

Welcome to our Woods

Project type: High Head Hydropower Development

Location: Cwm Saebren

Aim: To reduce fuel poverty, demonstrate a better use of natural resources and create revenue for community use.



About the scheme

Welcome to Our Woods (WTOW) has been working to reconnect the community through the shared interest, engagement and use of the local woodlands. WTOW wanted to explore this connection and started managing the woodlands to show how a variety of associated projects could help support and build the community. The 27kW hydropower development was a result of this work.

The aim of the hydropower development was to encourage engagement, learning and confidence in the capacity and capabilities of the community to deliver an ambitious commercial project. The local area has a rich history of energy through coal mining so there is a natural link to local energy generation and sustainability. The development took nine years from conception to operation. This lengthy timeframe resulted in a reduction to the expected outputs, specifically the expected financial return to the community.

Partners

Welcome to our Woods partnership: a partnership of 45 organisations working to deliver the overall community aims in the local area. The partnership was instrumental in decision making and adding capacity to ensure the delivery of the project.

The Green Valleys: Specialist community hydropower consultants who delivered technical support throughout the development phase.

Welsh Government's Local Energy service: The Government's community renewable energy service provided support through its local Development Officer and grant funding to pay for legal work and technical studies.

Natural Resources Wales: land owners and statutory body providing licensing for water abstraction.

Llangattock Green Valleys: formed a partnership with WTOW to provide support, expertise and capital finance for the project.

Welcome To Our Woods Limited (WTOW): the special purpose vehicle constituted to deliver the hydropower development. Advice and support provided by the partnership.

What was the result?

After nine years of development a 27kW run of the river, high head hydropower development has been installed in Cwm Saebren, Treherbert.

The project funded the capital through partnership with Llangattock Green Valleys. It is anticipated that the project will generate 118,870 kWh per annum.

What was learned?

Plan for the varied nature of personnel time and capacity required to secure permissions and finance to build

Without a designated point of contact to manage the development phase, the project would not have succeeded in gaining the permissions required to build. The length of the period over which the issues arose, nine years from initial idea to build, made this phase hard to manage. The workload fluctuated between periods of focused activity to a couple of months of little or no work requirements as deliverables were being carried out by a paid consultant. Appointing a dedicated member of staff proved to be key in overcoming the range of issues that arose during the development phase. This helped to protect the volunteers from the unnecessary frustrations and stresses that arose during this stage, helping them to keep their objective outlook for the project. At WTOW energy generation is part of the wider vision of the organisation. Without this connection, it would have been difficult to appoint the required resource to deliver the project. The support provided by the development officers at this stage was instrumental in successfully dealing with any issues that arose.

Instill confidence in community organisations to deliver

Much of the time spent on the development phase was to engage with statutory bodies in providing the required permissions to allow the project to be built. There was initially a lack of confidence from Natural Resources Wales (formerly Forestry Commission Wales) that we could deliver a project of this nature, and that they could retain the commercial value of the project if it was delivered by a community organisation. As a result Natural Resources Wales took a cautious approach to the development and we had to manage expectations and prove that a community organisation could deliver an ambitious project with less capacity than a larger multinational company. This added to the complexity and lengthened the time frame of the project delivery but, through working with Natural Resources Wales, we feel that we have demonstrated that enterprising community renewable developments are possible.

Enjoy the build process and working in partnership with other community organisations and contractors.

Despite taking nine years to complete the development phase, the build was in fact short and completed in a few months. That part of the project was enjoyable and we recommend having as much involvement in the day to day decision making as possible as that is when the learning really happens. We were fortunate to have an understanding consultant, who accommodated our involvement during the build. We worked in partnership with Llangattock Green Valleys to finance the build and this brought with it a wealth of skills and expertise that we benefitted from. Our involvement during the build has given us the confidence to plan the expansion of our portfolio of hydropower developments. This will allow us to use the local workforce, which we expect will reduce costs and help to build community skills and keep employment local. Our skills and confidence have increased as a result of the partnerships forged through this project and it is our recommendation that any community looking to develop renewable energy projects should use the experience gained in Wales and talk to other organisations that have achieved this.

Welsh Government's Local Energy service support

The Welsh Government's Local Energy service gave us the confidence to develop the project and helped us overcome any challenges we faced in doing so. The Local Energy Development Officers gave valuable advice and shared learnings from other community energy projects.

About Local Energy

The Local Energy service supports the development of locally owned renewable energy schemes through development officer support, grants and loans. To find out more visit the Local Energy website.

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