

bio-power news

Issue 10

January 2004

Christmas? - It's been a bit of a disaster!

Mid December we were sent a Trojan worm. If you don't know where, then perhaps you shouldn't be reading this!

When I was conducting a secure transaction over the web to buy some tickets for Paula, we suddenly were attacked by a whole series of viruses. Even though we have AVG virus protection and Black Ice firewall we had probably 200 hits in a few seconds. At first it slowed down the machine a lot and then it just died. I re-booted, and ran AVG with the latest up-dates. It removed all but three viruses, two of which were called 'back-door flood'. These eventually took so much of the processor time that the machine would not even re-boot.

I tried in vain to repair the problems by re-naming or deleting files, but the problem got worse and worse. In the end I resorted to buy a new 40 gig drive on which to build a new clean system, and then transfer all my files over to it. But my aged PC would not recognise 40 gig, and I could not find anywhere that would sell me a simple 4 or 10 gig drive. I was just laughed at! I resent enormously having to buy a new PC just before Christmas, especially now I am more resolved than ever to get out of Gates and Windows, and either set up a Linux box or buy an Apple Mac (second-hand). It seems the web is so infected with viruses these days that it is no longer a safe environment for people trying to use it for 'proper' purposes.

I would very much appreciate any advice or comment on the following.....

- ?? Is it true that Apple Macs provide a much better working environment than the windows PC?
- ?? Is it true that Apple Macs do not get attacked by viruses or worms like PC's?
- ?? Is it easy to transfer all my PC files to an Apple Mac and then use them in the familiar way?
- ?? Is it also true that Bill Gates has bought out Apple Mac and therefore anything novel or exemplar in this operating system will be crushed under the might of the Gates empire?
- ?? Is there a benefit in using Linux? - it runs on the physical PC machine (easy to buy, easy to repair), it is flexible and 'looks like' windows, it is run from a very similar ethical position as Bio-power.
- ?? Which is the best form of Linux? - for me, that means most reliable and simplest, i.e. easy to use, easy to install, compatible with PC, able to import all PC stuff, including dictionaries, sound files, pictures etc.
- ?? What is 'Lindows'? Is this worth considering?
- ?? If we went Linux, then would you consider joining us?
- ?? Is there a benefit in having two computers, one for internet work (running in Linux) and the other a detached PC? If so then what sort of connection between the two is 'safe'?

If you have contacted me recently by e-mail and had your e-mail returned it is because my ntl mailbox filled itself up to bursting point with kind presents from Santa. If you left messages on my phone then assume I have lost them as well because somebody in our household cleared all messages to stop the phone from 'bleeping'.

So I will have to re-write the report I had prepared on our Convention in November. I may also publish January BPN a bit late. Contributions very welcome to help fill it up.

Oh yes ... and I nearly forgot to say.... And a **"Happy New Year to everyone"**

And the Good News.....

We now have sorted out the new Bio-power.co.uk web site

It is functioning, but not yet fully loaded. So far I have just posted a few basic pages from the copy of the original site, but with some revisions, and improvements to the layout. The new or revised bits are in Tahoma instead of Times new Roman. I plan to remove a lot of the ambiguous information which some people feel gives away too much about what we do or how we do it. I also plan to move the emphasis of the site towards a sales site to sell our products as opposed to selling the rather radical concept of the Bio-power Network. I will keep the operation of the site simple, and will avoid fancy animations and graphics.

