

West Sussex SUSTAINABLE BUSINESS PARTNERSHIP

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NEWSLETTER



west sussex
sustainable business partnership

Biofuels

Two centuries ago, the majority of fuels used were biofuels. Hay powered the heavy horses used in farming, and wood supplied much of the heating for homes, and charcoal for emerging industries. In the intervening two hundred years, most people have forgotten that such fuels exist, so wedded have we become to the liquid products of oil. However, with climate change moving rapidly up the agenda, a growing number of businesses are turning once again to using carbon neutral fuels.

So, just how can you use biofuels in your business?

There are several different types of 'bio energy' which you can either use to help reduce costs and your environmental impact. You could even turn them into a profit making enterprise yourself, perhaps as a bi-product of an existing process. Crops such as wheat, sunflowers and oil seed rape are being processed to produce liquid transport fuels such as ethanol and biodiesel. By 2010, 5% of fuel will have to be biofuel.

It may seem scary to pour the same stuff the local chip shop uses into your vehicles, but when Rudolph Diesel first exhibited his revolutionary engine, it was designed to run on peanut oil! With very little effort, many modern engines can do the same. Blooming Futures, a local West Sussex company, is pioneering the veggie powered van. They can tell you whether your vehicles will run on bio-diesel or indeed pure plant oil, and even offer a guarantee to ease your mind. (Contact the team on: 01273 462197 or enquiry@bloomingfutures.com).



What is Biomass?

Opportunities exist for producing the fuels and undertaking the vehicle conversions. Think about your premises as a prime candidate for using biomass. Biomass is a generic term for all plant and animal material. A number of different forms of biomass can be burned directly as fuel or digested to produce energy. Biomass is a very versatile material and can be used to produce heat (for space and water heating), electricity and a combination of heat and power (electricity). The Europeans have been doing this for years and the equipment is mature and reliable. Several examples of timber heating systems have been implemented in West Sussex including a plant at Buchan Country Park, Crawley. Wood can be used as logs, wood chip and wood pellets in wood/pellet burning stoves or wood chip/pellet boilers for space and water heating.

Some agricultural crops are grown specifically with energy use in mind.

Agricultural Waste

Other forms of biomass produced by farmers are by-products of conventional agricultural activity. They include 'dry' agricultural wastes such as straw that can be burned in special boilers that take bales to produce energy. 'Wet' wastes such as green matter or slurry can be 'digested' to produce methane in a process known as anaerobic digestion. This can then be used to fuel a gas engine to produce electricity and heat, (p.3).

Commercial use of biomass has a number of benefits:

- Security of supply
- No climate change levy
- Improved environmental performance
- No possibility of contamination through spillage
- Grants available

Reduce & be Responsible

Biofuels may be the future of energy supply, but they are not without their environmental impact. Bio diesel has, for example, been dubbed "deforestation diesel" because of the impact on tropical ecosystems of planting palm oil forests. Monoculture of oil seed rape or sunflowers also has a great impact on wildlife in Europe. Responsible and sustainable consumption must be the first priority, together with the use of a balance of fuels, but reducing demand must remain the ultimate goal.

For more detailed information, check out the following links:

www.bloomingfutures.co.uk
www.logpile.co.uk
www.nef.org.uk
www.bioenergy.org
www.biodiesel.co.uk
www.masscoenergy.com

Many thanks to Chris Hodgson for putting this article together.

TRUE or FALSE? FACT or FICTION?

1. Leaving a fluorescent light on saves energy. **FALSE**

Fluorescent tubes use only a few seconds worth of power in start up – it is always better to switch them off when you don't need them, even for just a few minutes. www.nef.org.uk/energyadvice

2. London is drier than Istanbul, and the South East of England has less water available per person than the Sudan and Syria. **TRUE**

Each person in the UK currently uses about 150 litres of water every day. This has been rising by 1% per annum since 1930. This consumption level is not sustainable in the long-term. www.waterwise.org.uk

3. Leaving your PC on over lunch doesn't waste much energy and prolongs its life. **FALSE**

PC screen consumption can often represent at least a third of the electricity consumption in a modern office. Most of the wasted energy is given off as heat, and in an air-conditioned office half as much energy again can be used in getting rid of this waste heat in summer. www.nef.org.uk/energyadvice

4. The mercury from one fluorescent tube can pollute 30,000 litres of drinking water beyond a safe level for drinking. **TRUE**

Around 250 additional items have now been classified as hazardous waste. These include common items such as unwanted televisions and fluorescent tubes.

