

## Local energy supply and the bigger picture

### **Executive summary**

The UK energy system is a complicated beast. Massive top-down and bottom-up changes are needed simultaneously if we are to achieve a just energy transition at speed.

In the past year the system has seen a positive step change in the intensity of activity at both these levels. There is now a pressing need to link the two together much more closely through better information sharing and co-working, across the tech, finance, comms, energy, health and housing sectors.

### **As it stands**

1. The recently-established National System Operator (NESO) is tasked by Ofgem with developing Regional Energy Strategic Plans (RESPs).
2. NESO's regional RESP leads will be working on this with their corresponding regional Net Zero Hub (NZH).
3. The NZHs will in turn be liaising with their constituent combined authorities (CAs) and local authorities (LAs), who are expected to feed their respective local energy plans into the process.

The CAs and LAs have been chronically under resourced for a decade. Very few have therefore been able to develop local energy plans which are sufficiently detailed to provide useful data to funnel into the upstream RESPs.

4. At the hyper-local level, some communities are now developing community climate action plans, eg:

<https://bristolclimatenature.org/projects/community-climate-action/#community-climate-action-plans>

<https://www.cse.org.uk/my-community/future-energy-landscapes/>

But the majority are not. Those who are typically operate in areas where there has been long-term LA support for community energy, with initial seed funding enabling groups such as [Bath and West Community Energy](#) (BWCE) and [Bristol Energy Cooperative](#) (BEC) to boot-strap their activities and get to the point where they could begin to employ staff. But these LAs are outliers, and tend to be in urban areas which benefit from having a larger volunteer resource to get involved in community energy.

BEC, [Bristol Energy Network](#) (BEN) and BWCE are now helping rural community energy groups in the area to develop, backed by funding from the West of England Combined Authority (WECA), eg:

- A £1.5m grant enabling BEN to support local communities across the region develop community-owned wind projects.
- A £50,000 grant enabling community energy groups in South Glos to establish a South Glos Community Energy Network.
- A £20,000 grant from WECA-owned Retrofit West helping Climate Action Thornbury and Surrounding Areas (CATSA) establish a Community Interest Company (CIC).

This combined activity is leading to a point where residents, parish councils, town councils, etc in the WECA region will be able to productively engage with LAs in the detailed local energy planning required to feed into the upstream RESP.

There is also similar support for groups in [some other areas of the UK](#), but it needs to be in all regions.

### **Local energy supply**

Community climate action plans usually include a desire to run some kind of “streets of shared solar” project. The blockers to doing such projects are well known: Ofgem regulations, tech, cost of scaling, etc.

However, significant progress is now being made on some of these blockers:

- Balancing Code changes such as P415, P441 and P442.
- The emergence of community-focussed smart-tech startups who actively want to make local energy supply work, eg, Urbanchain, Cepro, Axel Energy.

A number of community groups are currently using Community Energy Fund (CEF) funding to work with companies like these on the feasibility of local energy supply (LES). I’m currently involved in two such studies:

- [Resilience Network](#), Bristol.
- Colshaw Farm Estate, Wilmslow: Aiming to share energy generated from over 700 houses using a smart solar array and communal battery storage, thereby reducing resident’s energy costs.

### **Blended finance**

Local energy schemes like this are much more likely to be viable if they have capex access to blended finance which includes impact investment. Development work on such financial models is well advanced but little-known to many in the low carbon sector - see:

[3ci.org.uk](https://3ci.org.uk)

[livingplaces.earth](https://livingplaces.earth)

<https://bristolclimatenature.org/news/finance-innovation-for-funding-net-zero/>

## Health, housing and energy

Importantly, similar impact investment work is also being done to address the housing crisis, and often involves the same participants:

<https://thegoodeconomy.co.uk/place-based-impact-investing/pbii-network/>

The crucial takeaway here is that **housing, health and energy are vitally interlinked**. Damp, unhealthy housing makes people ill and costs the NHS a lot of money, as outlined by Dr Michael Marmot, in the recent [Building Health Equity: The Role of The Property Sector in Improving Health](#) report:

*“Poor-quality housing costs the NHS £1.4 billion annually, with a broader societal cost of £18.5 billion per year. Investing £9 billion in remedial work could generate £135.5 billion in societal benefits over 30 years, including £13 billion in NHS savings.*

*“Everyone needs a good quality, safe, secure, affordable home, in neighbourhoods and communities that support good physical and mental health. Without these, we will see a worsening of physical and mental health, higher mortality rates and greater strain on our National Health Service.”*

*“The physical, economic and social characteristics of places and communities have an important influence over people’s physical and mental health beyond the provision of good quality and affordable housing. Places can support good mental and physical health by providing safe, inclusive and accessible environments with access to amenities and services, a sense of community, and a health-supporting environment.”*

So we should use blended finance to both improve our housing and decarbonise it **at the same time**. It’s not either/or, it’s both. Impact investors whose focus is, for example, on place-making can fund a new pocket park for streets that are to be retrofitted. Impact investors are already active in this space, and want to be doing more of it:

[Resonance plans homelessness property funds’ expansion](#)

[Innovative financing could transform preventative health efforts report](#)

[UK launches advisory group to develop social impact strategies](#)

[City of London Corporation shifts to impact investing](#)

The main blocker to all this happening at speed is the lack information-sharing between all the parties who need to be involved, as highlighted in these excerpts from [The Good Economy 2023 Innovation Lab report](#):

- *Local government faces an increasing number of complex challenges and reducing resources to do so. There is a growing group of highly engaged asset managers who are seeking to make a positive contribution to the sustainable development agenda.*

- *Both sides often start from a limited mutual understanding of what the other party needs / can offer, and there is also a level of mistrust built on historical experience.*
- *Internally, investors have tended to focus on investment ‘verticals’ even where they do have investment funds across different PBI pillars – all would benefit from applying a place-based lens across organisational siloes.*
- *There is real value in getting parties around a table to have an open conversation about what is needed and to approach these engagements in a spirit of openness and open-mindedness.*
- *Finding a common language to talk about social outcomes and developing local impact partnerships and common impact measurement frameworks would bring a lot of value to both sides and potentially open up a much wider market opportunity.*
- *Some investment types (e.g. housing retrofit) present the opportunity to deliver multiple outcomes (net zero, health, skills training), but these need to be addressed intentionally to maximise the benefit.*
- *Governance is key. It is vital to establish credibility that delivery will be managed effectively. Local impact partnerships are a key model here.*

### **Key action**

Far more co-financing discussions a) across sectors – govt, tech, finance and community; b) between govt depts such as (Ministry of Housing, Communities and Local Government (MHCLG), the Department of Health and Social Care (DHSC) and Department for Energy Security and Net Zero (DSNEZ).

### **The final missing link – the positive story**

In the past 15 years renewable costs have fallen by an astonishing 90%. It’s now cheaper to build renewable energy projects than fossil-fuel ones. In 2008 the UK got 76% of its electricity from fossil fuels. By 2023 this [had dropped to 33%, with renewables’ share reaching a record 43%](#). There are also similar cost reductions and technical advances underway in [energy storage and the decarbonisation of transport and heat](#).

The [UK public is supportive of action on climate change](#). But few people - from the public to decision-makers – know just how [advanced the net zero transition is](#), or where the money is to advance it further. [This isn’t accidental](#) – it’s been a long-term strategy of the fossil fuel industry, and the far-right is using this knowledge deficit to spread dis-information that polarises communities. It’s therefore vital that collectively we create a positive campaign around net zero which excites people and **empowers** them to make a positive contribution to it in their own community.

Andy O’Brien, Co-founder, Bristol Energy Cooperative

Written in a personal capacity, 21/2/25

Disclosure: BEC has a modest shareholding in CEPRO.