



Llangattock Green Valleys newsletter

Issue 88
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<http://www.llangattockgreenvalleys.org/>

ENERGY GENERATION PROJECTS:

By Steve Sharp

Hydro – MH-1 and MH-2 updates:

As expected at this time of year, we have had some rainy spells this month and so all our operational hydro schemes have been generating electricity.

Total generation at Cwm Gu at the end of October was about 94,000 kWhs. We have received the hydrologist's report regarding the flow at Cwm Gu and have instructed TGVHydro to submit the report along with a licence variation form to NRW, to request a reduction in the size of the HoF notch. NRW has indicated that they are likely to keep the abstraction regime at a 90/10% split, which is positive news. If our proposals are accepted, the changes should lead to an overall increase in flow through the hydro scheme and therefore greater generation potential.

Nant yr Hafod continues to generate steadily and at the end of last month the total generation was close to 74,700 kWhs. It is clear that the marshy peatland surrounding this scheme has caused a build-up of brown deposits on the inside of the penstock pipe and also in the turbine and so we have decided to purchase some hydro 'pigs', which don't have curly tails but are made of polyurethane and we will be using these to clean the inside of the penstock pipe.

The generation total at Blaen Dyar at the end of its first full month of operation was 2,700 kWhs. We are very pleased that some local volunteers have agreed to help us monitor and maintain our two new schemes, Blaen Dyar and Abernant. We have experienced some teething problems at the Abernant hydro scheme which has involved ourselves, TGVHydro and the manufacturers attending site to assess the cause of the problems, but we are hopeful these have now been fixed.

The construction of Cwm Saerbren, our final MH-2 scheme, is progressing well. The sinking penstock pipe has been stabilised and Western Power informed us this week that we have been granted the outstanding S37 consent for them to be able to carry out their electric works. They have already visited site to assess the project and they expect to start their work during the first week of December. It's going to be touch and go but we're optimistic that this scheme will be generating before Christmas – which will be a welcome present.

Now that we have 4 schemes up and running, we'd like to get a few more volunteers involved in monitoring the schemes, especially now that we're heading into the (hopefully) rainy season. It'll take around an hour or so once every 6-9 weeks. If you are interested in helping, please contact Simon Walter

admin@llangatockgreenvalleys.org



Image: Hydro volunteers at Nant yr Hafod

Blaen Dyar Artists in Residence

By [Leona Jones](#) and [Penny Hallas](#)

Following the successful funding bid with [A&B Cymru](#), concrete plans are now underway for the audio-visual installation we've been working on through our partnership with LGV - part of next year's 10th anniversary celebrations.



The photo you can see here is taken from one of the videos made as part of the project, and will be the central image used on publicity for the exhibition - as well as whetting the appetite for things to come.

The installation, to be situated in Oriel Cric Studio opposite the Tourist Information Office in Crickhowell, will be open each day from

Saturday 14th April until Saturday 21st April inclusive. A launch event will take place on the evening of Saturday 14th, and on the final day there'll be extra attractions as well, such as walks around Blaen Dyar (LGV and artist-led) and talks. Throughout the week there'll be other chances to talk to both Leona and Penny about the project.

As an exciting addition, Penny and Jackie will be leading a walk on the footpaths around the Blaen Dyar site as part of the [Crickhowell Walking Festival](#) in February. Full details of all these events will be available early in 2018, and we'll be letting you know what's going on through regular updates in this newsletter and on social media. Looking forward to seeing you there!

[Leona Jones](#) and [Penny Hallas](#)

**Arts
& Business**
Cymru

LGV and the artists have received an investment from [A&B Cymru's CultureStep](#) to strengthen and develop their creative partnership.

Now the electricity flows both ways!

By Peter Blood

Supplying electricity to your home used to be very straightforward. Electricity was generated at large power stations, at one time mainly coal-fired, and then transmitted round the country by National Grid in England and Wales (high voltage pylons) and locally (lower voltage lines) by Distribution Network Operators (DNO). Western Power Distribution is the DNO in this area and its substation in Crickhowell distributes electricity from Cwm Du and parts of Bwlch to Hillside and Glangrwyney. The third player in this game is the Service Provider, the company that supplies electricity to your home, and bills you for it! The function of the grid and distribution network was simply to convey electricity to you from a generator: a one-way flow, and the voltage of your supply could be controlled by adjustments at the power stations.

But over the last 15 years or so this has changed dramatically. Generation is not limited to a small number of power stations: there are commercial wind and solar farms, large and small hydro schemes and many small PV installations on individual homes. Most households remain connected to the supply network to provide them with power when the sun isn't shining, or the wind isn't blowing, and to enable them to export their surplus locally generated energy. There are over a million small renewable energy producers: customers are becoming "prosumers" as the Energy Networks Association has put it. You may be one of them.

So the network must now deal with flows of electricity in both directions: to and from your home. It must have sufficient capacity to redistribute unpredictable bursts of power produced by many small generators, generators over which they have no control. In some cases, this capacity can only be provided by upgrading the network at considerable cost. To utilise power generated by wind farms in Scotland and offshore in the Irish Sea the "Western Link" undersea connector with a capacity of 2.2 GW is being completed from Scotland to north Wales at a cost of £1bn!

Even when the network can accommodate renewable generators, the flow of locally generated energy back into the network can result in an imbalance between supply and demand causing fluctuations in supply voltage and frequency which is difficult to manage.

What's to be done? One approach is to build an "intelligent network" which adapts to real-time variations in power flows. Another approach is to use the power where it is generated so that it does not have to be transmitted out of the locality, avoiding adding a load to the network. At a recent Community Energy networking event with staff from Western Power Distribution it was recognised that "there is a niche revolution taking place in community energy among people who want to find ways of retaining the electricity and economic benefit locally".

