

Minutes from the meeting held at Appleton –le –moors Reading Room, 7.30pm 7  
December 2004-12-08

Present: Richard Hardesty, Dave Grewer(treasurer), Helen Beaumont Dave Rawlins(chairman) Jim Bailey, George Winn-Darley John Marsden, Nelly Trevelyan(secretary), Vicky Shaw(National Park) and Victor Buchanon from Bioflame.

Apologies: Sylvia Bernard, Anne Procope, Mr Farrant.

The minutes of the last meeting were read and approved.

Vicky Shaw spoke first and told us that she had visited Sinnington school and done a project with the children. The school is very interested in doing something itself in the way of renewables. She suggested that it might be a good idea to link them in to our project, although they are not in the parish. Most of our local children attend Sinnington Primary, and an educational aspect to the project always gains extra brownie points with funders.

She had been working with the community at Botton, who have two companies tendering, (out of five submissions) to do a feasibility study. The Five gave costings ranging from ten to twenty thousand pounds. What was on offer for the money? She thought that it might be better to wait to hear the results from Botton, sometime in December, before proceeding ourselves.

She had also chatted to a few people about finding someone who could give us a good overview about comparative costings. Very few people can cover all the current technologies, but it could be made a requirement of the tendering process that some one should come and talk to the group. Alternatively we could cover each technology in turn and get specialist speakers, and/or do visits to up and running projects so that we get a good feel for things ourselves. Transport and fuel costs could be met from Vickie's budget, though we might have to fund our own lemonade!

She drew our attention to a course being run by Norwoods, near Morpeth about managing woodland fuel supplies, and said that the park would cover £60 costs for two people to attend. Something similar might be happening in Ampleforth organised by Yorwoods in March.

George Winn-Darley said that visits would be less useful than numbers, as there isn't always a lot to see. Richard Hardesty was interested in seeing a project, and Jim Bailey asked if there were other feasibility studies that had already been done that would be relevant to us.

She said that she had also been talking with Barnaby Friar from Y.R.E.N, who is finding out what the best legal framework for the group would be, and will report back. She said that if the group were to set up a bank account she would be able to put a small amount of money in it (£100) to cover minor expenses, such as reading room hire, postage, and photocopying.

Our invited speaker was Victor Buchanon, managing director of Bioflame, an innovative local company, that makes highly efficient incinerators/generators that can burn a variety of fuels, with minimum emissions, to produce electricity and heat and hot water for community heating schemes. He started off by expressing the opinion that we didn't need to do a feasibility study, if we knew what we required in terms of heat and power, and what resources we had available to us. He also said that it would suit his firm to do a local project and that they might be interested in doing some of

this preparatory work. In his opinion wind did not produce good enough results. His technology was simple and cheap. He told us that he wasn't making a 'pitch'; however he did start with the attractive points. Financially he suggested that a half megawatt burner/turbine would not be so very much cheaper than a one megawatt set up, and in terms of financial reward we would do better to go for the larger scheme. The finances certainly set us thinking. Scottish and Southern Electric are offering very good terms for buying renewable energy at the moment and can also offer forward purchase agreements. They will offer £75 a megawatt, instead of the more usual £60, and in addition, if it is what they call 'reliable power' i.e. constantly available, (unlike wind) they will pay £90. This could yield £750,000 a year. United Utilities may well be prepared to cover the capital costs, which could be in the region of £2.5million! That would mean that for ten pounds borrowed capital we would earn five pounds of which they would take back three pounds fifty until we had paid off our borrowings. I hope that I have got that right, it all came past me very fast! This was all dependant on it being classified as 'renewable' energy, in terms of 'renewable obligation certificates'. Domestic rubbish, although the burners could cope with it would not come into this category, nor would waste farm plastic, that Jim Bailey inquired about. However, it would be possible to stipulate at the beginning that we would be burning biomass 6 days out of 7.

Their technology is based on super efficient burners, and gasification that uses steam to drive turbines. They are currently working on a way to reuse the heat by utilising the fact that ammonia boils at a lower temperature than water. I am no physicist, and will not attempt to explain further. The system is designed to be flexible about what fuel it uses. It could use surplus straw in summer, for example, or excess poultry litter from broiler houses, or wood waste or domestic rubbish. Because it burns at above 850 degrees for more than 2 seconds it does not produce any dioxins, though it does produce some particulates which can be removed with filters. To burn domestic rubbish would involve other regulations, such as the I.P.P.C. tax on chimneys, though there maybe a threshold for this of 3 megawatts.

All this made our heads reel somewhat, as I don't think any of us had been thinking on such ambitious lines. Coming down to earth, we wondered about the fuel supply for such a large commercial enterprise. Not surprisingly it was huge... 200 tons of wood a week! Rather more than Mr Allison's wood would provide in a year! (dealt with sustainably) which on a rough estimate by David Grever could be about 150 tons a year. It would therefore have to come from the forestry, and would involve lots of lorries. A site to house all this would need to be 3-5 acres and would involve a full time job or two to run it. None of the above mean that we shouldn't look at an idea of this scale, but we also need to be clear about our motives and about what we want to achieve.

We also looked at the idea of a far smaller scheme, which may be of less interest to Bioflame but more suited to our intentions. He said that we could have a scheme that did community heating and hot water and just produced a small amount of electricity. It is often estimated that 60% of power use is for hot water. We still might be able to get funding from United Utilities for a small scheme. Yorkshire Forward and other funding bodies might fund 50% of such a project. He said that he was personally going to use a heat pump for his own home as they are very efficient. Pelleted wood fuel delivered instead of oil for individual household boilers could also become possible if the forestry went in for making the pellets. This is a system much used in Austria and Denmark.

We closed the meeting by deciding that it might be useful to do our own feasibility study, and that we should apply to the parks sustainable development fund before the 10 Jan to do this. Victor said that most of the information was available on the web , and that really we were in the best place to decide about our own need and priorities. Dave Rawlins has time and computer skills but would need to be paid for his time, so it was suggested that we took that forward when Vicky returns after Christmas from her holiday. In order to continue our familiarisation efforts with different technologies, Vicky suggested that we get a speaker on solar water heating to come and talk to the next meeting. It was suggested that it only need be the core group, although anyone else who was interested would be welcome.

Our next meeting was arranged for January 25 2005 at 7.30pm in the reading room at Appleton