

# 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

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## ANOTHER SCHOOL GETS SUSSED!



EARLIER THIS MONTH MOORSIDE JUNIOR SCHOOL IN OVENDEN, HALIFAX celebrated their first season's harvest with a spectacular open-air party in their new "Culture Club" garden. Whilst enjoying the inspiring environment guests could also buy freshly dug potatoes and hand picked lettuces and coriander which were lined up alongside home-made cakes and biscuits.

There was no shortage of offers for tours of the garden that consists of raised vegetable beds, a herb patch, pond and wildlife space. The project has been completed in only 4 months thanks to a lot of hard work by pupils, staff and parents at the school.

The ATC had provided the initial plan for the garden along with a construction guide and month-by-month advice on building and planting. The plans were all linked closely with the ongoing project that SUSCHOOL has been carrying out with local schools on food issues - which examines healthy eating, food miles and growing your own fruit and vegetables.

For more information on SUSCHOOL contact the co-ordinator on 01422 842121 or [www.suschool.org.uk](http://www.suschool.org.uk).



## Beyond The Valley

### GERMANY CALLING

Whilst we're labouring along with average 43.6 hour working weeks the Germans manage to make do with 35. They have also introduced targets to switch 20% of their agricultural production to organic methods, and cut greenhouse gas emissions by 40% by 2020, despite being one of the highest car users in Europe. They are the second greatest producer of photovoltaic electricity (Japan are top of the league), produce approximately 33% of the world's wind powered electricity, and can take plastic bottles and cans back to shops to get their deposits back!

### KIELDER POWER

A school, youth hostel, business units, six 3-bedroomed houses and the Kielder Castle Visitor Centre in a small Northumberland village are getting their heating and hot water pro-

vided by an energy generation scheme that uses sustainably harvested wood from the nearby Kielder Forest. This biomass system will use 250 tonnes of woodchips supplied by the Forestry Commission each year. The Regional Development Agency hopes to promote the North East as the biomass capital of Britain and aims to achieve a target of 50MW of biomass power, enough to provide hot water for all house in Northumberland, by 2010.

### LONDON CALLING

Bus speeds have increased by 6%, disruption to passenger journeys caused by traffic delays has fallen by 60% and there are 38% more people using buses inside the inner London "zone" just one year after the introduction of the "congestion charge". About 50% of car users have opted for public transport inside the zone, resulting in approximately 70,000 fewer vehicle journeys each day. This represents a 15%

drop in traffic, and congestion is down 30%. A 12% reduction in nitrogen oxide emissions and "fine particles" and a 19% drop in carbon dioxide pollution have also been recorded.

### SUSTAINABLE SCHOOLS

Buntingsdale School near Market Drayton and Ladygrove School, Telford are both switching to renewable energy supplies. At Buntingsdale a 40kW ground-source heat pump now heats the classrooms and has enabled the school to cut its electric heating by approximately 66%, saving 18 tonnes of carbon dioxide a year. Ladygrove is installing a 2.5kW wind turbine that is expected to generate 6,600kWh of electricity a year, roughly equivalent to the consumption of two average households. Approximately half of the project cost of £12,000 was met by a Clear Skies grant from the DTI.

## A SIDWAYS VIEW Bobby Logic (AKA Eric Young)

"According to today's newspaper Noel Edmonds will soon be telling you that wind turbines are excessively noisy, unreliable, inefficient, won't reduce pollution, waste land, don't create jobs, cause house prices to fall, deter tourists, kill birds, and frighten horses. (Haven't we heard that somewhere before?) Noel Edmonds might also tell you that Mr Bobby is funny. Should we believe anything he says? The evidence is stacked against him! Videos of "Noel's House Party" will end one argument and a quick scan of the impartially researched information on renewable energies will expose the other claims as nonsense.

Well-designed, suitably positioned wind turbines aren't noisy. Visit one and listen for yourself. The Scottish Executive discovered that only 1% of people living near wind turbines thought that they were noisy. And I bet that 1% was Sean Connery making one of his rare tax-free visits.

