

THE GREEN PAGE

HB Alternative Technology Centre, Hebble End Mill, Hebden Bridge, HX7 6HJ
daytime tel: 01422-842121 • fax: 01422 84 31 41 • info@alternativetechnology.org.uk • www.alternativetechnology.org.uk

Views expressed by individuals in the Green Page do not necessarily represent the views of the ATC

WINDLESS IN HOLLINGWORTH

Forty Children from Calderdale and Rochdale plugged themselves into renewable energy during half term week. The two days of fun learning activities, at Hollingworth Lake Visitor Centre and Ogden Water Centre, were delivered by Nic Blair from SUSchool and organised by the Southern Pennines Heritage Education Access Network.

After finding out about our energy needs and the need to reduce our dependency on fossil fuels, the children got hands on experience connecting photovoltaic cells, miniature windmills and water generators to Light Emitting Diodes (LEDs) and sound sources. Nic commented that practical exercises like these are the best way to raise awareness of energy issues:

"These plug in kits are brilliant at showing how different forms of renewable energy work. Through days like these, children can learn valuable information that they can take home, take to school and take to their friends – and have fun as well".

In the afternoon, the children built windmills from recycled materials and generated electricity in the wind – or at a windless Hollingworth Lake by running while holding the windmills!

"Renewable energy's much more fun than the stuff from big power stations, and its better for the planet" said a damp and windswept Clare; "I liked the water generator and running



along the dam with my windmill best"!

We are grateful for the help from Calderdale and Rochdale Countryside Services and the Heritage Lottery Fund that enabled these events to take place. They are still avail-

able as workshops to schools and groups by arrangement with SUSchool at the ATC. Contact Polly Webber (01422) 842121 for further details.

BLOWING IN THE WIND

It is commonly agreed that a much greater emphasis must be placed on energy efficiency. Yet whilst our energy consumption continues to rise, even if we were to make unheralded improvements in energy efficiency, we will still need to find cheap, reliable and non-polluting forms of energy. Despite the biggest rise in energy efficiency improvements in modern history, energy consumption still rose by 7.5% between 1995 and 2000. In the United Kingdom about 30% of our highly polluting carbon dioxide emissions currently come from power stations that produce electricity. Improved energy efficiency measures must go hand-in-hand with utilising renewable energy sources.

It is essential that all sources of genuinely renewable and environmentally friendly energy are exploited to enable us to create a more sustainable environment. Wind power is currently the best developed of the more modern technologies, it is one of the few renewables that is ready to compete on price today (wind power can now produce electricity at a cheaper price than nuclear power in the UK and that's before the full environmental costs of

nuclear power is taken into account!), and fortunately for us the UK has the greatest potential for wind power in Europe! Wind must form a major part of our energy production capability along with biomass, solar power and many other renewables.

The rumour that wind turbines only work 30% of the time is misleading. A more accurate figure for actual electricity production would be between 70 and 85%! The claim (based on the 30% figure) that the Ovenden Moor wind farm produces no power for 266 days each year is nonsense. Power generation does vary at different wind speeds and will average out at around 30% of the theoretical maximum power output of the turbine, but the average for all electricity suppliers to the national grid is only around 50%.

The suggestion that wind turbines are not reliable is misleading. No power stations are able to operate all of the time without stopping. A great advantage of wind power however is that the electricity supply is much greater during the colder windier months of the year when energy demand is higher.

The suggestion that

tourism is adversely affected by the proximity of a wind farm has been disproved by countless surveys. Opinion polls also regularly show that the vast majority of people living near wind farms either approve or strongly approve of their construction. The recent Countryside Council for Wales survey demonstrated that between 74% and 83% of people living near three Welsh wind farms thought that they were acceptable developments. The Scottish Executive survey found that although 40% of respondents anticipated problems prior to development of a wind farm only 9% reported a problem once it was built.

The use of renewable energy is not a new concept but modern technologies do offer us the opportunity to gain real benefits from sustainable and renewable energy sources. Wind power is a practical, economically viable and government endorsed generator of clean electricity. If we are serious about reducing the serious threat to our environment and lifestyles then well planned and carefully sited wind farms, that are developed with sensitive consultation must be an essential feature of our landscapes.

