



## **Briefing Paper on Community Sustainable Energy for the Climate Change, Environment and Rural Affairs Committee of the National Assembly for Wales.**

**November 2017**

### **Background to this paper:**

This paper has been prepared by Community Energy in Pembrokeshire, a Community Interest Company whose aims are to provide umbrella support for community led sustainable energy schemes both by direct development of schemes and adding capacity to local groups. Two key member organisations, Cwm Arian Renewable Energy (CARE), and Transition Bro Gwaun (TBG) have contributed comments. These organisations represent the Pembrokeshire projects that have gained planning consent to date with support from Ynni'r Fro and Ynni Lleol.

The paper's lead author is Ben Ferguson, who has multiple roles in the sector. Ben has been a Development Officer for the Ynni'r Fro and Ynni Lleol schemes since their inception in 2010. He was a founder member and Director of Carmarthenshire Energy Limited until that organisation (a BenCom) successfully built a 500kW wind turbine scheme under community ownership in Salem, Llandeilo in 2016. He is a Director and founder member of CEP. As a Development Officer he has been supported in these roles with recognition that capacity shortfall is a serious barrier to the community energy sector. Nonetheless all comments in this paper are submitted in CEP's name and should not be attributed to Ben Ferguson's role as a Local Energy Development Officer or as the opinion of Energy Saving Trust or the Local Energy Service.

### **Recent progress of community energy in Wales**

In Pembrokeshire, one community energy scheme has been delivered under the Ynni'r Fro support programme. This is a 250kW wind turbine at Fishguard owned in 50% joint venture between Transition Bro Gwaun and a local farm.

Numerous projects were proposed across the county from 2010, but only two other projects have gained planning consent. These were a wind turbine for CARE at Llanfyrnach (originally proposed as 2 turbines at 1.2MW each, consented as a single turbine at 500kW) and a wind turbine for CEP at East Williamston (originally envisaged at 500kW but has now secured Active Network Management from the DNO up to 900kW).

All three projects were refused consent locally, in some cases in spite of significant support from the host community. All three ultimately won consent at appeal.

The two consented projects were financially profitable at the time of application to the LPA. However the delays caused by the appeal processes in each case coincided with the severe FIT cuts imposed by Westminster Government in Autumn 2015. This initially rendered the projects unable to secure finance. Solutions are being sought with measures such as deployment of used turbines, and more sympathetic finance offers from the Development Bank of Wales. Nonetheless both remain marginal and are unlikely to generate significant cash benefits for the local community after all.



Under the 2 years of the Ynni Lleol programme, and since the FIT cuts, significant progress has been made towards developing projects which are place-based, and will look to business models that connect generation, supply and purchase within the context of a distributed network. These projects respond to the need to develop a SMART grid network and complementary SMART markets, and will be more sustainable.

In Pembrokeshire, the following projects are seeking to develop local supply and demand networks with existing and new distributed renewable generation:

- Fishguard (TBG 10MW tidal energy project supplying onshore local markets)
- Fishguard (TBG microgrid project currently invited to business planning for WEFO funding under the Small Scale Renewables Theme)
- Tavernspite Zero Carbon Village ( CEP supported, balancing seasonal caravan park and local dwelling winter heat energy demands)
- Llanteg Park (CEP supported, 39 dwellings seeking to develop microgrid)
- Milford Haven / Hubberson / Hakin (CEP partnership with Milford Haven Port Authority & Capeston Organic Farm, developing community owned Anaerobic Digestion to balance a solar pv farm and microgrid to Milford Haven Waterfront)
- St Davids (CEP supported 10MW tidal energy project supplying onshore energy markets)
- CARE wind turbine seeking to deliver local supply and support local haulage firm in converting to hydrogen fuel cell drive train
- CEP 900kW wind turbine at Prouts Park East Williamston ( potential for local supply model)

All of these projects are confronted with capacity constraints, and without persistent and probably increased financial support, the community will not be able to realise them.

