



A report on the first UK community energy conference for public sector and communities







It's an exciting time for UK community energy

The 4th September 2014 saw over 200 representatives of community energy groups, local authorities, the third sector, central government and other public bodies come together in Oxford Town Hall for the Powering UP! conference.

The conference explored the latest challenges and developments for community energy in the UK, which has been moving at a fast pace since the launch of the first community energy strategy in January 2014. In particular it hoped to explore how local authorities can support community energy, the benefits on both sides and how together they deliver on the full potential of community energy.

This short report, written by Oxford City Council on behalf of the OxFutures partnership, captures some of the highlights of the programme and the notes taken in the afternoon workshop. It aims to provide a reminder of key insights and the examples that were shared on the day. Unfortunately it isn't possible to provide a complete account of all the views expressed, but where possible we have consulted with the speakers and discussion leaders in drafting the text to make it as relevant and useful as we can.

We hope you enjoyed the day as much as we did and we look forward to hearing of your community energy success stories at future events.

Rt Hon Edward Davey MP

Secretary of State for Energy and Climate Change

"It's an exciting time for community energy in the UK and the Government wants to help communities and local authorities provide affordable, low-carbon energy sources in

their areas. The Powering Up conference gives communities the opportunity to share knowledge about how they can work together to see more energy projects get off the ground and, in the process, provide

jobs and reduce bills for local people."

Ed Gillespie

Co-Founder of Futerra

"We're at an amazing and historical tipping point in the way our energy is generated and owned. The potential for unleashing energy independence, enhancing energy security and transforming energy sustainability is incredibly exciting."

Councillor Bob Price

Leader Oxford City Council

"The Powering Up conference was a thrilling opportunity to exchange experiences between community energy groups and to highlight the enormous opportunities which are now within our grasp to transform the UK energy market and deliver a sustainable future for our

community and our economy. I congratulate the organising team and the attendees for the outstanding quality and scope of the presentations and the discussion sessions."

Councillor David Nimmo Smith

Oxfordshire County Council Cabinet Member for Environment

"I was delighted to attend the conference, seeing the different applications and the benefits of local authorities and local communities working together. The work was truly inspiring and I welcome the fact that alternative energy supply is being treated with such importance, saving money and creating jobs."

















A Community Energy Revolution?

Rebecca Willis charged the atmosphere with her provocative analysis of whether we meet the conditions for a proper community energy revolution. Here is a summary of her argument...

Vanguard

One qualification for a revolution is the presence of a vanguard. We have that not only in Brixton and Oxford (big cities with the bolshy students!) but also in leafy Bath and Dumfries and Galloway. And it's spreading! With mentoring schemes experienced community energy groups can help the new ones.

Infiltrating the establishment

With the UK's first community energy strategy published in January 2014 and a Community Energy Unit set up at the Department for Energy and Climate Change there can be no question that this condition is met. Proposals for new models are now emerging from the working groups set up as part of that strategy – for example on shared ownership requirements that developers offer a stake to the local community. There are changes in local government too with partnerships with community groups based around new ways of delivering local energy.

Out with the old

Rebecca proposed that our revolution is a bit on the quiet side. We know what we want, but could be more explicit about what we don't want. Revolution means changes to business models and to the way our regulated energy system looks and feels in order to have a new market structure. It's also not just about doing more good stuff but also doing less of the things we don't want. For example there are links being made between divestment away from fossil fuels and opportunities to invest in community energy. For local authorities this is an opportunity to divest on the one hand, and to make investments that keep money circulating in the local economy on the other.

What are the social and economic changes we want to see? Community energy offers a radically different set of energy behaviours. It could lead to a local energy ecosystem that covers supply, demand reduction, carbon literacy and the motivation to change. The difficulty is in not knowing what the model is a priori: it needs government and local government to support innovative models without being prescriptive.

Are we nearly there yet?

