

sustainable development news for teachers

summer term 2002

This issue is about
!ENERGY!

...How to save it and how to help and encourage schools to look into using and investing in renewable energy.

The benefits are:

- helping to reduce CO2 emissions and climate change
- saving money on fuel bills

Energy project work will:

- introduce pupils to (clean) technologies of the future
- link directly with curriculum work and
- provide a stimulating context for school councils

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££ - grants you can tap into

- the £20 million Photovoltaic Demonstration Programme
- Re-Connect - the Community Renewable Initiative - £1.6m
- New Opportunities Fund (NOF), Seed Programme Money (see p.2) for details see overleaf

And keep an eye on
www.schoolenergy.org.uk website in future for grants

Start here @
CREATE

the one-stop shop for energy matters

CREATE is the Centre for Research, Education and Training in Energy

CREATE has expertise in developing:

- education strategies
- resource materials
- training packages for head teachers and curriculum leaders
- delivering innovative classroom sessions across the school age range

CREATE programmes are designed to - bring added value to existing work in many subjects by using energy as a real-world context.

Contact 01942 322271 or look up the newly revamped website:
http://www.create.org.uk/

visit associated web sites:
http://www.eef.uk.net/ web for the Energy Education Forum

http://www.energychest.net/
http://www.funergy.org.uk/

Energy Use Facts and Figures... Energy Use Facts and Figures...Energy Use Facts

- The average school could save up to £17.85 per pupil per year by implementing energy efficiency measures. This would result in a 23% reduction in carbon dioxide emissions.



RE-connect

The Community Renewable Initiative

For WIND SOLAR HYDRO BIOMASS projects

Funded by the Countryside Agency
A £1.6 million scheme to help schools, village/ community halls, shops, farms and housing developments etc in England to play their part in reducing the effects of climate change.

On offer

free advice and training on:

- funding
- feasibility studies
- technology issues
- environmental assessments
- planning and
- public participation

Your local team is set up @ Ecotech
contact Michael Helen tel: 01760 726129, or
email: jfraser@ecotech.org.uk

Or visit [www.countryside.gov.uk/](http://www.countryside.gov.uk/communityrenewables)
communityrenewables.

Supported in Norfolk by **Ecotech**, National Energy Foundation (NEF) and Anglia Woodnet.

New Opportunities Fund Seed Programme

Money for *after school* work on energy efficiency, training related to energy, energy awareness raising, an advisory programme, or work on biomass fuels.

For guidance notes and to download the application form, go to www.rsnc.org and click on SEED.

£20m

from the Department of Trade and Industry for photo voltaics (PV) via the

Energy Saving Trust

over 3 years, starting May 2002

The % of grant depends on the scale of your project. From 0.5kilowatts (kw) to 5kw the grant is 50%, from 5 to 100kw it's 65%. Most schools' projects are likely to be eligible for 50%.

To find out about it and apply online go to www.est.org.uk/solar/
The helpline 0800 298 3978 is helpful.

Solar PV is the technology that turns daylight into clean electricity.

On the website you will find a list of approved installers and information about PV products. An installer can help you develop your application by giving you technical advice. You may need to get planning permission.

Assuming you are eligible for a small scale grant ie 50%, applications are dealt with on a rolling basis, and you will be notified of a decision within 5 working days.

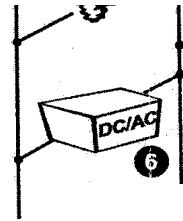
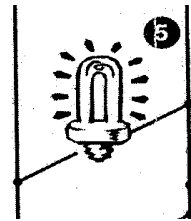
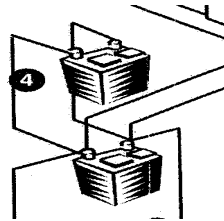
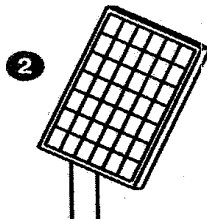
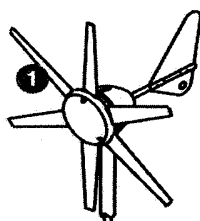
photo=light
voltaics=production of electricity

Planet Energy

Take the Renewable energy trail in search of the mysterious forces on our planet. Go to www.dti.gov.uk/renewable/ed_pack

Energy Use Facts and Figures... Energy Use Facts and Figures...Energy Use Facts

- UK Schools account for 25% of public sector energy costs. They spend nearly £400 million per year on energy.



