

Peter Tavy Community Hydropower

The Opportunity

A Community Benefit Society has been formed to explore the potential for renewable energy in Peter Tavy.

For hundreds of years the Colly Brook provided power for the village through the mill pond and leats to the water wheels of three mills. The Colley Brook remains well suited as a source of hydropower. An initial assessment indicates that the available head and flow could generate up to 100kW.

Hydropower is an efficient form of local renewable energy being more predictable and reliable than solar or wind power. The river flows are strongest during the winter months when the use of electricity is highest. Hydropower also has a longer life span than other renewable sources and will continue to produce electricity, without the need for substantial maintenance costs or reinvestment, for future generations in the village.

The Government is encouraging local renewable energy communities by providing grant funding for the feasibility stages. There are hundreds of local renewable energy schemes around the country benefiting their communities.

We are therefore exploring the possibility of creating a reliable and sustainable hydropower resource that will provide income to Peter Tavy village projects.

The next page shows an overview of the steps to deliver the scheme. The notes below show the start-up activities to date and that we are about to start the feasibility study. The third page shows how the feasibility study will include community meetings to review the findings. The fourth page outlines scheme funding and the benefit Peter Tavy.

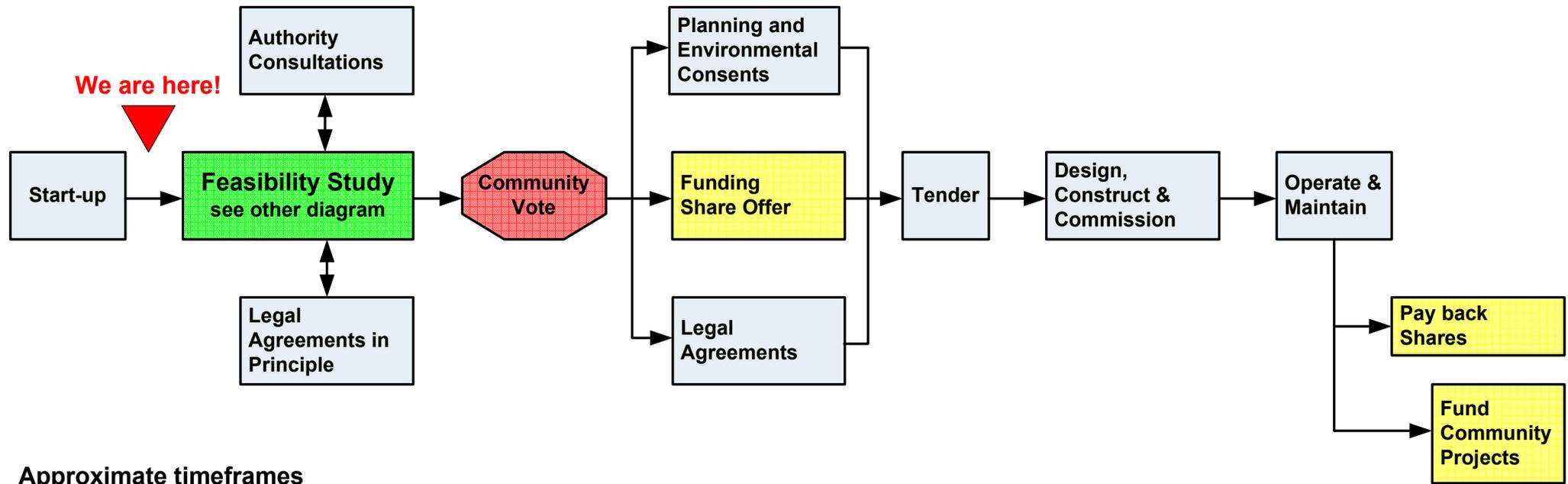
Start-up: the story so far

Initial proposal October 2014	Peter Tavy Piper and village hall meeting
Committee formed	committee and working group meetings
Informal expert advice on the feasibility	confirmed likely technical feasibility and viability
Registered organisation with bank account	November 2014
Start-up grant funds obtained	£2,279 from Devon CC November 2014
Set up Web-site and leaflet distributed	to every house in the parish
Community energy training (Devon CC)	five workshops run by Regen South West
Rural Community Energy Funding (RCEF) *	establish terms and conditions for grant
Prepare feasibility study Terms of Reference	feasibility study and consenting information
Pre-qualify consultants	three expert firms that met RCEF requirements
tenders, response to questions, evaluated bids	selected Hydromatch
Western Power Distribution (WPD) connection	confirmed availability and connection budget
Registered as a Community Benefit Society	required for RCEF grant and share offering
Applied for RCEF grant for feasibility study	and responses to questions
Award of RCEF Grant	expected early September
Feasibility Study instruction to proceed	work commences – end September

* The Rural Community Energy Fund (RCEF) is a £15million programme, jointly funded by the Department for Environment, Food and Rural Affairs (Defra) and the Department of Energy & Climate Change (DECC). It supports rural communities in England to develop renewable energy projects which provide economic and social benefits to the community. RCEF will grant up to £20,000 for investigation into the renewable energy project's feasibility.

