

Fernaig Community Trust

Feasibility Study Meeting - 16th August Achmore Hall

Present : Simon Munro from LoganPM, Kate Bulloch, Jim Coomber, Georgie Grimson, Lizzie Bird, Martin Fraser, Colin Parsons, Andy Bone, Jackie Cairns, Paula Hawthorne, Joe Grimson, Callum Bulloch, Mary MacBeth, Phil Game, Geoff Harrington, Chris Mortimer, Lucrecia Mortimer, Biz Campbell, Neil MacRae, Elanne Fraser

Apologies: Jack Bird, Alan Cairns

Kate Bullock, Chair of the Fernaig Community Trust (FCT), welcomed all to the meeting. Copies of the Feasibility Study had been distributed to the community and this meeting is an integral part of that Feasibility Study.

Kate explained that this is the initial step in what will be a long process. The next step will involve negotiations with Forestry Commission Scotland (FCS) regarding land. The FCT Directors have talked with FCS regarding the potential hydro scheme so they are aware of our aspirations and FCS are supportive of community projects.

Following negotiations with FCS, the FCT will hold another public meeting. If the answer to the proposed scheme is a 'Yes', then there will need to be a series of further investigations, drawing up plans etc. and sourcing funding. All of this is a great deal of work to ultimately benefit the community but it does need community support.

Kate stressed that there are obviously concerns about the proposed project, especially for those living around the top of the Glen who live nearest to the hydro plant. However, at this stage the feedback from them and everyone else locally is important, as the Feasibility Study is not the final plan. The siting of and what the turbine house will look like is a moveable feast. (Photo examples of different kinds of turbine house were on display)

Kate then introduced Simon Munro from LoganPM Consultants and author of the Study and opened the floor to him.

Simon explained that he had been involved in many community renewal energy projects around the country – about 30 projects – some of which were commercial. He has been involved in and working in the energy field for around 20 years through a consultancy firm based in Edinburgh on both wind and hydro projects and has been involved in West Coast community energy schemes recently.

The remit of the FCT study was to look at land at the top of the glen to look at the feasibility of the site, technical aspects, grid connection, environmental impacts, resources available and give an overview of financial considerations.

Simon had visited and walked the proposed site and, in general, thinks it is a good one. The scheme would be viable now. He added that the support regime for the type of project proposed has varied over past years. A lot has changed particularly with support brought in during the 90's with a new wave of hydro projects but these were on large hydro schemes and were only viable on that basis. However, two to two and half years ago the instigation of feed in tariffs makes smaller projects like this more viable particularly for local communities.

The proposed site has good potential and with modelled available water flow over the year, a small hydro project will take available water and have a 'hands off' flow, which must be left in the burn. If there is not enough water flow, the hydro switches off. The site characteristics are good, with a good vertical drop in a short space horizontally which helps with the cost effectiveness of the project. There is a large waterfall further up the burn which prevents fish migrating further up the burn. Fish would be prevented from entering the hydro scheme piping as fish guards would be put in place. The surrounding conifer plantation would offer least impact visually and there is good access to both the bottom and top of the burn.

Simon then covered the Consenting process, which is on two levels. The first is Planning Permission from Highland Council (HC) that he believes in this case it should be straightforward. HC look at visual, environmental and noise impact as they seek to safeguard local residents. The second consent for hydro projects is a Controlled Activities Regulations (CAR) license (water take off) from SEPA. SEPA guidelines relating to this type of project would be met by this project.

Having walked and crawled through the trees on the site, Simon said the design at this stage of the feasibility design has scope to change as the project develops.

Kate thanked Simon and invited any questions/comments from the floor.

Joe Grimson asked if costings were correct and realistic if the project started tomorrow or took say 5 years. Simon replied that the outline costings in the report were current but there may be variables over a time line of 5 years where costings could alter. Joe said that costs could rise by as much as 30% but Simon said that grid connection figures would be more precise on application to connect and that construction, cost of the turbine, land etc. were all subject to prevailing costs but he felt it would not be a big increase.