Please let me have your views about the style and format of the public Bio-power web site. It would be helpful to have your ideas about features we should include and what we should leave out. Also please let me have your views about which links we should include. I would especially like some genuine quotes from satisfied customers, or even yourselves on the quality / reliability of our fuels. JN

Growing the oil plant *Jatropha* for creation of bio-fuels in India

In a project supported by the United Nations Environmental Program (UNEP), a German university and the Central Salt & Marine Chemicals Research Institute in India, Daimler Chrysler is starting a new public-private partnership project in order to produce environmentally friendly Biodiesel in India, which can be used in Mercedes-vehicles. Daimler Chrysler made this announcement during the 3rd Environmental Forum in Magdeburg / Germany in November 2003. The project's objectives are the testing of Biodiesel produced from the oil of the *Jatropha*-plant and the application of that type of Biodiesel in Diesel engines. *Jatropha* (also called the physic nut) is an endemic plant to most parts of India – almost a weed, which can be grown on poor and erosion endangered soils. India is already a net importer of vegetable oils. Any land that is suitable for agriculture is used to grow food not energy crops. There is not a situation as in the UK where tax benefits are paid for land to be 'set aside'. It therefore makes sense to derive energy stock from plants that are already available in the natural environment, so that there is no need to create a conflict between the use of land for the creation of energy and the creation of food.

During the intended 5 years period the extent of greenhouse gas reduction, the value of side products and the impact onto the regional economic conditions is going to be evaluated in addition to the technical feasibility of Biodiesel. Commercial Biodiesel production based on the oil of *Jatropha* was already successfully tested in a pilot plant project in Nicaragua in 1997.

Useful opportunity opens in Bradford

You may remember that at the Llanberis conference, I said I was trying to enlist the co-operation of my local council both for help in setting up my plant and in using our fuel in their vehicles. This appears to have moved on to a new level, specifically, one where we may be able to influence the transport policy of all the local authorities and also help shape Government policy on alternative fuels.

Bio-power (myself & John N) are due to give a presentation (which we haven't written yet!) to the Association for Public Service Excellence (APSE) Transport Advisory Group, at a venue in Manchester on 21st January 2004. This is at the invitation of their senior policy advisor, who got in touch with me through contact with councillors I spoke to at my own local authority, Bradford Council.

The APSE meeting is potentially very important to us as a network for the following reasons:

- ?? APSE Transport Advisory Group represents the interests of up to 50 Local Authority Transport Managers. We have the opportunity to convince them of the viability of our form of fuel, the potential extent of our network and the benefits to their authorities of both the collection service and the finished fuel.
- ?? APSE currently has little information on alternative diesel fuels, except those types offered at 5% blends by our competitors, and is keen to find out more.
- ?? They see bio-fuels for diesel vehicles as *"being the only viable option for reducing carbon dioxide emissions from vehicles over 3.5 Tonnes"*.
- ?? They wish to use blends at a higher percentage than currently available, but lack sufficient research to justify this use, particularly on lease vehicles under warranty. The warranties usually state that fuel must meet BS EN590 - current 5% blends do this, but higher RME or straight oil blends do not. We should be able to make our fuel reach the BS EN590 standard and should convince them that this is achievable.
- ?? One of the agenda items for the meeting on 21st January is to develop a consistent lobbying position for APSE regarding alternative fuels. APSE is a powerful lobby group on Government policy. Local authority vehicles collectively make up the largest fleet in the UK and the APSE Transport Advisory Group has clout with Government policy makers. If we can convince them that our fuel and our network are the best way forward for them, then we have a powerful ally for the future use & development of our alternative fuels.

I would welcome any input or information from other bio-power members prior to the meeting (say, by the 18th January) that will help to put our case. Specifically, I need:

- ?? Any structured evidence of use of our fuel in road vehicles (especially HGV) in blends of from 5% up to 100% (anecdotal or scientific)
- ?? Any test data that may suggest that fuel currently produced by any of you meets all or part of BS EN590 (we can move onto issues of replicability later as part of any possible bid for assistance with universal meeting that standard)
- ?? Personal experiences any of you have had when dealing with your Local Authority as a representative of the Bio-Power network.

Any other comments also gratefully received, but the above are likely to correspond to the questions that will arise during the meeting.