www.environment-agency.gov.uk

5. With global warming we won't need as much insulation in the future. **FALSE**

This quote is attributed to an MP. It is wrong for several reasons: Global climate change is likely to be accompanied by greater instability in weather, so homes will need just as much insulation to deal with cold spells. Global warming will not happen overnight. It is expected to take around 50 years for the temperature to rise by another 2°C. Some scientists are concerned that melting icecaps will lead to the Gulf Stream shutting off or changing course, with a significant cooling effect for Britain and Europe.

www.nef.org.uk/energyadvice

6. Plastic is exported to China and dumped in a landfill. **FALSE**

Plastic and other material does go to China and other countries, but it's not just dumped there – people are buying it to use! In 2001, 66,813 tonnes of plastic were exported. This rose to 237,753 tonnes in 2005. Over half of the UK's plastics recycling is done via export.

Plastics for recycling are regularly bought in the UK and elsewhere for export to China. A tonne of plastic bottles for recycling can fetch around £200 so it would make no economic sense to ship it half the way round the world and then simply dump it.

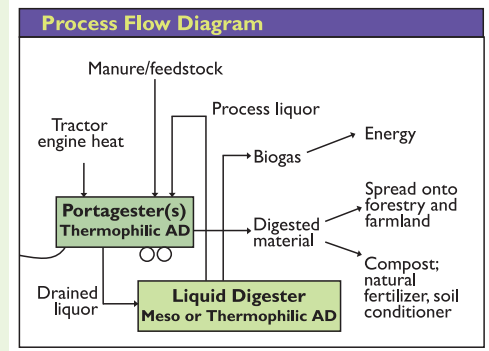
China in particular has fast-growing manufacturing sectors – and 'secondary resources' like recyclable paper and plastics are in high demand there.

www.recyclenow.com/facts/myths_exploded/myth_plastic.html



Flares Are Out!

You may have thought it was April 1st if you read a recent report about the contribution that gas from cows makes to global warming! But it's true! Methane is 28 times more potent as a greenhouse gas than Carbon Dioxide, but it barely gets a mention in the news. Fermenting and rotting organic matter forms the gas which is often seen burning on flares above landfill sites (or indeed heard emanating from the rear of bovines!). The process is known as Anaerobic Digestion (AD) which uses naturally occurring micro-organisms to digest/degrade organic materials in the absence of air. AD has been used for thousands of years to treat organic waste, and provide a valuable gas for cooking, and more recently for use in burners and generators. A local Hampshire company has developed a portable system which promises to solve a lot of waste and energy problems particularly in agricultural businesses.



The Portagester® is a mobile and modular anaerobic fermenter, which can hygienically treat waste material in less than four days. This invention was developed by Bioplex Ltd as part of a process which digests solid waste materials. (See diagram above).

Any type of organic waste can be used, and the sterile solid end product is suitable for soil conditioning. The methane is utilised both to heat the next batch and to power a generator to provide electrical power. This could be an ideal solution to the disposal of agricultural and horticultural wastes, providing a useful set of products in the process. For further information, please contact Chris Reynell: enquiries@bioplex.com or visit www.bioplex.co.uk

FREE ADVICE For Small and Home Based Businesses

Horsham District Council has produced a new guide: **Environmental Guidance for Home Based Business and Home Workers** which will be available at MicroBiz on **Saturday 10th March 2007**. Adopting more environmentally friendly practices will: • Improve resource efficiency • Reduce overheads • Provide competitive edge
This guide has been produced for people who have a home based business, or work from home and would like to start to reduce their environmental impact.

If you would like a copy of the Environmental guide but are unable to attend MicroBiz please contact Sharon Norman on **01403 724521** or email Sharon.norman@horsham.gov.uk

The event is organised by Horsham District Council, originators of MicroBiz, and sponsored by SEEDA and West Sussex County Council. For a programme please visit www.horsham.gov.uk or tel **01403 215542**

CSR Corner

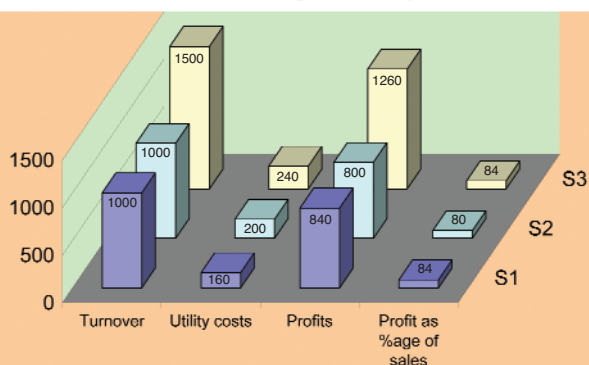
There are arguments against Corporate Social Responsibility and one of them is:

"I have no time for this. I've got to get out and sell more to make our profit line."