Across Wales, some strategic social enterprises are forming, which at their best, using examples such as The Green Valleys hydro (<http://www.tgvhydro.co.uk/>) signal the wider benefits of developing supply chain within Wales. However most groups remain hobbled by lack of capacity or the failure to secure projects during the “fat” years of feed in tariff. Local developers friendly to the community sector such as Seren Energy have brought a number of wind projects to community groups, but are unlikely themselves to survive the current drought in the onshore wind market. Future support should be sufficiently broad to develop a social enterprise sector, in partnership with our education sector, capturing these wider IP, supply chain and system management markets.

We also note that post-Brexit means post-WEFO. WEFO funds have been a significant contributor to the Ynni'r Fro Programme, but in this round are being delivered by WEFO direct to communities via a call for expressions of interest carried out earlier this year. Feedback from that call and from the groups currently invited to the business planning stage indicate some shortfall in understanding of the basic principles of how energy systems work, or a failure to access external resources to advise on this. There is also limited understanding of the shortage of capacity for communities to undertake the business planning process for WEFO. For community groups it is perplexing to be engaged in support services from WEFO and Local Energy which do not appear to have a consensus on what a good project looks like and how a community should be supported to deliver it.

Finally on this area, it should be noted that the Feed in Tariff and Renewable Heat Incentive schemes have suffered from some perverse incentivisation with regard to energy efficiency, and tend to separate energy efficiency from renewable energy generation. In the current conditions,



more joined up working is incentivised, looking to minimise impacts on grid infrastructure with balanced local markets, with energy saving as a key contributor.

However resources have been diminishing in this area, with the loss of organisations such as ECO Centre Wales, and the closure of the Resource Efficient Wales Programme. Greater community participation, meeting energy efficiency, behaviour change and smart meter rollout will necessitate deeper and more consistent market /community engagement, and new programmes will need to recognise the resource impact of delivering more complex projects.

### **Examples of good practice and innovation in Wales and beyond**

- TBG – Abergwaun Community Turbine Ltd – currently included in evidence gathered by WG towards call for evidence on meeting community energy targets
- Private sector partnership value (Seren Energy sharing development risks with CEL, Granell, Llanfyrnach, Bwlchgwynt, East Williamston)
- TBG tidal – partnership approach, SEACAMS involvement from early stage, Marine Energy Wales support, Stena, SDF, LEADER
- <http://www.gowerpower.coop/> Community Supported Agriculture, Renewable Energy and projects addressing biodiversity loss.
- <http://www.ynniteg.cymru/> YnNi Teg is a new Welsh community energy project with a newly commissioned 900kw wind turbine near Carmarthen.

### **Views on how Wales' target of generating 1GW from locally owned energy by 2030 can best be achieved**

The first point of clarification here is on how community energy is to be defined and valued, and why that value should lever a particular kind of support.

In terms of the driver of climate change, it is clear that the technology exists to decarbonise our societies. The market is developing momentum, indicating that policy drivers for sustainable energy in itself are becoming less relevant than they were. From a climate change perspective the outstanding question is whether global decarbonisation will be achieved in time to avoid significant temperature increases, and this is where policy drivers need to be strengthened.

In terms of economic drivers, it is less clear that the market is ready to adapt to distributed energy markets. Technology is delivering solutions at all scales, and the community sector is potentially caught here between private householders as energy entrepreneurs, and private sector companies with the potential to emerge alongside, or replace, the existing “big six” model. This is where the targets set are of real value.

The fact that renewable generation is possible, in one form or another, almost everywhere, means that expanding community ownership, as well as domestic scale projects, presents a significant opportunity to counter the centralisation of wealth that has blighted so many rural economies for generations, a trend now much accelerated by global marketing.



Communities have a unique potential to develop place based energy markets with sufficient diversity of supply and demand to co-exist within a national / international electrical grid while maximising local economic benefit and minimising pressure on grid infrastructure.