Why do an energy audit?

- to find out how much power you use and on what
- then plan to reduce energy consumption, and
- decide what renewables to use

Where do you start?

- set up your energy team or work through your school council/ eco-council to undertake an energy audit
- Eco Schools have a format you can use. See www.eco-schools.org.uk, and for a free handbook click on 'Join in' or call Sue Falch-Lovesey 01603 222985 for an application form to get one
- Call John Cobb, NPS Energy Adviser (see overleaf)
- Call your District Council Energy Officer (see p 6)

opportunities to find out about Ecoschools:

- 3 October 2.30-4.30pm and 6-8pm @ Ecotech tel: 017607 26100
- 28 November 2-4pm @ Wells Field Study Centre, tel: 01328 710525



A British Gas programme for 7-11 year olds.

A classroom pack for teachers, pupils and parents.

Think Energy Helpline 020 7401 4070 or go to www.think-energy.com

The SchoolEnergy programme

promotes the whole school approach to Energy Efficiency, and encourages schools to save money and reduce carbon dioxide emissions by:

- Producing an energy policy, embedding energy management within normal management procedures.
- Carrying out an energy survey to identify how energy is wasted.
- Taking action to use energy more efficiently.
- Including energy efficiency in the curriculum.

Call 0870 7000 457 or visit the website <http://www.schoolenergy.org.uk/>

Contact the Government's Environment and Energy Helpline - 0800 585794 for further information.

Support available through the programme:

- Advice and information.
- Education materials
- Accreditation scheme - under development.

EnergyZone:

EnergyZone is a guide for teachers to energy-related topics in the National Curriculum, with some resources available to assist teaching.

send off to CREATE for your step by step guide to setting up an e*-team

* energy efficiency team

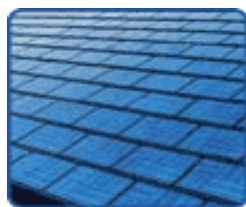
.....see contact details on front page

Energy Use Facts and Figures... Energy Use Facts and Figures...Energy Use Facts

- The 25% most inefficient schools use more than three times as much energy per pupil than the most efficient 25%.



greenscene in brief



the future is here!

Visit Ecotech - the centre for sustainability - and climb the highest wind turbine in the UK!

For information on group visits

tel: 01760 726100, or go to

<http://www.ecotech.org.uk>.

for useful explanations about sustainability and some good web links.

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Norfolk County Council's

Norfolk Property Services

Serving the Education Department.

NPS can provide advice/services on the following energy related matters:

- **Energy audits**
- Fuel Monitoring and targeting
- Fuel procurement advice
- Fuel bill enquiries
- Tariff analysis
- Apportionment of energy costs on shared sites



**Contact John Cobb,
Environmental Manager
01603 222674, or email:
john.cobb.nps@norfolk.gov.uk**

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VISIT iNSPIRE

a hands-on DISCOVERY cENTRE @

St Michael's Church, Coslaney Street, Norwich

or book one of their

tOURING sCIENCE sHOWS

such as 'The force is with you' or 'Light up your life'.

tel: 01603 612612 fax: 01603 616721

Wells Field Study Centre gets Eco-Schools Status

Eco-schools is a holistic approach. So, what did they do to achieve it with regard to energy?

For starters....

- monitor electricity and gas each day and look at how to reduce their consumption
- establish an eco-trail around the building which points out energy-efficiency features ...eg lined curtains, FSC wooden shelves above individually controlled radiators, a fridge with low energy ratings.....

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sOLAR eENERGY aLLIANCE

Is a local firm who can

- supply advice (an introductory talk) and
- install renewable equipment eg solar panels

call Chris Goodings on 01502 515532

or visit <http://www.gosolar.u-net.com>

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cLIMATE cHANGE LEVY (CCL)

Check out where you stand and whether you are eligible for reduced rate VAT on fuel :

http://www.schoolenergy.org.uk/se_england.asp

Climate Change Levy Helpline (HMC&E):

Tel 0161 827 0332 or 0161 261 7079/7095/7259

E-mail: helpdesk.ccl@hmce.gov.uk

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To find out who is the greenest supplier check out the league table (and lots of guidance)

on the Friends of the Earth website:

www.foe.co.uk

cONTACT

Corinne Livingstone 01603 222810, email corinne.livingstone.pt@norfolk.gov.uk or

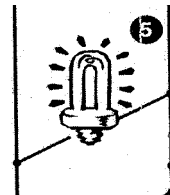
Sue Falch-Lovesey 01602 222985, email sue.falch-lovesey.edu@norfolk.gov.uk