Thanks from Robert Scully rob@rpsconservation.freeserve.co.uk john-nicholson@ntlworld.com

P.S. I have received a copy of a briefing note to the Association for Public Service Excellence (APSE) quoting from the chancellor's Pre Budget Review. This states the following:

*"The Government has decided that the environmental benefits offered by liquefied petroleum gas (LPG) no longer justify the level of duty differential it currently receives, while the long period of high duty support has allowed the necessary infrastructure to be developed. **The Government will gradually increase the rate of duty for LPG over the next three years, setting duty differentials on a path towards a level commensurate with the fuel's environmental benefits. Consistent with the Government's commitment to give three year certainty on duty differentials for alternative fuels, future differentials will be announced in Budget 2004"***

This statement may or may not mean that differentials for more environmentally positive fuels will be increased (i.e. duty reduced). Whatever happens, LPG duty will be rising and I would expect that our form of fuel will at the least remain on the current 20p/l differential over DERV.

Rob.

Bio-power is invited to attend a discussion at House of Lords

We have also been invited to a special meeting convened by Lord Era, on the development of micropower generation and the use of Powergen's WhisperGen boiler system that could revolutionise the way we create and use energy in domestic situations. This is very important for us as the use of bio-fuels with these boilers could become a very large business sector for us. The meeting is on 5th February.

Small scale power generation plant is the way of the future. But Micropower is about ultra small power generation. It means that even an individual household could run a unit that will provide normal domestic heating and also meet the average power demand for a family. When the demand is low the surplus energy is pumped into the grid, providing a cost benefit to the consumer by way of a credit on the electricity bill. When the demand is greater than can be provided from the unit then the extra is taken from the grid in the normal way. The technology uses the principle of the 'Hot air engine' to generate electric power from low temperature heat.

News from our members:

Jason and Debbie Catterel, Colchester, Essex

We live in Colchester. Debbie works for Lloyds TSB in London and commutes. I (an ex psychiatric nurse) ran / run a small touring theatre company dedicated to creating opportunities for new writers, actors and technicians. With Debbie's support we have created some spectacular plays (Shakespeare) and some bizarre plays (Fish Naked and the Carer was a particularly peculiar one!) But theatre companies make very little money unless funded and I am unimpressed by the peculiar grants systems in the Arts world, so we decided that a new income was needed. After attending the excellent Bio-power weekend seminar (and doing a lot of research), we intend to open a processing factory in Colchester in March and preparations are presently underway for this. But I am getting ahead of myself.

I had been researching Biodiesel for sometime as a backdrop to a drama about the struggles of a single individual against the might of the multinationals. As part of my research for this play I got involved with a company called Euro Biodiesel who gave me very little advice, most of which was misleading and then when I decided that I would like to start up a plant they tried to sell me a self contained processing unit for about £80,000! This was a bit more than I could afford and did not include IBCs or a system for cleaning the used cooking oil, all of which would have cost me another £50,000 plus VAT. The out put of this expenditure of about £130,000 investment would create 5,000 litres a week! I won't continue to expand except to say be warned out there. Be very careful before you get involved with such a company – and I understand I am not the only to be so drawn! They don't seem to be interested in a greener way or a new and helpful way of doing business. Their main priority seems to be making a lot of money out of the likes of you and I.

Having found the Bio-power site, Debbie and I decided that we preferred the philosophy behind the business practice and aspects of co-operation rather than competition so we headed over to Wales to attend the seminar. We discovered a simpler greener way of creating fuel that fits in with our desire to help ourselves by helping others. Best form of business practice I feel and were inspired to set up our own unit. We aim to be producing 5,000 litres a week by September and have been mightily encouraged by the local business support team. Every area has one, ours is called COLBEA training. It is free training in business funded by the Government and is very well worth taking. We have also been encouraged by our local college who run their own restaurants!

All in all things are looking good and both Debbie and I would like to take this opportunity of thanking the Bio-power team for their hospitality and inspiration. And a special thank you to the two sparkling assistants!