Furthermore, with our farming industry suffering considerably from fluctuating markets globally and within Europe, and with further uncertainty presented by Brexit, distributed energy generation and local markets offer a potentially long term and stable element to local economies where landowners can benefit from a balanced yield of natural resources as food, as energy, and in the form of ecosystem services (for example where Anaerobic Digestion can be deployed to manage on-farm waste streams in Nitrogen Vulnerable Zones), and/or from rental income from a local social enterprise operating renewables on their land.

Local Authorities should also be recognised and supported in delivering a key role. Welsh Government has made support programmes available along with opportunities to invest equity in local energy, but this has so far failed to stimulate substantial action: Further consultation may be helpful in meeting the barrier faced by Local Authorities in taking this action in partnership with communities.

Local energy can deliver a more resilient and equitable energy economy with the potential to eliminate persistent social ills such as fuel poverty, achieving improved social, health, educational and general wellbeing. It is essential that target delivery mechanisms and definitions perceive and remain focussed on these benefits as the key reason for supporting communities as a specific sector, with unique needs and benefits.

1. Continue to find additional resource to support local communities to lead projects – including project skills, volunteers, training, information dissemination (esp to Community and Town Councils)
2. Find ways to ensure Local Authorities and Communities work in partnership towards shared goals rather than competing or simply opposing one another. Foster an atmosphere in which Local Government and communities (and the private sector) recognise their interests as more common than not. Currently, two services, Local Energy and Local Partnerships, deliver separate support to Local Authorities and Communities, which does not foster such cooperation.
3. Invest money in risk at development stage (more than presently delivered under Ynni Lleol)
4. When assessing value for money, establish clear mechanisms for recognising wider benefits – be they secondary and tertiary financial benefits such as IP, supply chain, jobs, reduced local energy costs, reduced pressure on infrastructure and services, or wider cultural and social benefits meeting objectives such as the Wellbeing of Future Generations Act. Seek methodologies for evidencing this for example from New Economics Foundation etc. and build them into the expectations of any support you provide
5. Make flexible capital finance and grant investment based on the whole potential benefits stated in 4 above, not on a narrow, single bottom line model
6. Ensure that the end of WEFO activities does not signal a reduction in the levels of financial support available to community projects – the Scottish Government Challenge Funds are a good model to look to here
7. Foster closer working at WG level and within WG directed bodies such as NRW, across environment, business and innovation departments
8. Get proper clarity on planning consent, and put communities in a strong position, for example with permissive development status or planning orders



## **Barriers to the development of community energy projects**

- Planning consent – covered at length below
- Capacity – there are simply not enough people on the ground with the time to develop the skills needed. These skills run from the basics of organisational development through to governance suitable to deal with substantial financial sums, through to the complexities of procuring and delivering work in a very complex field. We need investment in volunteering, training and development with a view to providing a growing workforce to meet the needs of a new distributed energy economy
- Money at risk – less of this will be needed depending on how well the two points above are met – but the fact remains that new projects will remain innovative and complex, and money needs to be invested in feasibility for distributed energy systems at a higher level of intervention and risk than was the case when seeking to develop projects in mature industries such as wind, in a secure financing climate such as provided by FIT
- Flexible capital investment – high interest, short term loans will not work to grow a new energy economy based on substantial up front infrastructure investments that will pay back through local markets over long periods. These projects will be sustainable in the long term, but will not achieve that sustainability on a 7 year cycle. The range considered should be more like 10-25 years
- Cost of market engagement and administrative burdens of establishing local energy trading schemes so that energy customers can benefit financially from local projects, even if they are not investors. Distributed networks will hopefully facilitate this.

## **Support provided by the Welsh Government through its Local Energy Service**

*Local Energy commenced as the daughter programme to Ynni'r Fro in January 2016. The comments below are verbatim from feedback from CARE, without contribution or editing by Ben Ferguson.*

Support from Ynni'r Fro to CARE was invaluable throughout the development of our wind turbine project, and that from Ynni Lleol continues to be so. The scheme empowered us as inexperienced community volunteers, to become more knowledgeable and to keep ownership of the project. The specialist knowledge, and enthusiasm of our Development Officers continues to be a huge help, and we really couldn't have done without it. Indeed, we couldn't continue without it as the financial, technical and legislative barriers continue to make it very challenging for community groups to get projects off the ground.

