Regeneration Ltd, a non profit making regeneration organisation, to work in partnership with Liverpool City Council, Liverpool University, Energywise Recycling and local community groups to deliver the programme.

This innovative scheme, which involves schools, youth groups and local community organisations, aims to increase awareness of the need to recycle, reuse and reduce waste. The project is predominantly funded by Onyx Environmental Trust.

Several exciting and original ideas have been devised by CREATE's Project Co-ordinator, Sandy Carter, to help inspire the local people to take action against waste.

Residents of a sheltered housing scheme were taken on 'A Trip Down Memory Lane', to stimulate discussion about how the local environment has changed. Some of the residents then visited a local primary school to talk about how they used to reuse items and rarely threw anything away! This brought out an awareness of the need to return to more environmentally friendly habits. Following this visit the children came up with some very creative ideas for reusing and recycling things that they would normally have thrown away. They made musical instruments from waste materials and performed a concert for the local residents they had met.



This striking display was produced by St Philomen's Young Campaigners to be displayed in churches throughout their local neighbourhood within Liverpool.

At a local "grot spot", an overgrown area that looked uncared for, young people have produced a mural, featuring the 'goodie' and the 'baddy' in the form of 'Recyclo Man' and 'Litter Van Damme'. This art feature will spread the message about waste and recycling to local residents. The young people involved in this art project were members of INclude Young Voices, a community youth group that has grown out of a national initiative, undertaken by Groundwork and Save the Children, to involve young people in regeneration decision making.

More exciting events are planned, including a Recycling Challenge, Waste Bingo and a Fashion Show to promote the recycling of unwanted clothes and other materials. Over a period of 16 months Liverpool University will measure the effectiveness of the activities being carried out and it is hoped that these efforts by CREATE, it's partners, and, most of all, by the local people of all ages, encourage more action to care for their environment.

Did you know that..... Recycling one aluminium can save enough energy to run a TV for 1 hour Recycling 1 glass bottle could save enough energy to power a light bulb for 1 hour Recycling one tonne of paper (100 bin bags full) may save enough energy to heat an average home for 6 months! Source: Energywise Recycling and the National Trust

Watts in Your Wires

'Watts in Your Wires' is a new 15 minute training video; produced by Shot in the Dark, Centre for Environmental Communications.

The video, which is suitable for office staff, uses computer generated imagery, workshop demonstrations and a few balloons to show how electricity is wasted, where consumption can be reduced and why we need to monitor it.

One of CREATE's energy meters will be supplied with every package. The energy meter is a plug in device that can be used to enhance training sessions by allowing staff to see actual energy consumption figures in real time.

This new film illustrates the financial and environmental costs of every day office equipment and is designed to motivate staff by making the invisible visible. The inevitable 'office cynic' makes a cameo appearance to help pro-actively manage any negative attitudes in the audience.



Sowing SEED in South Staffordshire

South Staffordshire Youth Service and CREATE have secured funding through the Social Economic and Environmental Development (SEED) fund to run an energy efficiency awareness programme in youth centres across the district.

CREATE is now working with the youth service to carry out energy audits of centres and run interactive sessions for 13 - 19 year olds. Training and resource packs for youth workers will be provided, together with skill based training for young people via existing schemes such as NVQ and Duke of Edinburgh's Award.

To find out more visit the website www.shotinthedark.co.uk To order telephone 01484 400008 or email info@shotinthedark.co.uk



Consider the iceberg theory

Do you know how much you really spend on energy for your business? Or perhaps, how much you could save if a few things were done a little differently?

As a government-funded programme, Action Energy offers a free survey of your current energy usage. Tailored to your needs, we'll develop and help you implement an energy saving action plan that could put thousands back into your profit margin. You're bound to see the difference.

For a free energy survey, call:
(quote ref: EWice210)

0800 58 57 94
www.actionenergy.org.uk


From the Carbon Trust