In simple terms you would think that increasing sales would be the best way to increase your profit. However, as you can see from our graph, there is more than one way to skin a cat. Reducing costs can actually be a much easier way of boosting profit margins. With proper advice, it is generally accepted that most businesses can easily cut 20% from their utility bills, including electricity, water and waste. We have tried to illustrate in the graph that saving 20% on a £200 bill equates to an increased

profit margin of 4% on a £1000 turnover. To achieve the same percentage rise in profit margin, your business would need to achieve a 50% growth in turnover! Which do you think would be easier to achieve? Reduce and save - you know it makes sense.

Effect of reducing costs on profits



Register for future WSSBP Industrial Estates Waste Management Workshops; call 01243 777348; email spb@westsussex.gov.uk

LOCAL EVENTS AND CALENDAR

Events Feedback

Agricultural Waste Workshop



Agricultural Waste Workshop was held at 3 Farmworld also known as Holmbush Farm in Horsham on 29th November 2006.

The 28 delegates who attended this workshop all received a free breakfast of fresh bacon butties, fruit, bread and conserves. In addition, delegates received valuable information from Environment Agency representatives, who carried out a presentation (in Plain English) explaining the new agricultural waste legislation that came into force in May 2006. The Environment Agency is currently urging people to register their potential agricultural waste exemptions ASAP. Contact the Environment Agency's Agricultural Waste Helpline on 0845 603 3113 for advice or to register.

Peter Davey of Agri-Cycle Ltd., gave valuable information on how and where to recycle farm waste (wadavey@agri-cycle.uk.com).

Simple Utility Management Workshops - Do your SUMS!

Over 20 businesses attended SUMS held across Chichester and Crawley in January and February this year. Not only did they get a free, tasty lunch but they were also captivated by the valuable sessions involved.

What they found out.....

- "Ideas about how to involve and motivate staff"
- "Learning I'm paying too much for power and being billed incorrectly and can change it"
- "Inspiration to improve things – ideas about where energy savings can be made"
- "I learned and realised the importance of monitoring our utility bills"
- "Both seminars reinforced the need to



implement changes quickly" SUMS helps businesses understand the true costs of overheads and identify quick wins to minimise costs through more efficient use of resources. Businesses draw up their own action plan, prioritise issues and learn how to communicate environmental and financial savings to staff and customers.

Next SUMS will be held in May. Book now – 01243 777348, sbp@westsussex.gov.uk

Awards

Would you like to showcase your business' environmental and social achievements? There are a number of local and regional award schemes which you can enter. For further details phone Shelaine Weller on: **01243 756869.**

Events for 2007 – Your Calendar

Horsham Micro-Biz 10th March 2007 10am - 4pm	Where What	The Drill Hall, Denne Road. An exhibition programme with details of over 45 exhibitors taking part and FREE seminars held throughout the day. If you want to start a business, this is the event to visit. See page 3 for further details.
West Sussex Sustainability Forum 15th March 2007 9.30am – 1.30pm	Where What Cost Action	Martlets Hall, Burgess Hill Launch of the 2007/2008 work programme, focusing on Sustainable Transport and Energy Efficiency. Check out WSSF's activities for the year, how you can get involved and what resources WSSF will be producing to support you. FREE Contact the Forum secretariat by 9th March: Tel: 01243 642119. Fax: 01243 777232 Email: WSSF@westsussex.gov.uk
Sussex Enterprise 16th March 2007 12-2pm	Where What Cost Action	Millstream Hotel, Bosham, Nr Chichester Bringing together members of Sussex Enterprise with those from the Portsmouth and South East Chamber; if you want to expand your client/supplier base beyond the Sussex border, this event is for you. Members: £25+VAT Non-members: £50+VAT BOOK Online now. Email: eventbookings@sussexenterprise.co.uk For information on all Sussex Enterprise's events and training courses, view www.sussexenterprise.co.uk
Sustainability Sun 20th & Mon 21st May (Schools Day) From 10.30am - 5pm	Where What Cost Action	Weald & Downland Open Air Museum A showcase for environmentally friendly products and services for building and sustainable living in the 21st century. Learn more about a wide range of low impact, 'green' products and techniques for building and sustainable living in the 21st century. Includes seminars, demonstrations and a wide variety of exhibits to interest domestic users and professionals on Sunday 20th, and a day specifically aimed at children and school groups on Monday 21st. Entrance fee to museum. Contact Cathy Clark - Marketing Officer - Weald & Downland Open Air Museum - Direct: 01243 811014



Thank you to the following for contributing to this edition of the newsletter: Chris Hodgson, Anna Buckingham and Sharon Norman.

