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# **TALKING SHOP**



Work in progress. A glimpse of the

weekend for its official re-opening.

mezzanine floor and new display window

in the refurbished Green Shop. Pop in this

As recent visitors have noticed the ATC is currently undergoing a major facelift! With funding assistance from Yorkshire Forward and many hours of hard work from our staff and highly motivated volunteers the first phase of refurbishment is nearing completion. Amongst the new developments at the Centre is the relocation of the Green Shop to across the courtyard, adjacent to its current site, and the creation of an exhibition room concentrating specifically on sustainable development.

The "new" Green Shop has been refurbished using many environmentally friendly materials, all of which have been sourced locally whenever possible. Reclaimed wood for beams, joists, shelving and floorboards have been complemented by a reclaimed staircase from a local developer. All paints and waxes have either been donated, recycled or sourced from the environmentally friendly Biofa range.

The Green Shop's new display window is manufactured from Pilkington's K glass. This has a special coating on the inner

pane of the double glazing that allows heat absorbed by the glass from the sun to be reflected back into the room. It works in a similar way to a sheet of reflecting foil behind a central heating radiator and will also reflect heat from fires and radiators back into the room. Double glazing that uses K glass is as effective as triple glazing.

The shop will generate its electricity needs from its very own array of photovoltaic solar panels, and will be heated by a modern wood pellet burner, kindly supplied by local fuel and heating specialists Able Fuels.

Funding has also been received from Yorkshire Forward to develop new educational materials, including a sustainable building design booklet. Whilst apologising for any

inconvenience that the building works have caused, the ATC would like to thank everyone who has been involved in the refurbishment for their superb efforts which have allowed the work to progress so quickly!

## **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 more than 100 years. David Wilks has developed the Interflush, a low cost, user friendly, easy to install kit which is suitable for approximately 90% of toilets. 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 also saved. Research in America has suggested that

up to 20% of all household toilets leak at a rate of approximately 85,000 litres of water each year. This is the equivalent of 15 to 30 litres of wasted water each day for every person in the USA! The Interflush is guaranteed leak-proof and designed to fit on top of plastic siphons in cisterns with front mounted handles on either the left or right hand side. It cannot be fitted to valve cistern toilets. The Interflush has been awarded a Department Of Trade and Industry SMART award and is guaranteed for at least 200,000 flushes!

### **PLASTIC VOLUNTEERS**

The Ekko Plastics Recycling Factory at the Alternative Technology Centre is looking for volunteers to work with the Recycling Co-ordinator. In return for helping out all volunteers will receive a complementary introductory course in small-scale plastics recycling.

For more information please contact Dave on (01422) 842121, or info@alte rnativetechnology.org.uk.

## **A PEOPLE PLACE!**

Volunteers from the ATC, Royd Square and the local community are aiming to reinvigorate one area of the overgrown and under-used garden area at the Royd Square Centre. The project will create an accessible space for events and activities which will benefit the whole community and provide a vital resource for the area. It is hoped that the first phase of the work will be completed in time to take part in this year's Arts Festival Open Gardens programme.

For more information please contact Susy on (01422) 842121, or info@alter nativetechnology.org.uk.

### **A SIDEWAYS VIEW**

### **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.

### WHAT ON EARTH IS...

## **Anaerobic Digestion?**

Anaerobic digestion is a biological process that produces a gas principally composed of methane and carbon dioxide (otherwise known as biogas) which can be burnt to produce heat and energy. Anaerobic digestion occurs when organic matter such as manure or food waste is broken down in an oxygen free environment.

In a controlled environment anaerobic digestion is particularly useful in industries, such as dairy farming, where previously unprocessed wastes cause odour and water pollution problems. Waste matter is placed in a digester (a warm, air tight container) and left to ferment. As well as producing the biogas the process also creates liquid and solid by-products which can be used as soil conditioners or fertilisers.

Anaerobic digestion is a valuable process because it can use locally available waste products to create heat and power, thereby reducing reliance

on non-renewable energy sources and allowing local communities to become more energy self-sufficient. It also minimises the damaging effects of methane on the environment. Methane is 21 more times potent than carbon dioxide in causing global warming.