Any claim of inefficiency conveniently ignores the fact that the fuel for wind energy is free and clean. Unlike inefficient, dirty coal and gas-fired power stations, where much of

the energy is wasted as heat, there is no comparable "waste" if some of the wind is not used! Noel Edmonds might point out that wind farms only produce around 30% of their theoretical capacity but this should not be confused with inefficiency. The wind supply does not allow turbines to work non-stop throughout the course of a year, and the energy outputs of wind turbines are calculated for them working at 30% of their capacity.

Unlike gas and coal powered electricity, wind power will reduce the amount of carbon dioxide being released into the atmosphere. Wind turbines offer the cheapest available and most developed renewable energy to deliver carbon cuts on a large scale.

A wind farm will only use approximately 1% of the land on which it is sited. The remainder could be used for farming or be protected as wildlife habitats. The RSPB supports sensitively sited wind farms because it recognises that wind turbines are less of a danger to birds than electricity cables. The British Horse Society is also not opposed to wind farms, it has found no conclusive evidence that turbines frighten horses. The UK's first

wind farm was actually built next to a stud farm and horse riding school! Have you ever spotted any sheep or cows too scared to graze around wind turbines?

Wind energy creates jobs too. The New York State Energy office has concluded that wind power creates 66% more jobs than coal fired electricity generation. Wind farms can also provide an important source of income for local people. They are a longstanding tourist attraction! A Cornish wind farm had 350,000 visitors in its first 8 years of operation, and a MORI poll in Scotland reported that 80% of tourists would be interested in visiting a wind farm!

And there is no evidence that house prices fall due to their proximity to a wind farm!

Used together with other renewable energies and wholesale energy efficiency measures wind power offers us the opportunity of a more sustainable future. The UK has the greatest wind resource in Europe. Even if you don't like the look of them (and are partial to lurid, multi-coloured sweaters) I believe you should open your eyes to their environmental benefits that are far too great for us to lose.

## THE SANE SCIENTIST

### Two ways to convert your own home into a mini power station

#### 1. The photovoltaic method-

When sunlight strikes a photovoltaic solar panel the photons in the light interact with the photovoltaic material and cause an electric current to flow (if an electric circuit is connected to the panel!) - electricity is produced for you to use in your house. You will require about 8 square metres of panels to generate 1 kilowatt of energy in the summer sunshine, with lower efficiencies in cloudy conditions. Photovoltaic panels are a no-fuel system with a very low environmental impact, and if fitted now will still be working when the UK has used up all of its own gas supplies and is reliant on imports from Russian and the Baltic States.

You may think - "but I also need electricity at night when the sun doesn't shine?" Remember, your house is a power station. During the day your solar roof is generating excess electricity and supplying it to the National Grid if you're not using it all. Your electricity company monitors the export of this electricity and deducts the amount from any you use from the National Grid when your solar panel isn't working.

#### 2. The Micro Combined Heat and Power method-

At present you probably pay for gas that you burn in your heating system to produce heat for central heating and hot water. The heat in the exhaust gas from your boiler is wasted to the atmosphere. You also buy electricity for the multitude of machines and gadgets you require power for. In doing this you are only using about 70% of the energy in the gas you burn and about 35% of the energy in the coal used in the power station to produce your electricity.

A micro combined heat and power (CHP) unit, which enables you to produce heat and electricity from a single source in your own home, can help stop this waste. It can work at an efficiency level of 90% enabling you to use less fuel for a similar level of service!

The micro CHP unit usually takes the form of a white steel box about the size of an average domestic fridge. It contains a Sterling engine that is powered by heat from burning the gas, and an alternator that is driven by the engine. The heat from the gas flows through a heat exchanger to provide domestic hot water and central heating. All of the time the system is running it is producing heat for you to use and electricity for your immediate use or export to the National Grid. This system will reduce the environmental impact of burning gas for heat and coal for electricity whilst making your personal energy consumption that much more sustainable.