Willow weaving



The ATC's willow weaving workshop held at the end of November was a wonderful success. Hosted by local gardeners Claire Blakey and Helen Blackwell several willow plant stands and hurdles were completed and taken home at the end of the day by very satisfied participants. Helen and Claire have a wealth of experience in constructing willow structures for schools and private gardens and have helped to create all of the sculptural structures in Primrose Garden through workshops in recent years. Due to the overwhelming interest in this workshop another one will be held in the New Year on Friday 28th January. The cost will be £15 per person. For further information please contact Susy Feltham at the ATC (01422) 842121.

Raised Vegetables

Here are the recently completed raised vegetable beds at Stubbings Infants School. They have been designed to be used by the whole school; the lower bed is easily accessible to the very youngest children and both beds are narrow enough to allow the children to reach into the centre. The growing areas are deep to allow vegetables to be planted close together and to conserve water, as the roots can grow deeper. The beds were designed by the ATC and expertly constructed by local builders Roger Ditchburn, Angus Mitchell and Dan Strachan. Rising out from the cobbled playground they are built from reclaimed stone and

the remaining lock gates that were left over from the planters and benches that were installed in the main playground.

The school has raised some money for seeds and tools and

teachers Rachel Kirby and Julie Harris are planning to start preparing for the growing season with children at the start of next term.



A Sideways look:

Support your local shop Vaughan Ryan

I recognise the pitiful state that our society is in. I walk amongst you on Market Street with my head down wondering what is to be done about the puddles near bus stops. I am appalled by the selfish and unsocial attitudes foisted upon us by much of the media. I rage silently against the amount of vehicles driving along the canal towpath. I wonder what sort of award a mill conversion could possibly deserve after making its neighbours' lives unbearable for weeks on end. I am not stimulated into action by politicians because I am not convinced of the worth of their political system. Why vote when not even those elected can stop the sale and ultimate loss of a community resource?

But I'm not apathetic. I know that there is something I can do over which I have a very strong control. I know that every penny of every pound I

spend (and save!) encourages activity. I can influence what goes on around me. I am determined that my spending power will encourage as much positive and useful activity as it can in my local community and beyond. I am thinking globally and acting locally. I have discovered a powerful tool. For too long I have consumed without thought, wasting time journeying long distances to drop money into far off tills, needlessly exploiting workers and supporting slave labour, foolishly donating money to animal abusers and environment polluters.

My money will win battles. It will talk to the selfish in a language they understand. I'm becoming an ethical consumer. If it can, it will be bought locally. I'll be sourcing sustainable businesses that don't exploit or pollute. No genetically modified organisms here. I'm

actively seeking out the Fairtrade labels (and there's loads in the Co-Op!). I'm purchasing cruelty-free products from companies that don't test other products on animals. I'm sending a message of support to sustainable and responsible business people and denying my custom to those who are slowly destroying the fabric of our society. I'm avoiding those who didn't support the results of the traffic review consultation. I'm joining the 52% of people who say that they are actively boycotting at least one product. I'm challenging my long held ideas and attitudes about shopping and consumerism and I'm loving it.

I'm part of a movement that cost the enemy £2.6 billion in lost sales last year. Come and join me, support your local shop, the World Trade Organisation is wobbling.

THE A-Z OF RECYCLING

X is for...XMAS

(well you try thinking of something else beginning with X!)

Over the Christmas period the United Kingdom throws up to 30% more glass bottles, and aluminium and steel cans than usual into its dustbins, helping to create more than 3 million tonnes of rubbish. A staggering extra 500 million aluminium and steel drinks cans will be used over the Christmas period. It's estimated that as much as 83 square kilometres of wrapping paper will end up in the bin. That's enough to cover an area larger than Guernsey (now there's a thought!). The main sources of extra rubbish during the festive season are packaging and cards, glass, cans and Christmas trees, all of which can be recycled. Recycling is the most cost-effective solution for re-using these valuable resources so don't forget to fill up those black kerbside boxes and make regular visits to your local recycling sites (your body will appreciate all the activity it can get!).