Rebecca challenged the conference to consider whether we wanted to have our cake and eat it? Are we looking for the benefits of community energy without being willing to do the hard job of challenging the status quo? She called for us to demand changes. For example: to get comfortable with challenging the existing bias in relation to grid connections and be explicit about demanding discretion for Ofgem to prefer community groups; to challenge big investors such as the Green Investment Bank to consider community projects; and the issue of the Financial Conduct Authority clamping down on co-ops not selling energy to their members when the barrier is regulation.

So we aren't there yet but it is an interesting transition point for community energy. There are new models and "cunning plans" emerging to address the barriers – we just need to see it through.



"is there anyone here from Tunbridge Wells? ... that's when we'll know we've got a proper vanguard"

> "Can the Big 6 be brought into the mix, change their business model and be part of it?"

"...unfinished revolutions are dangerous things."

Community Energy Strategy and beyond

With the working groups of the community energy strategy about to publish their findings and recommendations, here's what our panellist had to say on the current challenges for community energy:

Hydro Working Group

- Only 1% of hydro capacity is community energy: there are still barriers.
- Landlords including local authorities can help by working constructively.
- Implementing community schemes takes around four years with three `at risk'.
- Support is needed for early stage finance to help projects become bankable.
- FITs that favour community schemes are also important: many schemes have been in development long before FITs, but now face degressions.
- Help to raise funding for public good services (aka "fish pass") would reduce a barrier.
- A positive national framework to support and favour community schemes is needed.

Grid Connections Working Group

- The group's report made 27 specific recommendations.
- Many can be delivered within the current regulatory framework for the distribution network operators (DNOs).
- The recommendations related to: engagement between the DNOs and community groups; the responsiveness of the DNOs to community energy needs and the cost of connection.
- In order to discriminate in favour of community energy in relation to grid connect, a wider public policy steer is needed. This needs to enable Ofgem to satisfy itself regarding benefits and any disadvantages to consumers.
- Further engagement is through the distributed generators and smart grids forum.





Planning Working Group

- The planning system is critical to transforming society, but we need to transform the planning process for community energy.
- It needs good planning policy and improved skills to respond to this exciting agenda.
- We should combine energy and spatial planning.
- Poor practice includes charging community groups for pre-application consultation and not including meaningful policy on community energy in local plans.
- The policy framework has hooks that could be used more effectively.

Finance Working Group

- A clear investment readiness programme is needed for community energy including accrediting the advice regarding legal and governance issues
- Ensuring financial support can be used to pay for legal advice.
- Development risk capital needs to be flexible to meet the needs of groups.
- Proactive and bespoke guidance is needed on state aid.
- Self-policing of share issue practice in this sector is recommended to ensure investors are protected and avoid heavy regulation.
- Market for project debt needs to be developed through Government support.





Inspiration from around the UK

This session featured the Pecha Kucha style: 20 slides, 20 seconds each to highlight the achievements and insights from their case studies. Congratulations to all our speakers for meeting this challenge (some have even said they would do it again!) - here's a reminder of who was speaking and some of those insights.

Reg Platt, representing the **Institute for Public Policy Research**, set the scene: we should welcome new technologies, but they aren't so good for the existing big companies. So we need to change the system to work for us and **communities are essential** to this change because they are **trusted**.

Successful share offers have been made by **Bath and West Community Energy** who have raised nearly £5m for local energy projects with expected returns of 7%. The group work closely with Bath and North East Somerset Council and have



signed a co-operation agreement to aid this. **Plymouth Energy Community** also raised £600k this year in their first share offer.

Despite this the Bath group reported being at the beginning of a journey which demonstrates the **learning curve** involved and the need to share knowledge and learn from the pioneers. Tanya Nash from Swansea described their aims to help deprived areas through a politically-driven top-down programme supported by the appointment of a cabinet member for sustainability within the council.

Experience from Plymouth on local authority and community group partnerships is that they are long term, projects can be delivered **faster and at lower cost** and that it is a fantastic way for local authorities to **engage** with their communities. In the Plymouth model the local authority carried out the ground work for Plymouth Energy and then **transferred ownership** to the community.