This can be done by forming an Energy Local Club. The larger local generators agree to export their electricity to the same supply company and local consumers agree to buy their electricity from this same company, then with the aid of smart meters, and pricing which varies with the time of use (similar principle to "economy 7"), most locally-generated energy can be used locally without going beyond the sub-station. Electricity is still available from the network when there is little or no local renewable generation. Initial experience with a trial project in Bethesda (www.energylocal.co.uk) shows income benefits for generators and

reductions in bills for consumers and similar pilot schemes are to be rolled-out in other communities. To be continued.....

Peter Blood

peter.blood@llangattockgreenvalleys.org

LACAS: End of the Year Allotment News

By Sue Cartlidge

It's a quiet time now on the allotments after a bountiful year for those who put in the effort on their plots.

Events over the year included learning about pruning and grafting in the orchard, the Summer Show which included the popular Dog Show, a garden visit to Alt-y-Bela, and at last completing the building of the new communal area. We were pleased to welcome many non-



allotment members from within and without the village to our No-Fireworks Bonfire Night Do which was, once again, a great success. It's also been a great year focusing on building the strength of the beehives, chickens and the orchard, and we have been joined by some new allotment members as well as new committee members.

Everyone is now focused on putting the allotments to rest and preparing for another successful growing year. There should be some plots becoming available in the spring if anyone would like to join us. If you are interested please contact Phil Gibson on 01873 811537 or gibsons@uwclub.net.

Image: New chickens attacking sprout tops



Focus on Felling

By Jackie Charlton

The year is passing really quickly now and it's time for us to start building up on our wood stores for selling next year. The sale of wood keeps our charity financially sustainable and pays for protective equipment for volunteers, expenses which includes our now famous weekly sausages, other major equipment replacement and fuel. But this is



not the primary reason for felling and managing our small woodlands. Our primary objective as a charity is protecting and supporting the environment. Last year we worked in partnership with Canal & River Trust to coppice the hazel on the canal bank along the towpath between Llangynidr and Gilwern. Hazel makes excellent fire wood, provides wood for hazel hurdles, nesting and food sites for wildlife including of course the elusive dormouse. Our aim this



year is to continue that coppice work, keep clearing the rhododendron and laurel by the towpath and start managing the Alder Carr. All those actions will help recharge the woodlands and provide new sites for wildlife.

Extra funding from Fund for Wales has helped purchase a new chain saw and other associated equipment including helmets, goggles and ear protection for our volunteers. This will enable us to

keep managing the woodland sites, improve the environment for many woodland species including dormouse, bats, birds, moths and butterflies.

Website

Please visit our website. Go to <http://llangattockwoods.org.uk>. It is looking really good and any comments would be gratefully received. Still more to do as it is work in progress but we are quietly pleased.



Woodland Charter new project ideas are on the way from the Woodland Trust.



Alder Carr Lottery

Llangattock Community Woodlands has been advertising the Alder Carr Lottery for several months and would really like to see more members. Please contact jackiecharltonlgv@gmail.com or andrewgpeach@gmail.com for information.

The **Alder Carr Lottery** is registered under the Gambling Act 2005 and has a Small Society Lotteries Registration Certificate Registration No: LN/201600367.



Bob's bee notes - December

In November, Colin Gardener and I spent an interesting Saturday extracting a colony of bees from a roof near Pandy. Colin had been at a woodland social gathering in Llanvihangel Crucorney the week before where he was introduced to someone who had wild honey bees in his roof that he needed removed.

I have had previous experience of this sort of request so we took along various bits of equipment and once we could see what we were up against used our experience and skills to work on the colony. Colin had said that scaffolding





would be necessary if we were to be able to work safely, so when we arrived at the remote house it was good to see all was ready for us.

We could see where the bees were accessing the roof space on the end of the building where a squirrel had chewed its way through the timber on the gable end of the house. The roof tiles were gently eased up to reveal the squirrel damage to the roof insulation. Part of the bees wax had been broken where the squirrel had been removing and collecting the roof insulation. The photo shows how the beeswax had been built in the narrow space between the rafters, ceiling, and roof tiles when the swarm first arrived some years previously.

We cut the comb into pieces large enough to fit into frames and placed into a nucleus hive securing with strong elastic bands and thin string. The Queen was eventually found, then she was placed into a small plastic cage with a few worker bees and fixed onto a frame with brood that was about to emerge. That evening I returned just before dark, wrapped the nucleus hive in an old sheet and took them to my apiary.

I was able to inspect a sample of the bees and found they were 86% native honey bees. Next year I shall have some bait hives dotted about that area to see if they will attract swarms as the bees in that area are native and will have survival genes that could prove very useful to next year's breeding programme.



Enjoy your Christmas mead, Bee Bob.
And Good beekeeping!



LGV VOLUNTEERS NEEDED PLEASE! CAN YOU HELP?

We are looking for a number of people who would like to get involved at Director and non-Director level. Please get in touch with Andrew Fryer if you would like to explore the ways in which you can help: andrewfryer70@gmail.com. You can meet our Board of Directors [here](#).



Please follow [this link](#) to the Llangattock Litter Picker's November newsletter, which includes litter picking dates/times for December.

Anyone intending to come out litter picking with us in December, please do let us know by emailing llangattocklitterpickers@hotmail.com so that we can plan the litter picking routes and place enough road safety signs out prior to the litter pick.

PLEASE ASK US!

If anybody would like to look at LGV's finances or discuss our schemes and projects, please contact us and we will be happy to help. We are proud to be operating a transparent and successful Community Interest Company. You may also find useful answers to our [frequently asked questions](#) on the LGV website.



To find out more about us or to become a member, please visit:

www.llangattockgreenvalleys.org

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