Christmas cards – Up to 1 billion cards will end up in the waste stream this Christmas (that's 17 for every man, woman and child!). Whenever possible buy cards made from recycled materials. Consider making your own (The Green Shop has a large selection of recycled card), perhaps try sending e-cards, but make sure that you bring all of your unwanted cards to the ATC after January 5th for recycling

with Kerbside. If you can't get to the ATC there will be collections at most WHSmith and Tesco stores.

Christmas presents – Buy locally, buy recycled and buy durable presents whenever possible. Visit The Green Shop or www.rethinkrubbish.com to see a wide range of excellent recycled gifts. Avoid presents with excessive packaging! Around 125,000 tonnes of plastic packaging is thrown away over Christmas. If you receive an unwanted gift consider passing it on to a charity shop, or after school club! More than 80,000 tonnes of old clothes are thrown away every Christmas. Consider donating unwanted clothes to charity shops or place them in a textile bank. Use labels and tags on presents that are recycled from your old Christmas cards. If you didn't save any last year the ATC has a large collection for you to sort through!

Christmas trees – Instead of buying a tree consider renting a living tree that can continue growing after Christmas is over. Over 6 million trees were bought in the United Kingdom last year. Most were thrown away after Twelfth night, creating an additional 9,000 tonnes of rubbish. The ATC will once again be renting out trees this year that have been grown on Hill Top Farm, Edgworth. Contact Abby at the ATC (01422) 842121 for more information. Trees will also be available at the Farmer's Market in Hebden Bridge on Sunday December 19th.

Beyond the Valley

WIND WIND WIND!

After nearly thirteen years in pipeline plans that allow for five 1.3 MW wind turbines to be constructed on a site at Westmill in Oxfordshire have at last been approved by the local Development Control Committee. At the same time a late legal challenge to the proposed development was refused by a London Court. This will be the first wind farm in the south east region, it will be entirely community owned, and in recognition of this the Westmill wind farm co-operative was recently awarded the Thames Valley Energy Award for best business.

THE LITTLE GREEN BOOK

With a population of well over 1 billion and an economy that grew 9% last year, China's future is of direct consequence to everyone. It is one of the world's largest polluters and faces huge environmental challenges but it has built the largest tidal energy project in the world, promoted a massive solar energy programme and is the largest manufacturer of solar cells. By the end of 2010 all Chinese cities will be expected to reduce their building's energy use by 50% and over 80 million square metres of building space will be powered using solar and other renewable energies.

TOP GEAR

The huge potential for electric cars has been demonstrated by a group of Japanese students developing an 8-wheeled all-electric vehicle that has achieved 0-60 in four seconds and is faster than a Porsche 911. It has a range of 180 miles and incredible handling due to the 8 wheels, each of which has its own in-hub electric motor. Volvo has also recently showcased an electric sports car that was designed in California, where the State Legislature has recently acted to cut the amount of greenhouse gas emissions that can be released from vehicles that are sold in the state.

TWO WHEELS GOOD

Cycling activity has risen by 23% in London during this year with 73% more cyclists entering the central congestion zone at peak times. Powabyke have now sold 20,000 of their electric bicycles in just five years of business in the UK, and are beginning to make inroads into mainland Europe's bike market. Recognised by the European Union as license-free and insurance-free cycles, instead of mopeds, research has shown that 42% of Powabyke owners purchased them in place of a second car. The average Powabyke does 1,200 miles a year, which is equivalent to them having saved approximately 800,000 gallons of fuel! B

FLUSHED WITH SUCCESS

A former technology, science and maths teacher from Mirfield, West Yorkshire is laying claim to having invented the biggest water saving device for over 100 years. David Wilks has developed the Interflush, a kit which is suitable for 90% of toilets and sits on top of the plastic siphons and connects to the flushing handle inside the toilet system. He claims it can save up to 45% of the water used on a conventional flush, which amounts to approximately 1,000 litres per fortnight for the average family. For every cubic metre of water not used 0.9kw of energy used to pump water to your house is saved.