Jason and Debbie Catterel

Bio-power member Kaye Angus drives to Dakar on bio-fuel

Right now Kaye Angus is somewhere in the Sahara desert, driving approximately 3,400 miles in a Nissan Patrol, as part of the Plymouth to Dakar in Senegal Challenge, together with her two children Caragh and Seamus aged 13 and 8, and co-driver Charlotte Hyatt. The rules of the challenge require that the vehicles used must cost no more than £100, and the maximum budget for the rally preparation is £15. Any vehicles that make it to the



This is what a good road looks like in the Sahra desert

destination of Dakar are then auctioned off, and the proceeds go to help charities working in the Gambia. So if the team are not able to raise money to fly back home to tell us the whole story, then they face a long walk home.

Kaye's team is called 'Oil matters', because in journeys like this it does! But this is not just a technical challenge, it is also a means to raise awareness along the way of, the environmental catastrophes, climate change issues, destruction of tribal lands, global conflicts and the all

round NO GOOD carried out in the name of the OIL TRADE. And of course it is also to show that vegetable oil is a viable fuel source and that using it is something we could all be doing right now. Kaye has set up an amazing web site on which she tells the story of her journey. Visit Kaye at <http://www.oilmatters.co.uk/> She is seeking people to support her venture at 1p per mile – that's £35 if she reaches Dakar. PLEASE HELP TO MAKE THIS A SUCESSFUL PROJECT

Food for thought.....

I set out below some extracts from a report from the European Committee on Economic and Monetary Affairs on the proposal for amendments to Directive 92/81/EEC with regard to the possibility of applying a reduced rate of excise duty on certain mineral oils containing biofuels and on biofuels. I feel it shows the way that people are thinking in Europe, and it very much favours our form of process and is a great encouragement for the development of bio-fuels on an equal footing to the production of petrochemical fuels. In particular, it shows the desire to encourage the use of Pure Vegetable Oils and blended fuels (like ours!) and also the need to bring equal benefits to the biofuels industry as have been 'enjoyed' by the mineral fuels makers. Whilst Europe is moving very strongly in our direction, the British Government is dragging way behind. JN

2a) The Commission White Paper on European transport policy (COM(2001)370) expects CO₂ emissions from transport to rise by 50% between 1990 and 2010, to around 1113 billion tonnes, the main responsibility resting with road transport, which accounts for 84% of transport-related CO₂ emissions. From an ecological point of view, the White Paper therefore calls for dependence on oil (currently 98%) in the transport sector to be reduced by using alternative fuels such as biofuels.

4a) World oil consumption is estimated at around 115 million barrels a day in 2020, as compared with around 77 million barrels a day in 2000. The transport sector will account for 71% of final demand for oil in 2020. The Commission also expects the European Union's dependence on oil imports to rise from its current rate of 75% to over 85% in 2020. (The European Union's oil supply, COM(2000) 631.

Justification: The security of energy supply is extremely important in the European Union. Biofuels can be produced in the EU and contribute to a secure energy supply.

It is therefore desirable to establish a Community framework for reducing **and providing an exemption from** excise duties so as to promote biofuels, thereby **complying with the objectives of promoting the use of biofuels**, contributing to the better functioning of the internal market and affording Member States and economic operators a sufficient degree of legal certainty.

Justification: The amendment to Directive 92/81/EEC must be considered in conjunction with the proposal on the promotion of the use of biofuels. Pure biofuels are currently competitive only if they are exempt from tax.

The Communication of the Commission entitled 'A Sustainable Europe for a Better World: A European Union Strategy for Sustainable Development' (3), highlights the important role of alternative fuels, including biofuels, in tackling climate change and in the development of clean energies. **In this connection, consideration should also be given to pure, cold-pressed vegetable oil, such as rapeseed oil, which does not undergo any chemical change and can thus be produced in an environmentally friendly way, and whose by-products also contain protein and can be used as animal feed.**

Justification: The use of pure vegetable oil offers many advantages, including environmentally friendly, often local production, diversification of the landscape and the possibility of using by-products as animal feed, of which there is a major shortage in the EU.

(10a) At present not all the biofuels available on the market meet strict environmental efficiency criteria. In some cases their production is linked to very high energy input and greenhouse gas emissions. However, technological advances in this area can only lead to improvements. Consequently research and technological development in the field of the sustainability of biofuels must be promoted.