There is a role for local authorities, and other bodies, to help find **funding** to help establish community groups. This was the case for **Carmarthen Energy Ltd** who benefited from a multi-agency grant pot and are delivering wind and schools' solar pv projects. It was important here however that groups get themselves going before approaching the local authority. While this appears to contradict the Plymouth experience, in fact it probably exposes the fact that there is a difference if the driving force lies in the local government or in the community. Where resources are constrained or dependent on volunteers, it's important to **focus on achievable projects** with a credible means of delivery.

Fuel poverty is also a significant issue and key driver. This is especially true in **Dumfries and Galloway** where the rate is as high as 37% so engaging communities to help those people is a major opportunity. Chris Wood-Gee told us about their work to support communities to develop sustainable energy action plans and said that we will only deliver if we work together. This was a message reiterated by Agamemnon Otero from Repowering London. He went on to emphasise the role of individuals in **making things happen** and the importance of people over clever financial engineering: there is no lack of money, there is a lack of will.

Investment in individuals as well as communities was also reflected in insights from Bristol. Kate Watson said that groups need to find a **local authority champion** who can inform, train and encourage others. At Bristol they are supporting their communities by launching an area-based initiative to promote the Green Deal in which community groups receive a referral fee.





Consultation or cake?

Jodie Giles, Regen SW

It goes without saying that all communities are different so when community groups come to engagement they need tools, methods and messages that work for their local audience. For example the best engagement in urban Lambeth will be very different from rural villages like Charlbury. So how do you draw people in?

Sustainable Charlbury established a mandate for their work via a door-to-door survey with 25% return and 76% support – but this was labour intensive. Stimulate debate by making energy more visible: a summer fete with pedal powered films, a solar stage or unplugged events. Low Carbon Chilterns worked with community buildings, scout or faith groups who, once persuaded of the benefits of

saving energy, were able to spread the message through their own networks. Find those inspiring and creative individuals to lead their community to action.

There are also tools out there for creative engagement, for example: Ketso.com. Regen have just launched a new project to develop creative engagement tools and training, they will also be offering free tailored engagement and technical support to 30 community energy groups. Contact Jodie jgiles@regensw.co.uk to join Regen's network and register your interest in this Esmée Fairbairn Foundation funded project.

Understand your audience, and make your engagement activities fun and interesting.

Community District Heating

Simon Woodward, the UK District Energy Association

Energy consumption for heat dominates household energy bills compared with electrical use. A big message from this discussion was that heat isn't high enough up the agenda.

Heat has been a priority for some. An example given was the implementation of district heating on a domestic estate currently supplied by oil. This project had faced a number of challenges – not least gaining agreement from all the parties involved. This is especially true given the need to sign up to a long term (20 year) heat supply agreement and achieve a critical mass to fund the project: the decision is often a lifestyle choice as much as

about energy purchasing. Another group encountered public procurement issues in developing a communal biomass system to feed a number of local authority buildings. In both cases a key lesson was that having one or two anchor off-takers was important. Other issues include: needing the ability to pre-register for RHI in the same way as FITs; what is a fair price to pay for heat and where the risk lies in financing; and, dealing with predictions of demand that depend strongly on weather. An advantage is reduced maintenance. With all these questions and issues one thing is clear: a forum for communities to share their experience would be highly beneficial.

Let's get heat on the agenda - we need a Community Heat Conference!

Spending the Energy Company Obligation

Kevin Frea, Halton Lune Hydro Ltd.

Many groups and local authorities around the countries have sought to attract and spend Energy Company Obligation (ECO) funding. This discussion recognised that it hasn't always been easy and, drawing on the experience of the groups, collected the following recommendations:

- Start small because there is a learning curve and it is important not to overpromise
- The EPC is vital because funding rests on carbon reductions
- Working with local authorities brings the credibility of their brand and can help to engage householders.
- Try to talk to the Head of ECO at the utilities you are engaging and keep talking to them as the project develops in order to be clear on their offer and whether it is changing
- Installers are potential allies

More advice for groups on how to make the most of ECO is needed



Setting up local supply companies

Reg Platt, Institute for Public Policy Research

As energy generation becomes more localised through renewables and district heating there is growing interest in the opportunity for energy to be supplied directly to local residents. At the same time, many consumers, including high proportions of the poor and vulnerable, are paying too much because they don't engage in the energy market by switching. Extremely low consumer trust in energy companies is a key barrier to switching. Could local authorities and community energy groups become engaged in the activity of selling energy to their local residents?