Jim Coomber added that the FCT had made application to Scottish & Southern. However, connection could not be enabled until 2015/16 because of restrictions on schemes over 50kw. (basically until the Beaulay to Denny national transmission upgrade line has been

completed together with the installation of a submarine cable and land connection to the Western Isles) and costs re land would be dependent on liaison with FCS and seeking finance.

Phil Game asked about the £160K projected price on the three-phase cable connection and whether this is correct. Simon replied that as this is a small scheme that there is always the chance that price limitation could change for small projects.

Mary MacBeth referred to page 38 of the Report – Costs Section 7 - and asked about the background to support the figures. Simon replied that the proposal was to install a turbine with a capacity for 100 kw on which the study figures are based. Mary asked if it was more than 100 kw would the feed in tariff rate be higher and Simon replied that with a step change in tariff on schemes over 100 kw that the size range for the scheme was between 70 to 100kw and that 100 kw seemed the best option currently. He also added that annual production and computer modelling that takes account of rainfall in the catchment area of the burn, the curve of water flow during the year, the land itself, the efficiency model gave a figure of 449 Mw hours.

Phil Game asked if the turbine has a range of output. Simon replied that it will run to around 10%. Essentially, as long as there is water above the 'hands off' flow, but there will be times when extra will flow past.

Andy Bone asked about variables with feed in tariffs and the likelihood they would reduce. Simon confirmed that, at the moment, it is 23.7p per Kw hour. There is intent to revise the rates but the latest revision kept hydro tariffs the same. Having said they would like to reduce rates in future these would have to be notified well in advance and rates set out. From 2014 the rate would be down to 19.7/18.7 pence and there could be proposals beyond that so yes, rates will come down but by relatively a small amount

Jackie Cairns asked how long the hydro would need to run to break even. Simon replied that dependent on rainfall etc. about 4.8 years. On a simple payback scheme the capital cost is divided by the annual profit which equals 5 years.

Chris Mortimer asked about the life of the turbine and Simon replied that it would be around 50 years but he knows of some turbines still operating that are older (Nostie power station was built in 1947). Some hydro projects have been running since 1890 with only replacement parts required basically because there has not been much evolution in the technology other than control systems now being electric.

Andy Bone asked what the scheme would consist of and Simon outlined that it is simple system. There would be a small weir at the top of the burn where some of the water is taken off and piped downhill to the turbine house where the giant hosepipe squirts water at a cupped wheel to drive the turbine.

Mary MacBeth said that seeing as the eventual profit is modelled to feed in tariff, the selling power on its own is 3p a unit but some schemes can get up to 10p. Simon replied that this is on what is called 'brown' power – large commercial concerns.

Andy Bone and Geoff Harrington, referring to brown power, asked about using the power generated for local use, would it be cheaper and could it be an option if the feed in tariff does not make the scheme viable. Simon replied that generally this is for private schemes on estates or businesses with a private grid. He said the principle sounds great but is hard and expensive to do especially as all wiring is owned by Scottish & Southern. Martin Fraser asked about choosing to who you sell to but Simon confirmed it is very difficult to become a private power supplier.

Simon emphasised the importance of a Project Manager as the person who should be keeping an eye on things to tie in all costs and the tariff so there should be little risk. Mary MacBeth added that with the current model at 23.7p the point of the feed in tariff is to allow for forward planning.

Phil Game raised point about the value of the feed in tariff commitment of the buyer, could they make a decision not to buy? Simon replied that there is a contractual commitment and, as the grid is a monopoly, it is very tightly regulated and could not change their agreement.