There have been challenges with our engagement with Ynni'r Fro and Ynni Lleol along the way – we often felt that there was more work than even our DO could manage and that their portfolios of projects were too large for them to keep the positive momentum going.

We felt that the communication between Ynni Lleol officers and WG has not been clear – where the fault for this lies, we don't know. But everyone seems to have been frustrated by the discrepancy between positive policy and guidance coming from above and the understanding and willingness of local authorities to engage with the concept of community renewables.





We can only assume that communication or will has failed somewhere along the line. That said, we did feel that our Dos, especially near the beginning, were very proactive in feeding back to WG...but it feels like little changed

We have noticed a decline in the time available to us from Ynni Lleol Dos latterly, and are not sure whether this is because of the status of our project or because there is less time available to all projects or because of relationships between individuals. Overall there is still a definite willingness of Dos to work with our project though, and the moral and financial support of the scheme is currently the only thing external to our committee's own grit and determination, that is really keeping our project running.

### **How the planning process can facilitate developments, and to what extent priority is given to local and community owned projects**

The planning process has potential to facilitate developments inasmuch as it provides a process for ensuring compliance of any proposal with key planning needs, some of which contribute towards ensuring the technical viability of the construction and operation of any project

However, the delivery of the planning process has presented significant barriers to the projects developed by communities in Pembrokeshire in the following ways:

1. Local Authority Officers in Pembrokeshire have on the whole dismissed the proposal that community ownership or any of the associated financial and wider benefits associated with schemes of the type can be given any weight in the planning process. On the contrary they tend to re-affirm that the planning decision is made on the proposal and not the applicant
2. Wind turbine developments, given their association with small minorities of vocal objectors, have been disproportionately vulnerable to refusal on grounds of visual impact. In a wind turbine development, all material facts such as noise, ecology, access etc are of a fundamentally binary nature – either the scheme meets the requirement, or it does not. In contrast, visual impact is fundamentally a subjective matter, hence particularly open to abuse as a reason for referral whether put forward by private objectors, members of local government (whether members of the Planning & Rights of Way Committee or not). Planning officers may or may not have strong private opinions on the subject, and are compelled to present a fundamentally subjective matter as though it were being dealt with by an objective methodology. This is a significant flaw in the process.
3. On being refused consent, and going to both lost and won appeals, communities have flagged these issues to Welsh Govt. WG planners have consistently refuted that there is any shortfall of clarity between WG and LPAs on the policy issues. The evidence shows this is patently not the case and that individual Welsh Govt Inspectors, WG Planners and LPAs are on substantially different pages on these matters.
4. Given the confusion, the status of community ownership appears to some to have constituted not a benefit but a handicap within the planning system. The nature of WG support encourages groups to consult more widely and sympathetically with communities, and to put additional effort into developing community benefit evidence, reporting and



distribution policies which are additional burdens on capacity. This also has the effect of exposing community volunteers as individuals, as well as projects in themselves, to local criticism and opposition. Without better resourcing this has the potential to create more division than a standard commercial approach to development.

5. No evidence to date has been gathered to compare the attrition rate of community versus commercial projects at planning consent in Wales during the 2010-2015 period. However, the briefest observation of the landscape indicates substantial successes on the part of the private sector, with minimal results for communities.
6. The financial consequence of the refusals in Pembrokeshire in the 2010-2015 period as standing today are:
  - a. Approximately £131k of WG money spent through Ynni'r Fro grants, of which approximately £97k is attributed to projects struggling to get finance due to the feed in tariff reductions and likely to be built with lower than anticipated returns and under alternative models (e.g. local supply, refurbished turbines)
  - b. The potential for approximately £6m in operational surpluses via FIT payments, in the hands of local communities planning to support their local economies, tackle fuel poverty, and deliver more decarbonisation, has been lost