

The Local Electricity Bill Detailed Briefing

Today we face two great challenges: one immediate—the seismic economic shock created by the covid-19 pandemic —and the other looming large, which is the devastating impact of climate change. The Local Electricity Bill addresses both challenges.

The Bill has been drafted by Power for People who are a UK organisation campaigning for local renewable energy. Visit powerforpeople.org.uk to read the Bill.

The problem that the Bill aims to solve

Imagine someone setting up a micro-brewery, planning to deliver their beers to local pubs, off-licences and homes, and then being told that they have to pay £1 million in road tax for their delivery van. The business would never be started. This is the reality for community-scale renewable energy.

The Committee on Climate Change states that the UK is way off track to meet its greenhouse gas emissions reduction targets.¹ Transport and heating need to be electrified in order to decarbonise the economy yet renewable energy generation currently accounts for only 11% of all UK energy use.² Renewable generation must, therefore, be dramatically increased.

There is huge potential for more community-scale renewable energy generation infrastructure to be built across the country and for this growth to bring substantial benefits to their local economies. A government report,³ published in 2014, stated that the community energy sector could deliver 3,000 megawatts of generating capacity by 2020 and that the potential for further growth beyond this was even more substantial. Yet the community energy sector is currently less than a tenth of that and thus accounts for less than 0.5% of the UK's electricity generating capacity.

This huge potential is being blocked because current energy market and licensing rules lead to local supply costs that are insurmountable. A report by the Institute for Public Policy Research states that the financial, technical and operational challenges involved in setting up a licensed energy supply company mean that initial costs exceed £1 million.⁴

The solution

The costs and complexity of being a licensed electricity supplier need to be made proportionate to the size of the supply operation. It would then be financially viable for current and potential renewable generators to sell locally generated energy directly to local customers.

¹ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/501292/eepReport2015_160205.pdf (page 5)

² Department for Business, Energy and Industrial Strategy; Digest of United Kingdom Energy Statistics 2019

³ The Department for Energy and Climate Change; Community Renewable Electricity Generation; January 2014

⁴ Institute for Public Policy Research; Community and local energy: Challenges and opportunities, June 2016

The Bill would establish a Right to Local Supply. This would give the energy market regulator, the Office of Gas and Electricity Markets (OFGEM), the statutory duty of establishing new market rules that would ensure that the setup and running costs of selling locally generated renewable energy directly to local people are proportionate to the scale of the business. Local energy suppliers would then be financially viable, unleashing the huge potential for community renewable energy, as described above.

This has been shown to be the case in Germany where there are 1,000 supply companies⁵ (in comparison to around 50 in the UK), most of which are local suppliers and owned by communities and almost all of which supply renewable energy.⁶ Their four large utilities only control 40% of the market.⁷

The benefits

The Bill would lead to energy market reforms that would create local economic resilience in communities across the country. By empowering communities to sell local renewable energy directly to local people, it would make new community renewable energy businesses viable and, by bypassing large utilities, they would keep significant additional value within local economies. More of the money we all pay our electricity bills with would circulate in the local economy: more skilled local jobs, more viable local businesses, stronger local economies.

As shown above, the evidence suggests that community energy generation, currently accounting for less than 0.5% of the UK total, has the potential to increase *ten fold* over a six year period and then even more beyond that.

With communities seeing direct and tangible benefits, there would be greater public support for the transition to sustainable energy. Our energy supply would be more secure due to less imports of fossil fuels, further increasing the resilience of local economies. This is all in stark contrast to the current centralised system dominated by fossil fuels and large utilities that are national or multi-national companies.

In Germany, where they have local supply rights, there are over 1,000 local energy businesses most of which are owned by local communities.⁸ Meanwhile UK domestic customers have a choice of around 40 nationally licensed utilities⁹ with the 'Big Six' controlling 72% of the market.¹⁰

Local economies benefiting from local energy has happened before – local facilities across the UK such as parks, swimming baths and libraries were built from revenues of municipal energy companies in the 19th and early 20th centuries.¹¹ It could happen again if we succeed.