Chris Mortimer asked about the next steps and how long it would take to construct the scheme. Simon replied that the land issue is very important and the next step is dealing with the FCS as the land issue needs to be secure. Next would be a community to vote to see whether the response is Yes or No to the scheme. There will also be the need for some environmental survey work, putting in a Planning Application to HC, applying for a water extraction licence and securing a contractor. The following step, dependant on the others, would be to set up an operating company to source funding for the scheme. With regard to the project construction, Simon confirmed it would be a year from start to finish.

Geoff Harrington asked about noise levels. Simon said that noise is not usually much of a problem with this scale of project. Inside the hydro house there is significant mechanical noise when the turbine is running but outside it is not an issue as, answering a query from Andy Bone, he confirmed that the building is soundproofed.

After some discussion about what level of noise would be experienced outside the building, Jim Coomber said there was the same size of turbine running in North Connel, near Oban and, if people were interested, he could arrange a visit so people can assess the noise levels.

Phil Game asked how big physically the generator would be and Joe Grimson asked whether the turbine house would be visible. Simon confirmed it is a relatively small size and the proposed building area would be surrounded by trees. In answer to Phil's further question about the design of the building, said that there are various options in the way the look of it

could be treated. He described one turbine house that looked like a croft and one in Switzerland that looked like a small chalet. However, for our site in the woods it would only really need to be a basic, simple utility building. (The photos on display showed such a building). Simon said that a small hydro scheme is the least intrusive of renewable energy options with regard to properties nearby, as they have no great impact and therefore no great change.

Jackie Cairn raised the issue of disruption to local properties whilst the project is being constructed. Simon confirmed that the disruption would only be noticeable with supply vehicles delivering to the site but some would not be on the glen road but to the top of the burn via a forestry track.

Paula Hawthorne asked how the existing water supply to properties at the top of the glen would be affected during construction and after completion. Simon confirmed that during construction provision would be made to maintain water supplies. Joe Grimson asked if there is the opportunity to improve water supplies to the two houses at the top of glen and Simon said provision to existing take off could easily be incorporated within the project to improve their supplies. There would be a holding tank as part of the scheme but new water supplies would not be part of the hydro scheme itself but would be constructed alongside the hydro, to make sure that low burn flow levels stopping the hydro would not stop water supplies to the tank.

Joe Grimson asked about funding and Simon said that lots of projects going through the route of getting capital funding via the Community and Renewable Energy Scheme (CARES) loan fund.

Neil MacRae asked that if the project was funded with private money would the feed in tariff change. Simon replied that there is more of an open mind in the industry regarding dealing with private partnerships, share option companies etc. Andy asked does this happen at the moment and Simon replied it does but they are generally large projects costing several million of pounds. Joe Grimson asked if it would be worth it for a small project and Simon said it depends on how the capital is raised but it is down to the community to decide. Hydro projects fall into two camps – hydro developers who are mainly commercial such as SE, Npower and a couple of fully commercial landowner projects or community/private developers.

Mary MacBeth asked about ongoing traffic in the area once the hydro has been set up. Simon replied that this would be very low and cover maintenance checks every month or so and a planned maintenance check twice a year. He added that the reliability of the equipment is very high so there are not continuous call back problems.

Neil MacRae asked whether politics, such as Scottish Independence could affect tariffs down the line to which Simon replied that feed in tariffs are a UK issue as power delivery and consumption is governed by the operation of the national grid.

Joe Grimson asked about having a separate company to run the hydro. Jim Coomber replied that a separate company set up by the FCT would be a good option and Simon confirmed that if a charity body, such as the FCT, sets up a trading company the benefit is that if the trading company goes bust it does not affect the charity. Phil Game asked about tax on income for the trading company and Jim replied that there are various ways of setting up a company, particularly a community based organisation, regarding tax etc.

As there were no more questions Kate thanked Simon and all who had attended the meeting. The next step for the FCT is talking to FCS on the land issue. She said the minutes of this meeting would be circulated and the FCT would keep all up to date with the ongoing situation.

The meeting closed at 8.20 pm