A community energy tariff linked to a local renewable development could spread the benefits of the development around the community, helping to secure community support

It is happening and it is achievable, stick with it!

for developments. The possibility of realising cost savings from this model was raised. Local authorities and community groups may be able reach out to those who don't switch due to their strong local presence and trusted relationships with residents. Several local authorities were actively exploring an energy supply role, attracted by generating an income stream. There were concerns regarding expense and complexity of the junior electricity supply licence (licencelite). The 'Ovo Communities' proposition, in which Ovo Energy partner with community organisations to set up local energy companies, and take on responsibility for complex operations like trading and billing, was seen to offer a half-way house.

Policy drivers for unengaged local authorities

Stephen Cirell, Stephen Cirell Consultancy Ltd

The role and benefits for local authorities in community energy hasn't yet been set out clearly enough.

Presenting the benefits is important because in resource constrained times, local authorities often face a choice between delivering projects on their own estate themselves, rather than helping community schemes.

For example community schemes are likely to enjoy more local support, and community energy could help local authorities act

on fuel poverty. Local authorities could help to empower more deprived areas to take advantage of community energy.

Confusion regarding the role of local authorities and communities arises because they are referred to collectively, but each can have very different roles and ways of delivering decentralised energy. Partnership working is at the heart of the local authority role. Success at Plymouth Energy Community is due to buy in from all key players. It was politically driven but the community felt in control: so there was a drive from both sides.

Investment in education and training of councillors/senior officer in local authorities.

Investment readiness - making the financial case work

Robert Rabinowitz, CEO, Pure Leapfrog

Action on two fronts is needed to make more projects financeable. The finance industry needs educating away from the fear of the "community energy group" and a clear roadmap is needed on how community energy groups become investment ready. There is guidance available on investment readiness but more is needed to support a joined up journey for communities. A detailed checklist would be helpful.

A lack of key skills in community groups is a barrier. Attendees suggested the following way to generate engagement and get these skills into your group:

- Public events, running your own and having a presence at events run by other organisations
- Some groups put ads in local papers.
- Join forces! Twin with more experience groups or create "mother co-ops" in which 10 or so groups share skills and this can help with the administration required over the lifetime of a community energy project (e.g. 20 years).

A roadmap to investment readiness is needed for community energy groups



Smart metering

Robert Cheesewright, DECC

Smart Energy GB, an independent organisation, has been tasked with building enthusiasm for, and educating people in the use of, smart meters.

Currently many consumer and community groups have little understanding of the technology, their capabilities and purpose. While one attendee did not agree with the merits of the inhome display: "I have everything I need on my computer", other contributors were excited about the potential for energy saving from smart meter use. The benefits of smart meters are near-realtime energy use display, enabling energy-savings, and direct connections to suppliers, for accurate billing and faster switching, there may also be concerns about intrusiveness if the data protections are not properly explained.

Community groups could have a role to play in maximising the benefits for local people. Indeed, this could be essential to the success of smart meters. The meters could be an engagement tool with schools and their pupils and contributors raised hopes that neighbours and streets could collectively compete with one another. The discussion also mentioned potential for confusion over standing charges and they could cloak one's actual level of energy saving.

More information about smart metering in the home is needed and community organisations have a big role to play

Getting people to use less energy in homes

An issue for community groups is that outside of the early adopters: most people are not interested in saving energy and don't want to `return to the Middle Ages'. This was echoed by the experience of members of this group who felt like they were `fighting the mass marketing of wider society' and that `some households will only change when the bailiff arrives'.

It was agreed though that people do change all the time and that it is finding the right triggers for different people that matters. In the same way, not all messages are suitable for everyone – e.g. one cannot tell the elderly and those with a chronic illness to turn the

Know your audience - touch a nerve

heating down. Using the right kind of messaging is really important too: understand your audience and look like them (or at least like someone they want to listen to).

