Barriers to Community Energy - Response

DHD20240622

A personal response to
https://www.gov.uk/government/calls-for-evidence/barriers-to-community-energy-projects

Q1 Which type of stakeholder is responding?

Individual

Q2 Where are you, or your organisation, responding from within UK?

London

Q3 What are the barriers, financial and non-financial, preventing the establishment, development, and scaling of community energy projects? Please include any relevant quantitative and qualitative evidence.

1. Inconsistent, varying government policy and fragmented intermittent or absent financial and logistic support, sometimes actively hindering community schemes.
2. Local 'NIMBY' / 'BANANA' opposition from officials, politicians and residents who expect never to have to see or hear any renewables anywhere in their neighbourhood while still wanting the benefits of cheap reliable grid energy and a livable planet. Especially in densely-populated areas such as London, solar PV is one of the key local mechanisms available to help fill the energy demand centre / sink.
3. Difficult/impossible access for small schemes to dig up roads for cables and pipes for renewable electricity and heat compared to utilities who have inherited statutory rights to do so (in some cases to supply more fossil fuels and increase climate impacts).
4. Regulatory restrictions around sharing and sale of electricity across premises for microgrid and similar schemes.
5. Loss of easily manageable separate impact streams (eg Feed-in-Tariff) to help support organisations fund CAPEX and OPEX for community energy schemes.

6. Insufficient legal pressure on, and logistic and financial support to, public organisations such as schools and local authorities to urgently mitigate their own climate impacts: the appropriate carrots and sticks would encourage community energy schemes amongst other solutions.
7. There is no established commercial mechanism to deliver energy from household renewables, meaning that the community energy market is only really tapped by those who can afford to directly invest in hardware, which contributed to the discourse on community energy being centred around means (energy technology/environmental politics) rather than outcomes (cost of living/community identity).
    a. For community-scale projects there is a lack of institutional investment and finance for community energy projects that enable lower income households to directly benefit from low cost renewable energy.
    b. Consumer-style finance is limited to affordability criteria that can exclude those who would derive the greatest benefit (credit), or be unviable for the financial profile based on the useful life of technology (leasing).

Q4 Please indicate whether the community energy scheme(s) you typically work with are urban or rural?
Urban

Q5 Are there any regional issues impeding community energy projects? Please include any relevant quantitative and qualitative evidence.

There should be particular support for (and pressure to implement) solar PV, including community schemes, in densely populated areas such as London where local injection of energy is particularly valuable, as wind for example is not viable in such locations. Hydro also should be properly supported where available in such areas, but is not due to the fragmented and unimaginative narrow scope of water schemes, such as https://www.earth.org.uk/River-Thames-Scheme-and-renewable-generation.html which has seemingly precluded building hydro generation into the scheme even though the returns would likely be good and costs relatively low and the injection of energy near demand centres would be good.

Q6 Where you have identified possible or actual barriers, do you have any proposals for how these might be reduced or removed, and why do you think the actions you propose would be effective and appropriate? Please include any relevant quantitative and qualitative evidence.

1. The Local Electricity Bill would have helped microgrids and similar community schemes: something to similar effect should be reintroduced.
2. Make schemes such as Ofgem's Sandbox more widely known to smaller innovators. Ofgem also needs to get better at understanding and supporting innovation and smaller organisations, and should have better representation on its main board of those closer to these issues and to innovation.
3. Provide some sort of open access to allow works such as the laying of renewable electricity and heat cables and pipes either via utility companies under the New Roads and Street Works Act 1991 (NRSWA) or similar, or via a public-interest provider. Make sure that this is in practice available to smaller organisations such as small community schemes, without excessive legal or other costs or delays.

Q7 Which existing or past government support mechanisms and policies have been most helpful in implementing community energy projects and why? Please include any relevant quantitative and qualitative evidence.

1. The Feed-in-Tariff (FiT) was useful in part because it provided a distinct revenue stream that could be used to cover CAPEX and OPEX for such schemes. It may be useful to have available an optional uniform statutory shared-savings legal framework that organisations can adopt without expensively reinventing the legals and financials each time, maybe administered by a regulated bank or an existing licensed energy supplier.
2. General Permitted Development Orders (GPDOs) are enormously valuable in allowing installation of solar PV, heat pumps and the like, and their scope should be widened to allow more low-bureaucracy low-paperwork low-cost solutions. This should allow more non-MCS installations of suitable equipment providing standards are maintained, especially for smaller and community schemes, and those schemes should be allowed to access revenue streams such as SEG (the Smart Export Guarantee).
3. Very small 'nanogeneration' schemes for those in flats etc, as is now in place in hundreds of thousands of German and Swiss homes as "BalkonSolar" or "balcony

solar" should be enabled in England urgently. The technology exists and is safe and cheap. See https://www.earth.org.uk/note-on-G83-lite.html for a suggestion previously presented to DECC and endorsed by the then SoS (2012-05: "Sounds a great idea - will pursue!").

4. GDPOs or similar should be extended to cover group work across property boundaries, and as reasonably necessary over highways etc, to enable such schemes, eg laying of cables and pipes for a community energy grid.

Q8 Could you share any evidence, either quantitative or qualitative, demonstrating how community energy projects are supporting the delivery of the UK's national net zero targets and providing additional benefits (e.g., reducing fuel poverty and improving community well-being).

1. Every additional renewable generation scheme installed via community energy is greening the grid. It is evident from many studies that awareness of energy use improves when such schemes are in place, typically improving energy efficiency on top of the direct reduction of grid demand from the PV. Eg see Smart Energy Research Lab (SERL) study CLNR trial data from 2012.

Q9 Could you share any evidence, either quantitative or qualitative, of the wider system impacts (positive and negative) of community energy schemes and how any negative impacts can be mitigated.

1. For organisations on tight budgets, once solar PV is installed, paying less for grid energy and having less volatility and future risk on energy supplies, directly helps the bottom line and reduces budgeting and planning complexity. The installed PV also can be used as a teaching aid to support parts of the curriculum. I have witnessed these effects at my local primary school as Resources Committee Chair. The PV was also used as a draw to promote the school to prospective parents. There have been essentially no negatives in this case. Solar PV is particularly low complexity and low risk.