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Overview: a long way to go

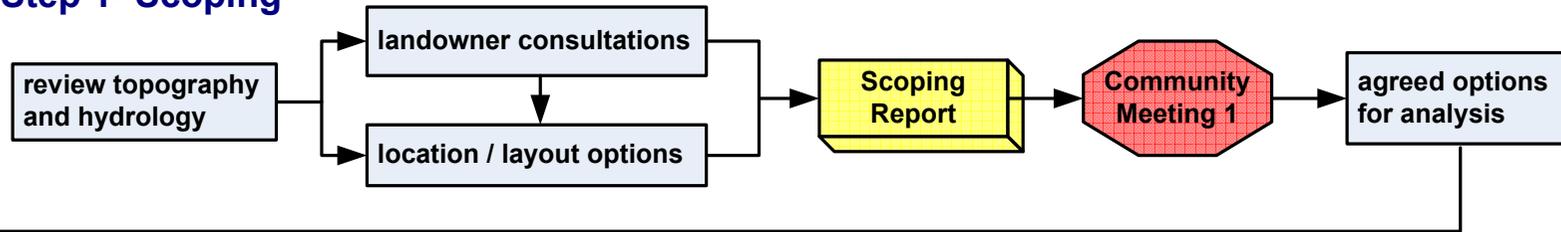


Approximate timeframes

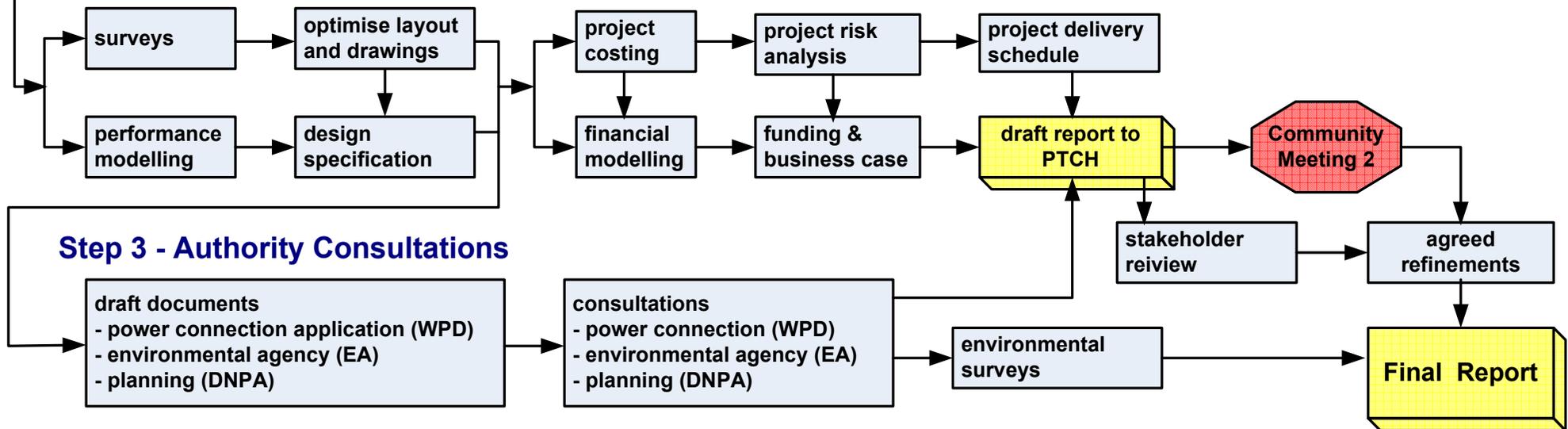
October 2014 to September 2015	October 2015 to March 2016	April 2016	May to October 2016	November 2016 to January 2017	February 2017 to September 2017	from winter 2017
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Peter Tavy Community Hydropower Feasibility Study: the next steps