Giving people the tools or achievable (by them) next steps is necessary. Smart meters could be one of those tools. One tool for the communicators themselves may be "Yes! 50 secrets from the science of persuasion", a book recommended during the discussion. In terms of the local authority, one authority was quoted as allowing people to borrow LED lamps to test in their home.

Challenges and solutions for raising finance from the public

Lisa Ashford, Ethex & Goring and Streatley Community Energy

The barriers to investment in renewables vary depending on whether we are talking about big investors, 'high-net-worth's, people who have other kinds of investments and those who have never invested beyond regular savings products. Issues raised in this discussion included:

- lack of understanding of these type of investments;
- loss of tax relief (EIS) and liquidity (shares not being tradable);
- communicating/managing relationships with both small and large scale investors;
- accessibility to mass market;
- whether factors such as age, gender or background made a difference.

It was thought that councils could play a role by providing loans to projects which adds credibility to community groups seeking investments from the public. A good example of where this has been successful is for Plymouth Energy Community Renewables. It was recognised that some councils might feel uncomfortable if it seemed they were recommending an investment. Financial advisors (IFAs) could play an important role if they are brought up to speed on the benefits of some of the community energy projects. Communicating with different types of investors in different ways is essential if a group wants make their offer accessible to the general public.

Lack of awareness and the loss of tax relief are the top two issues to address



Participative Energy Planning

Graham Ayling, Energy Savings Trust

The Community Energy Strategy provides the context and mandate for engaging communities on energy planning in order for everyone to take advantage of the opportunity associated with district heating, the demand for other forms of local energy generation and the chance to influence the energy supply network. The challenge is in connecting community groups with local authorities and in particular to the planning process. The National Planning Policy Framework for England sets out an expectation that local authorities should have a positive strategy on renewables and community energy.

The discussion reflected an expectation that this should be reflected in the Neighbourhood Plan – but there is little experience with this so far. Cornwall was held up as an exemplar of bringing forward guidance on community energy in planning policy.

Distribution network operators can engage well with community groups, but they can't invest in preparation for delivery of a scheme. Early engagement between all involved may enable a smoother journey by being more strategic and identifying opportunities that work for all involved. A grid collaboration service can inform planning decisions and develop joint applications. A community group from Cumbria were considered a good example. They got LEAF funding and started to look at deploying a range of renewables and are approaching self-sufficiency in electricity.

Top down, bottom up

Different financial models for community energy schemes

Andrew Enebe, Energy Donwell and Stephen Edwards, Brent Council

It's important to consider how you want the community group to work and then seek a suitable funding model. More guidance on the models used so far would allow communities to weigh up the pros and cons in their own context. Repowering London/ Brixton and Plymouth were held up as good examples of community funding in fuel poor areas and Oxford's Low Carbon Hub CIC got a positive mention for providing technical assistance and cap ex funding up front.

Crowd funding, such as the Donwell platform, have an appeal due to the possibility to reach a large audience, but it was thought that it is more effective to engage directly with the local community.

Schemes that allow anyone to invest a small amount often still rely on larger chunks of investment in order to operate. Other points raised were whether it is possible to focus on a particular geography and whether there are any issues for trusts or local authorities due to the mechanism for subscription.

Renewable energy projects have a clearer business model for investment but many would like to prioritise energy efficiency finance. Examples such as the Energy Saving Co-op have not survived however and the high interest rates associated with the Green Deal are a barrier. Groups working with schools and local authorities could consider SALIX.

Know what you want to get. Don't let the platform drive you.

Communities changing heating and using the Renewable Heat Incentive

Patrick Allcorn, DECC

Getting a heat network off the ground is difficult due to the extent of infrastructure costs involved. The role of local authorities might be is needed for the equipment and installation is more complex than to help with this, but there are procurement issues and complaints that local authorities `steal' projects that community groups have tee'ed up. There has only been one community share offer on a biomass boiler and while many schools have invested in biomass boilers, they can't benefit from the Renewable Heat Incentive (RHI). returnand developments that would help going forwards included:

Other concerns raised related to the loss of the Enterprise Investment Scheme tax relief and RHI pre-registration causing uncertainty and delay; understanding the heat load and

identifying who you will sell to; recognising that a longer lead time solar pv; and the standard contracts available for electricity aren't in place for heat.

