

Establishing Community Based Wood Heat Supply Clusters in the Thames Valley

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As yet, little renewable energy is currently used in the Thames Valley even though the technology is fairly well established. The difficulty lies with misinformation, lack of understanding and the complexities involved in the implementation of wood fuel systems in a competitive market dominated by other energy forms, rather than acceptance of wood fuel as a viable heating system. For the most part, people register concern over environmental issues, but this is not enough to engage them into readily accepting new technologies.

The regional dimension

The energy and environmental context in which communities and organisations can work and operate locally is important. To a large extent this context is set regionally and nationally. TV Energy has been working closely with the regional arm of government that is responsible for the Thames Valley area, the South East of England Regional Government Office, Assembly and Development Agency, to establish:

- The extent of the technical renewable energy resource (including biomass as the most important one) in the South East
- The potential credible exploitable resource
- Setting targets for 2010, 2016 and beyond
- Looking at partnerships and methods to gain local acceptance and draw in local groups

The regional strategy has now been published and can be seen via the TV Energy website at www.tvenergy.org. TV Energy is seen as a ‘delivery vehicle’ for change and is presented as a case study.

Building clusters

TV Energy has identified a series of organisations keen to become more sustainable and wanting to use biomass for heat and sometimes also for electricity generation. These ‘end-users’ range from local municipalities redeveloping large urban centres to eco-centres and local community buildings.

One such ‘cluster’ of eco-centres is being lead by developments at the ‘Living Rainforest’, an educational research Trust caring for a range of tropical flora and fauna in

a purpose built environment close to Newbury, Berkshire. The Trust is working with TV Energy to redesign the site on energy efficiency principles coupled with renewables energy supply. In particular, using biomass heating (300kW boiler) to supply the entire heating needs of the establishment.



The Living Rainforest Eco-centre in West Berkshire – home to many tropical plants and animals. Soon to be heated by locally and sustainably produced wood chip.

The intention is to link the upkeep of a tropical environment with the use and management of local woodlands. Very much on the ‘think global, act local’ idea. TV Energy and the Trust will develop joint educational activities for the area.

Such thinking will be applied to the other three sites that TV Energy has ‘clustered’. This method of operation should also give the eco-centres an opportunity to network on other matters too – hopefully enhancing their operations and effectiveness.

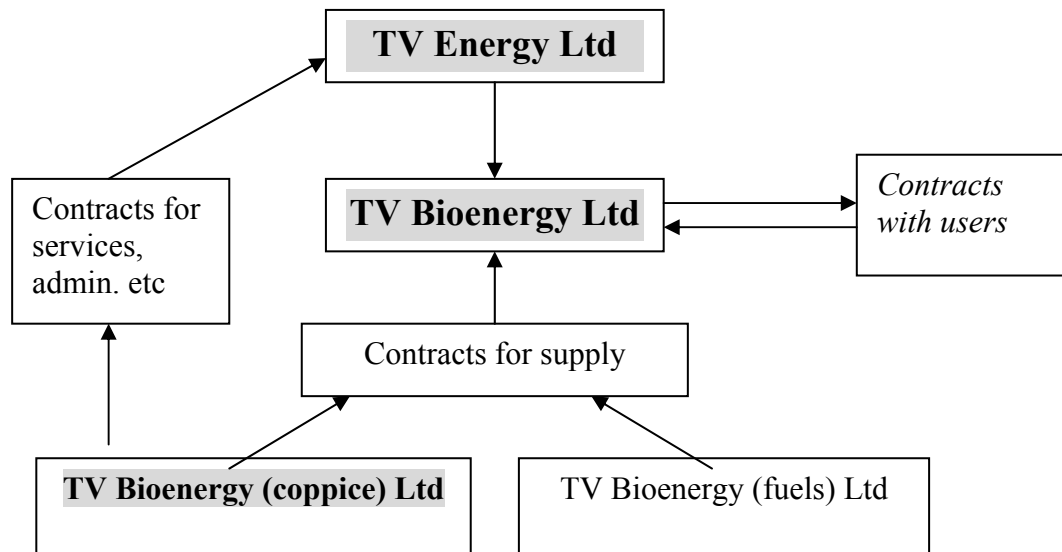
Of course, clustering also allows us to more effectively develop a wood fuel supply infrastructure without which no projects can become a reality.