**'greenscene' is produced by the
Departments of Planning and
Transportation (Environmental Co-
ordination Team) and Norfolk Education
Advisory Service**



MORE ENERGY NEWS

for teachers



book a visit from Broadland's school energy bus

a fun way to find out more about

- ➔ how to be energy efficient or
- ➔ renewable energy

The bus has examples of PV/solar panels and a wind turbine.



school energy bus

Here it is - recently repainted with designs by Norfolk schoolchildren.

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To book call Paul Bourgeois @ Broadland District Council on 01603 703375 .

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If your school is outside the Broadland area he will give you details about your local District Council Officer who will organise the booking.

Introduce pupils to renewable energy through a demo solar kit.

Contact the Centre for Alternative Technology @ <http://www.cat.org.uk/>
OR register with NEF to get a small 'powered renewable kit' from Marlec: www.marlec.co.uk.

Primary Schools - build your own mini solar water heater

To find out how, access the instructions on

www.greenenergy.org.uk

and click on 'Renewable energy for schools'

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greenenergy information sheets will be available soon on:

- ➔ Renewable Energy
- ➔ Solar energy
- ➔ Wind Power
- ➔ Water Power
- ➔ Biomass
- ➔ Geothermal

Call their office on 0800 138 0889 or e-mail enquiries@greenenergy.org.uk to receive them by post (free of charge).

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The greenenergy website is the website of **NEF Renewables - or the National Energy Foundation**

Contact them on **01908 665555** and talk to their Education Officer to find out more about their:

- ➔ mobile exhibition /bus, with on-board library
- ➔ drama presentation on renewable energy for assembly for up to year 3
- ➔ interactive classroom work (all ages)

Their education work is being being developed continuously.

Facts and Figures about climate change... Facts and Figures about climate change

- ➔ By 2080 the average temperature for the UK may rise between 2 and 3.5 degrees C. There will be greater warming in the south and east than the west and north. To discover more go to: www.ukcip.org.uk/climate_change

ptO for useful websites

funergy!



check out Lolly's links

from the funergy website

Energy Chest

The site includes basic information on energy and its use, curriculum activities, notes for teachers and a library of links to other energy and environmental sites.

<http://www.energyquest.ca.gov/index.html>

Greenpeace – UK

Click on GP-info, then Nature Power to find a curriculum based education programme exploring energy and our environment for Key stage 3. Includes movies, learning resources, quizzes and tasks, all supported by teachers notes.

<http://www.greenpeace.org.uk/>

Global Warming

For children 7-11 and 12-16 plus teachers. Gives information about climate change to help with projects and coursework. Also offers tips on what you can do!

<http://www.defra.gov.uk/environment/climatechange/schools/index.htm>

Energy Quest, USA

Californian Energy Commission - site for young people. Colourful and informative, with lots of energy information, puzzles, stories, jokes and even an art gallery! Well worth a 'hit' by children and adults alike.

<http://www.energyquest.ca.gov/index.html>

Skolernes EnergiForum

This is a Danish website, but the work sheets at this address are in English. Find out how to store electricity or make windmill blades...and more...

http://www.skolernesenergiforum.dk/materialekasse/English_index.htm

NGfL

National Grid for Learning.

<http://www.ngfl.gov.uk/>

Young Energy Savers

What do you know about energy? Why save energy?

A questionnaire to test your knowledge, followed by information about where and how energy is used in schools, presented in a classroom friendly

<http://www.gowild.org.uk/yes/home.htm?intro>

Doing Your Bit, UK

Facts, ideas and news about sustainable living, from the UK Department of the Environment, Transport and the Regions (DETR).

<http://www.doingyourbit.org.uk/index.html>

Green Code Programme

Get details of the free material for schools aimed at helping young people understand the principles of sustainable development in a fun a stimulating way. Kids, click on 'Search' to get the information you need for that 'green' project - quickly.

<http://www.greencode.org.uk/>

SunDay

An annual event to promote the everyday use of renewable energy. Find out what happened last year and consider organising or taking part in an event near you!

<http://www.defra.gov.uk/environment/climatechange/schools/index.htm>