Despite these difficulties it was recognised that there is a financial a forum to share knowledge about best practice and lessons learned; support for communities as well as local authorities; and a guaranteed tariff for community heat projects.

It's new and communities need additional support with the learning that needs to be done.



How to get local authorities to invest in community energy

Jane Wildblood, Bath & NE Somerset Council

Bath and West Community Energy and Bath & North East Somerset Council spent two years working together to convince local authority decision-makers to invest, even with strong political support for the idea in principle. It is clear that the case for local authority investment is being made and progressing differently across the UK and it would be good to share experiences.

The main challenge is how to persuade local authorities that it is not a massive risk, but a real opportunity. Often cited barriers, such as State Aid or procurement, need to be understood, but should not be prohibitive issues.

bigger investment projects but can come from anywhere in UK, as compared to local authorities, which can access Public Works Loan Board. The latter may be simpler to get into community energy. In Bath, they waited until projects were on the ground and also had convincing investment from SSE. In Plymouth, there was strong political will behind supporting a co-op organisation.

Although efforts were needed in making the business case, there was no more than normal due diligence and an expectation that next time it will be easier. Oxford's investment happened relatively quickly and was greatly aided by the investment readiness process that Low Carbon Hub had undertaken.

It is important to distinguish pension funds, which generally need

We need more formal versions of this workshop to demonstrate the interest and support.

Community Energy schemes supplying local communities proposition

Leo Murray, Back Balcombe and Emilia Melville, BuroHapppold Engineering/University of Surrey

Direct supply and local tariffs are the Holy Grail for community energy because affordability is central to how people engage with energy but there is no obvious way to do this yet. Tariffs could take many forms. For example time of day use incentivize time-of-use switching and more efficient delivery of electricity. "Sunshine" tariffs charge less during daylight hours which, in combination with solar pv become the best time to use appliances or charge electric vehicles.

As fuel poverty is defined on the basis of income, it might be possible to identify those in fuel poverty and offer lower rates to

The potential benefits are high, but how do we do it?

them. Those in fuel poverty often haven't switched supplier and/ or are on pre-paid meters and suppliers make a greater margin. So in theory it ought to be possible to provide cheaper offers in a notfor-profit model especially if marketing and customer acquisition costs were lower. Rising block tariffs that make consumption below a certain affordable, penalising those who use large amounts of energy, where the user pays less for the first few units of energy they use than the next 'block' would not be economically viable for any supplier under the current system. However time-of-use tariffs will be viable once smart meter technology is more common.

Social Impacts of community energy projects

Chris Church (Community Environment Associates) and Ross Weddle (Green Community Buildings)

Along with well-known environmental and economic benefits of community energy this group listed wider impacts such as improved well-being and health, skill-building, improved community cohesion and increased social capital.

Repowering London and Bath and West CE are examples that have highlighted their social impacts, but no one was aware of energyrelated examples for which tools such as Social Auditing had been used.

The geography of the impacts may also be helpful to consider (e.g. immediate, wider and national/ global impacts). A basic set of

common measures that community energy groups could use that aren't too resource intensive would be useful to present alongside a narrative for the harder to quantify impacts. The audience that needs to be convinced is broad: local councils/planning committees, national government, investors, social development agencies (e.g. health) and communities themselves.

Developing a clear picture (with solid evidence) of the wider impacts of CE will need proper funded work, probably in cooperation with universities and research agencies. A detailed write up of this discussion is available on the OxFutures website.

We need to; learn from existing work on social audit, adapt it to CE needs, find resources to trial this.

Exhibitors













ENERGY GB



ove communities











"The power to change our energy future is in your hands"

Rt Hon Edward Davey MP

Secretary of State for Energy and Climate Change:





Thursday 4 September 2014 - Oxford Town Hall



Department of Energy & Climate Change



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