Justification: In the long term the use of biofuels only makes any sense if not too much energy is used or greenhouse gases emitted in their production. Research in this area therefore needs to be supported.

(16a) Article 4(3) of Directive 92/81 EEC of 19 October 1992 provides that 'the consumption of mineral oils within the curtilage of an establishment producing mineral oils shall not be considered a chargeable event giving rise to excise duty as long as the consumption is for the purpose of such production'; for reasons of equity, it should therefore be

stipulated that the consumption of biofuels within the curtilage of an agricultural holding producing biofuels should not be regarded as a chargeable event giving rise to excise duty as long as the consumption is for the purpose of such production.

Justification: It is only right that the exemption applying to intermediate consumption in the oil sector should also apply to the biofuels sector.

The consumption of mineral oils within the curtilage of an establishment producing mineral oils shall not be considered a chargeable event giving rise to excise duty as long as the consumption is for the purpose of such production. **Similarly, the consumption of biofuels within the curtilage of agricultural holdings and agricultural trade organisations producing biofuels shall not be considered a chargeable event giving rise to excise duty as long as the consumption is for the purpose of such production.** However, where such consumption is for purposes not related to that production and in particular for the propulsion of vehicles, this shall be considered a chargeable event giving rise to excise duty. *Justification: It is only right that the exemption applying to intermediate consumption in the oil sector should also apply to the biofuels sector*

2. The levels of taxation applied by Member States on the products made up of or containing biofuels referred to in Article 8b may be lower than the minimum rates specified in Directive 92/82/EEC. **Particularly low tax rates should be set for those fuels which meet particularly stringent environmental criteria.**

Justification: In the long term, priority should be given throughout Europe to promoting those biofuels which show high efficiency, in other words, whose production involves the smallest possible greenhouse gas emissions and minimises other environmental damage.

The levels of taxation applied by Member States on the products made up of or containing biofuels referred to in Article 8b may be lower than the minimum rates specified in Directive 92/82/EEC, **and a total tax exemption may be applied for unblended biofuels.**

Justification: It must be possible for the Member States to ensure that biofuels can compete with mineral oils. Account must be taken of the far higher production costs of biofuels. The Commission proposals would put a brake on the necessary development initiatives and are already hindering investments made previously and pending investment decisions.

(12a) In view of the importance of biofuels for the environment, consumers and producers and in order to ensure that they are competitive vis-à-vis petroleum products, pure biofuels which were fully tax-exempt before 1 January 2001 should continue to be exempt.

Justification: A time limit would be at odds with efforts to step up the production and use of biodiesel and would undermine measures being taken by the Member States.

Your feedback

Hi,

I've just found your site and have use some fuel produced by Richard Oz. I impressed on two sides, firstly for being able to self support from otherwise wasted source and the performance that it supplies the engine with. I have a Toyota Townace imported from Japan that on just 80 litres of your wonderful fuel has returned over 40 mpg from about 30 mpg on fossil fuel. That's with a 20% mix with Mr Asda finest, hope it is a lot better when I get the pre-heater installed and run on 100%. I am hoping to make my own and have started collecting from the local Chinese takeaway. Just need to set up the system, which is held up while I work out what/how I'm going to heat the stuff. Richard is going to show me his plant after Xmas so may have an idea by then. I hope to make it to one of your weekends, and think about producing commercially, I may have the option to take early retirement and if I can have an avenue to keep the old grey matter working all the better.

I am a member of the Townace club (covers all Toyota MPVs), I have already posted some findings and there also someone else who posted your web page, so there may well be a fleet of recycled vehicles using recycled fuel in the near future.

Clive.

The Bio-power Seminar program 2004

Seminar 25	6 7 8	February 2004	places still available
Seminar 26	12 13 14	March 2004	open
Seminar 27	9 10 11	April 2004	
Seminar 28	7 8 9	May 2004	

Special event Meeting to plan AGM 23, 24, 25 January 2004, Llanberis

Please use the information in this publication carefully.

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