

Abingdon Hydro Directors Report for AGM, 15 Nov 2013

The Report would normally be a report on the past year, but as this report is the first one, it covers where we have got to from the beginning in 2010, and what comes next.

What we need

Unlike a hydro project developed by an existing company, a community project starts with nothing, and builds up resources gradually. Here are the ingredients that are needed to make progress, then the next section outlines where we are on each one.

1. **Feasibility:** we need to know that the site is able to produce enough energy to justify its cost. The basic calculation is quite straightforward, but more detailed analysis is needed to get a clear understanding of how much power can actually be extracted from the water. That has to be compared with the estimated cost of construction, to ensure that it is a sound investment.
2. **Community:** the project must be something that is attractive to a good number of people. From that emerges a smaller number of people who are willing to get actively involved to see the project through.
3. **An appropriate legal entity.**
4. **Money:** getting through all the regulatory steps is not cheap.
5. **Environment Agency licence.** The EA has to be satisfied that we will not have adverse environmental impacts. From their point of view rivers, especially the Thames, are under pressure from a variety of users with conflicting interests, and they see hydro power as yet another unwelcome demand. They aim to balance these interests, and to preserve or improve the state of the river, considering flooding, navigation, fish, ecology, water flow, recreation, etc.
6. **Planning permission.** The District Council has a long list of criteria to check before they decide if a development is appropriate. There is a bit of overlap with the EA, but not a lot.
7. **Agreement with the land owner.**
8. **An electrical connection:** whether a private line direct to a consumer, or as in our case, to the grid.
9. **Ofgem registration.** This is to receive the feed in tariff. Without it we would not be able to cover the costs. Ofgem will reduce the feed in tariff each year, with an extra reduction if too many people apply, so it is in our interest to apply as early as possible.
10. **Management.** People are needed who will work together, share responsibility for the project, put in time and effort, and get the decisions right.

When all these are in place, we can move on to the actual construction.

Where we are now

Following the same order of the points above, this is where we are:

1. **Feasibility:** the amount of energy we can generate can be predicted fairly well, and the limiting factors identified. The only estimate that we have at present of capital cost is too high (more below).
2. **Community:** taking part regularly in local events seems to have paid off, by giving people the opportunity to talk to us, and in receiving wider media coverage without much effort. We have a mailing list of over 500 people so far, who have made a positive decision that they would like to go onto the mailing list.
3. **Legal:** we started life as a Community Interest Company in 2010, then in 2012 converted to an Industrial and Provident Society (the legal name for a co-operative), Benefit of the Community (in contrast to benefit of the shareholders, or members in co-operative jargon).
4. **Money:** we are grateful to and much encouraged by the number of people who have put money in, or expressed a willingness to do so, in exchange for shares in future.
5. **EA licence:** that was granted on 7 February 2013, but there is a need for renegotiation (more below).
6. **Planning permission:** was granted on 30 October 2013. It could be seen as just one more step along the road, but people know what planning permission is, and the response of our mailing list and the media show that it marks a significant step forward.
7. **Lease:** the site is owned by the District Council and they are in favour of the project. We have the basis of an agreement to lease but need more background information before we can complete it.

8. Electrical: the network operator, SSE, is able to install a meter unit, connected to the substation in Curtis Avenue. It means crossing County Council property (the Abbey Centre), and SSE can quote when we have decided where we want it to be.
9. Ofgem: they need a lot of documentation before we can get on the queue to be registered for a feed in tariff. There is some confusion over just what, and they have long delays (more below).
10. Management: we started with 7 founder directors. A project like this needs a wide range of skills and abilities, so as others have come forward with valuable contributions that can fill some of the gaps, we have added them.

There is also a broader picture. We are fortunate in Oxfordshire that there is a large number of community groups, supported by the CAG network. In particular there is the Low Carbon Hub, with ambitious plans to decarbonise the city and county, serving as a central resource for projects like ours. Also there is Carbon Leapfrog (now Pure Leapfrog), able to give legal advice which could otherwise be expensive or overlooked.

Next steps

We cannot have a share offer until the regulatory process is secure. We need:

1. Renegotiation with the EA. The lock keeper is responsible for the upstream water level. Our licence does not allow us to generate if it falls below their stated level. However the lock keeper is allowed to let the water go lower, which means that he can stop us generating and there is nothing we can do about it. We need a change to allow us to operate under the same conditions as the lock keeper.
We will also need them to approve a simplified fish pass design, but this is part of the conditions rather a direct regulatory matter.
2. An agreement to lease. The person responsible in the Vale is supportive, but needs more from us, such as a business plan, to satisfy his superiors.
3. A quotation from SSE, to which we make a down payment.
4. Submit the Ofgem application. They want to see several documents, including the agreement to lease and a receipt from SSE. Advice from a consultant is that we should submit by the end of December.

Meanwhile we have to think ahead to construction. There are different types of contract, and as a community organisation we have to consider risk and responsibility as well as price. This means that a design and build, or turnkey, project is probably to be preferred, as the contractor takes most of the risk. The next step to that will be to write a detailed specification so that contractors can work out in detail how they would do it.

Another activity is financial modelling, with the aid of the Low Carbon Hub's model. These ingredients all go into the business plan, which becomes a prospectus, which leads on to a share offer. We look forward to that time.

Richard Riggs, Company Secretary, 11 November 2013