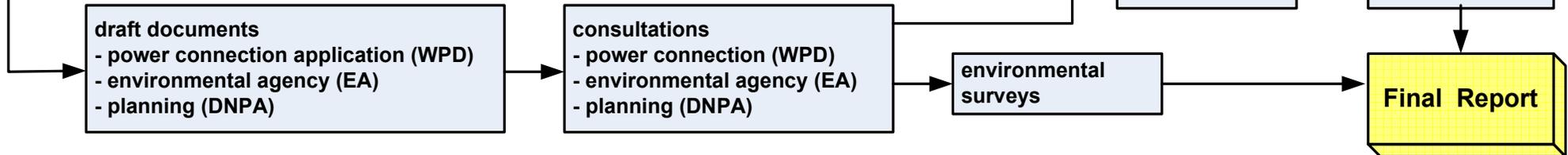
Step 1- Scoping



Step 2- Feasibility..... and Viability



Step 3 - Authority Consultations



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Funding the scheme - and the benefits to Peter Tavy

Capital Funding

If the feasibility study confirms that a scheme is technically feasible and commercially viable, and has the support of the Peter Tavy community, capital funding to build the scheme will be raised by a share offer. The share offer will present the financial and risk analyses that support the business case.

Initially this share offer will be limited to the Peter Tavy and nearby communities of Mary Tavy and Brentor. The balance of funding required will be raised by a wider share offer. Recent experience of other community groups has been that renewable energy shares are sold very easily because they represent a stable income at a good rate with relatively low risk.

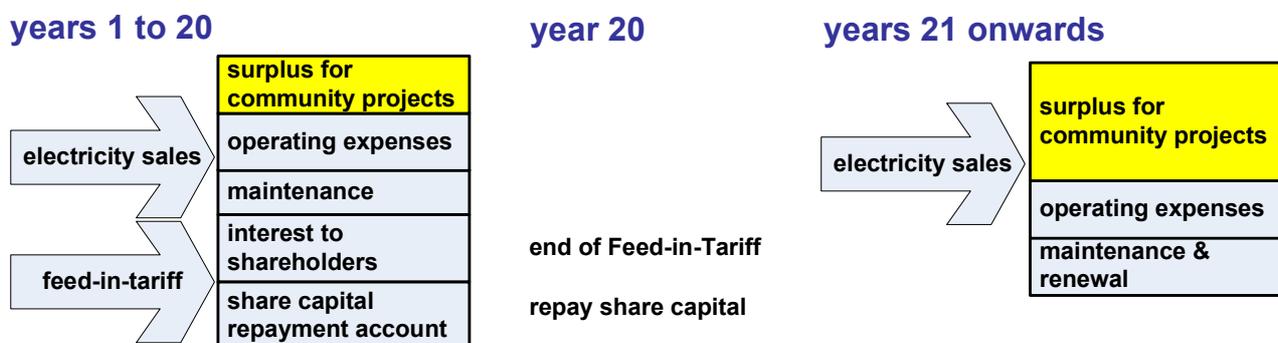
Individuals in the community who have invested in the scheme will receive a return on the shares they purchased – the rate is likely to be set at around 5% per annum for 20 years. Income from energy sales would be set aside to repay the face value of the shares at the end of 20 years, or earlier on request once the repayment fund is established.

Surplus income for Peter Tavy Community Projects

The electricity produced will generate income by being sold to a power company. A Government organised incentive for renewable energy, Feed-in-Tariffs, will also pay for the generated power (over the first 20 years).

The aim of the PTCH Community Benefit Society is to earn a surplus (over operating costs, interest to shareholders and repayment of capital) that would be used to fund Peter Tavy community projects.

The 20 year capital payback term relates to the Feed-in-Tariff duration. The hydropower scheme would continue to operate for many years (50 years or more). With the capital paid back, the income from energy sales will continue to benefit the community for future generations. The Feasibility Study will show the potential level of surplus.



At present, the Peter Tavy community funds its activities through many diverse ways, but even with careful management of finances it's difficult to meet the identified needs. A steady and reliable source of revenue from the PTCH surplus would provide support to community needs, with priorities collectively agreed.

The surplus would be put into a community trust fund administered by a group of appointed villagers who will co-ordinate community agreement on how the funds are used.

Possible uses of funds include:

- upkeep and improvement of St Peter's Church, Methodist Hall and Village Hall
- an additional weekly mini-bus service to Tavistock
- energy-saving measures for households
- other suggestions?