There are several examples of successful commercial anaerobic digestion plants throughout the world, being particularly common in California, but unfortunately the UK's first largescale facility is facing closure following the collapse of the German company that built it. The Holsworthy Biogas plant in Devon, which has won many environmental awards, first went on stream in May 2003. It had the support of the local community, who recognised its potential to supply hot water to a local hospital, health centre and several schools and houses. The Holsworthy plant has the potential to extract 3.9 million metres cubed of methane from

## **POSITIVE NEWS**

green news stories from outside the Calder Valley

#### LANDMARK SOLAR DEVELOPMENT

Photovoltaic solar panels are being used to replace obsolete mosaic tile cladding on three sides of the service tower of the huge Co-Operative Insurance Services (CIS) building in Manchester. This £5.5 million project will establish the largest vertical array of panels in the whole of Europe on the 40 year old Grade II listed building which is Britain's tallest office tower outside of London. The panels will produce almost 400 kilowatts of renewable electricity when work is completed at the end of this year.

### SAYING YES TO KYOTO

Just one day after the Kyoto Protocol came into effect without U.S Government participation, the mayor of Seattle announced plans to by-pass his

President's intransigence by leading a city-by-city effort to limit carbon dioxide emissions in line with the terms of the Treaty. Seattle has already reduced its announced plans to introduce a "Clean-Air" Bill requiring stringent emission standards for all vehicles. American cities such as Santa Monica, Oakland and Portland have already expressed solidarity with Seattle.

### **TURNING THE TIDE?**

A Cornish based research and development company has developed a breakthrough in tidal technology which creates renewable energy by utilising both the natural tidal stream and the rise and fall of the tide (theoretically a more reliable energy source than wind and solar technologies!) without the use of a barrage or dam. A grant application

## **GIGHA BITES**

The only mains connected community owned wind farm in the UK recently opened on the Scottish Isle of Gigha. There were no local campaigns against the development and the decision to agree to it had been made by the islanders in a unanimous show of hands at a meeting in the village hall. All of the profits made by the wind farm will be re-invested back into the local community, contributing to projects such as the Housing Improvement Programme.

After accounting for maintenance costs and loan-interest repayments the islanders estimate that their wind farm will initially generate in excess of £75,000 per annum. (Had the development been privately owned the community stood to benefit by a mere £2,000 each year.) They also forecast that after eight years they will

have generated enough income to be able to replace the machines without borrowing any money at all.

Three second-hand 225 Kilowatt turbines with a projected annual generation of approximately 2.1 gigawatts have been erected on the southern tip of the island. They will produce enough power to meet over 66% of the island's electricity needs. Each turbine stands on a thirty metre tower and has an area blade diameter of 27 metres.

The Highlands and Islands Enterprise Company have now established a Community Energy Company with a view to replicating the Isle of Gigha model of community ownership of renewable power generation in communities throughout Scotland.

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.

146,000 tonnes of animal dung and other organic waste and is capable of generating 15 million kilowatt hours of heat and 14.4 million kilowatt hours of electricity each year. A rescue package is currently being prepared by the plant's management team.

On a smaller scale anaerobic digestion can take place on an economic basis thanks to a newly designed mobile unit, which can treat waste within a four day period. The Portagester is completely self-sufficient and can be towed from site to site within a local area collecting and digesting waste as it goes. It has been designed to process a range of effluents from farm manures, biomass, sewage sludge, food waste and other municipal solid wastes. Community waste collection with a Portagester keeps operators transport costs low and minimises road traffic pollution.

has been made to the Department of Transport and Industry to help finance a full-scale feasibility study for a plant capable of producing at least 20% of carbon dioxide emissions by 60% and has Cornwall's energy requirements.

#### **ON THE ROAD TO OIL INDEPENDENCE**

If all of the cars in United States were converted to gas-electric hybrids similar to the Toyota Prius, Americans would find themselves using half their current amount of gasoline without changing their driving habits. Washington D.C has recently become the home of the first ever petrol station equipped with a hydrogen fuel dispenser, alongside the regular petrol and diesel pumps, and Shell Hydrogen have announced plans to create a network of hydrogen friendly filling stations across the country.