## THE A-Z OF RECYCLING : V is for victory!

But the Germans are doing it better than us again!

Recycling gives everybody the opportunity to make a real improvement to their local environments. By reducing our demand for non-recycled (and non-recyclable) products, re-using and repairing goods whenever possible and recycling everything we can, we will protect and preserve valuable resources whilst saving us all money!

Sadly, whilst Germany recycles 48% of its domestic waste, Britain only manages about 11%. If every country recycled as much paper as the Germans, the industry worldwide would use nearly a third less wood and consume up to 50% less energy! As if that wasn't enough, like many of us in times past, most Germans enjoy taking their empty bottles back to supermarkets to reclaim deposits! I'm getting jealous...

**Vacuum cleaners and video recorders** - Unwanted working vacuum cleaners and video recorders can be donated to Sitting Comfortably (01422 329895 / 01274 731909) or deposited in the special unit at Eastwood Waste Transfer Station, Lord Dales (01422 844148) and Valley Electronics (01422 885088)

will repair vacuum cleaners and video recorders.

**Vegetable waste and peelings** - Estimates vary, but it is generally agreed that up to a third of all household "waste" is derived from kitchens and gardens. All of it can be successfully composted with other materials to produce a valuable resource for your garden or allotment. On the other hand, if food waste is continually dumped in landfill sites it will invariably create a highly dangerous pollutant that will damage water supplies and affect air quality.

**Vehicles** - Each year in the UK about 2 million vehicles are scrapped and nearly a quarter of the weight of all scrapped vehicles is not currently recycled. The End-of-Life Vehicles Directive, which became law in 2000, but is yet to be fully implemented, aims to reduce the use of hazardous substances in vehicle manufacture and sets recycling targets for all governments in the European Union. Car share clubs (Hour Car - [www.hourcar.org.uk](http://www.hourcar.org.uk)) offer the opportunity for a reduction in the need for vehicle ownership whilst giving members a convenient and cost-effective access to car use.

**Vending Cups** - By recycling non-reusable plastic cups from vending machines many companies and other organisations can cut their costs and help improve the environment. The recycled plastic is used in the manufacture of many innovative products including personalised business cards. For more information contact [www.save-a-cup.co.uk](http://www.save-a-cup.co.uk).

**Vermiculture** - Worms will eat most types of organic waste to create vermicompost, a high quality growing medium which can be used in many ways throughout the garden. Setting up a vermiculture system requires very little work and should produce very few offensive smells! Worm bins can be bought or home-made and will fit even in the smallest of back-yards.

**Viagra** - See Vitality. **Volunteers** - Anyone with a few spare hours on their hands who is interested in any aspect of sustainability can be easily recycled into a much-loved volunteer at the Alternative Technology Centre. For more information about the current opportunities for volunteering at the ATC please contact Polly on 01422 842121.

### FOR FAULKS SAKE!

Faulks and Co. have successfully sold products made from recycled tyres and polyethylene worldwide for over 20 years. The polyethylene containers, which can be used for ponds, fountain sumps and troughs are guaranteed to be frost and sunlight proof. They are extremely flexible and are made from recycled squeeze plastic bottles.

The recycled tyre rubber, which is commonly used for buckets, tubs of all sizes and builders' rubble chutes, is also guaranteed to be frost and sunlight proof and non-toxic. It is very flexible and can be used in the garden, around the home and for all animal feeds. Examples of the recycled tyre rubber and polyethylene containers are currently on display in the Green Shop.

### THE MAGIC JUTE

Jute is a long, soft, shiny fibre made from the plant materials cellulose, lignin and pectin. It can be spun into coarse strong threads and is one of the cheapest natural fibres, second only to cotton in amount produced and variety of uses. In India, Asia and many parts of the "developing" world jute production is a sustainable industry that employs millions of people. Jute's best-known use is probably in hessian sacking and tarpaulin but it is often the hidden component in many other goods. Jute bags are currently available from the Green Shop. They are exceptionally durable, ultimately biodegradable, and are a natural and sustainable alternative to plastic.