Wood fuel supply from local woodlands, currently a resource with no market.

TV Energy is in the process of establishing a ‘vertically integrated wood fuel supply infrastructure’ for the region. This will allow woodland owners, operators, tree surgeons and others to join in and be a part of this new diversification opportunity. Companies based on the cooperative principal are being established for wood residues and for short rotation coppice. All will be linked contractually through ‘TV Bioenergy’.

In exploring the *modus operandii* for us in this area it has become apparent that we will need to establish the following hierarchy of organisation:



Organisation to enable a wood fuel supply infrastructure to be developed for clustered projects in the Thames Valley and Surrey region

Empowering local communities

Overcoming ‘non-technical’ barriers will necessitate a structured framework identifying the stumbling blocks for the development of a wood fuel market. To address this issue, wood fuel projects will benefit from well managed consultations to build confidence and avoid scepticism in local communities. Consultation is important and beneficial to projects relating to wood fuel for energy production as it will improve the quality of the product by ensuring that expert advice and local knowledge are incorporated into the design, development and management of the scheme. By identifying, anticipating conflicts at a preliminary stage, major problems can be reduced, thus creating a positive image for the project as well as building public support.

The consultation process can be viewed as a three-pronged approach; through information dissemination, discussion and debate and decision-making. Information dissemination is vital in helping people to understand and accept the need for renewable technology. This can be carried out, using a wide range of communication methods such as leafleting, web-based material, exhibitions, public meetings and workshops to

stimulate local dialogue as well as sociological analysis in the form of surveys, focus groups and in-depth interviews. Other possibilities that will help to inform the public are site visits, involvement of local schools and regular progress reports for public scrutiny.

Through discussion and debate, the criteria affecting people's decision of whether they want to pursue a community renewable energy project will emerge. History of past failures could have a decisive impact towards acceptance or rejection of any new initiative. Therefore to prepare for this possibility, an analysis should be made of all key groups and information collected on relevant social issues. Wood fuel as an industry may be a new concept for the local community to adjust to, therefore it is important that its visual appearance, likely impact and positive benefits are explained, highlighting the potential for increased local employment both in obtaining the fuel and in energy production. People need to have reassurance on the scale of the proposed industry, that it is regulated with minimum visual and environmental impact on the countryside, including the collection, drying, chipping, storage and transportation processes.

Using this approach encourages local communities to participate in the decision making process and has the advantage of gaining their longer term commitment to a project by developing a sense of ownership for both the resource and the sustainable energy product. With this relationship, there is likely to be a greater willingness from local people to protect and conserve the resource as well as promoting the energy produced. In some instances it may be possible for a formal partnership between the project developer, the community and other parties to be set up as a trust, to jointly manage the resource and energy generation plant.

Moreover, the opportunities of wood fuel should be placed in the broader context of energy policy, in order to gain widespread public understand and support for growing short rotation coppice or using forestry residue. It is therefore important that a clear link between global warming and renewable energy is given, in order to increase public acceptance. Individuals should be made to believe that they are key stakeholders in the development of renewable energy and through their actions as local champions they are contributing to Local Agenda 21 objectives as well as helping to meet national and international targets.

Recognising this method as the way forward, TV Energy has initiated community consultations in the Thames Valley through a series of workshops in the four counties of Berkshire, Buckinghamshire, Oxfordshire and Surrey. These were aimed at educating local communities about the potential for renewable energy projects in their respective areas. The workshops involved presentations on different renewable technologies and breakout groups to discuss the potential and obstacles posed for local renewable energy schemes. From the workshop groups and all other TVE events all feedback is being followed up to maintain continued community interest and to portray a sense of action. TV Energy believes that communities represent the potential catalysts for social change which can inject momentum and commitment into the wider acceptance of renewable energy across the UK. If green technology is to be deployed successfully to the extent

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required to meet government targets, community involvement will have a vital contribution to make.

For more information on how the TV Energy initiative is progressing please visit the TV Energy website at www.tvenergy.org. TV Energy is a 'not-for-profit' public-private sector partnership working in the interests of local people and communities in the Thames Valley and Surrey region of the SE of England.