⁵ <http://www.respublica.org.uk/our-work/publications/creating-local-energy-economies-lessons-germany/>

⁶ <https://www.thenews.coop/108839/sector/energy/nimbyism-co-operatives-germanys-energy-transition/>

⁷ <https://www.newstatesman.com/politics/2014/01/fix-our-broken-energy-market-we-need-help-supply>

⁸ Leuphana Universität Lüneberg; Development and State of Community Energy Companies and Energy Cooperatives in Germany; May 2017

⁹ Which? Switch website, accessed April 2020

¹⁰ OFGEM; Electricity supply market shares by company: Domestic; January 2020

¹¹ Professor Robert Millward; The Cambridge Economic History of Modern Britain, Volume 2, 1870 to the Present; Chapter 15 – The Growth of the Public Sector

How the Bill creates the solution

The Bill is a first attempt to lay out a mechanism that will fix the UK's local supply problem. It is accepted that there is scope for improvement and refinement, and new ideas are welcome for how that can be done.

Clause 1 states the purpose of the Bill: to enable the local supply of electricity. Clause 2 states that it is generators of electricity that can become local suppliers. This is intended to achieve the aim of smaller-scale renewable generators being able to supply electricity to a local area. There is a case for amending the clause to allow any organisation to become a local licensed supplier; the logic for that is that currently licensed suppliers do not also need to be generators.

Clause 3 goes to the heart of the Bill and gives Ofgem the task of setting up the local supplier licence process; it also requires that the process ensures that local suppliers face set-up costs and complexity proportionate to the scale of their operations. The exact details of that process are not laid out in the Bill, as it is believed that Ofgem should carry out this task. Subsection (1) requires Ofgem to set up the local supply licence mechanism to ensure that the costs and complexity of becoming a local supplier are proportionate to the size of the operation. Subsection (3) allows for the local supplier operation to be based on a radius area, although that could arguably be improved, if amended, to be a defined area.

The campaign for the Bill

So far 190 MPs have stated their support for the Bill in Parliament, along with 49 County and Local Authorities and 280 Parish, Town and Community Councils.¹²

Over 300 community groups also support the Bill along with a coalition of 50 national organisations including Forum for the Future, the New Economics Foundation, ResPublica, the Solar Trade Association, the British Hydro Power Association, Triodos Bank, the Transition Network, Community Matters, Locality, UK Community Works, Possible, RSPB, Friends of the Earth, WWF, Greenpeace, ClientEarth, Tearfund and 350.org. One of the members of this coalition is (the Distribution Network Operator) Electricity North West who own and operate one of the UK's regional electricity grid networks.

There is complexity around the local energy supply problem. We believe that this is *exactly* why campaigning for this Bill is the right approach. So far stakeholders and interested parties have identified the problem and suggested general approaches to it, reports have been written, discussions have been held, presentations have been made and warm words have been said.

The Bill takes this broad enthusiasm and proposes a specific mechanism that would fix the problem. It has created a rallying point around which grass-roots, civic and Parliamentary support has grown quickly. The campaign is also inspiring the discussion to move forward and urge organisations, experts and academics with detailed knowledge to contribute.

¹² <https://powerforpeople.org.uk/the-local-electricity-bill/support/>

Potential ‘tricky questions’ and our responses

Question: Doesn’t the fact that some local authorities have set up supply companies (e.g. Nottingham, Bristol, Islington, Derby and Liverpool) using the ‘white label’ approach and that the first few Licence Lite licences have been granted show that local supply is effectively happening anyway?

Answer: The problem of the insurmountable costs and complexity for local generators setting up as local suppliers still remains.

Licence Lite was set up by Ofgem in 2009 as a way of becoming a licensed supplier without the high levels of cost and complexity involved. It works by the applicant partnering with an existing fully licensed supply company and thereby ‘standing on their shoulders’ to reduce set-up costs. However, since 2009 only a few Licence Lite licences have been granted by Ofgem. Licence Lite is clearly, therefore, not a fix to the problem which is largely due to the requirement of an Licence Lite licensee to partner with a nationally licensed supplier.

‘White label’, similar to Licence Lite, also allows a new supply company to partner with an existing fully licensed supplier and so reduce set-up costs. However, the handful of local authorities that have used it to set up energy companies have each set up *national* supply companies and have customers across the country. This approach to licensing is, therefore, also not a solution to the problem.

Question: Local grid networks and the national grid won’t be able to handle all the new renewable generation this will lead to. Who will pay for the costly grid upgrades that will be needed?

Answer: Who pays for grid expansion and modernisation is not something affected by this Bill. As we shift to increasingly more renewables this will have to be paid for anyway.

Furthermore, Distribution Network Operators (DNOs – the local monopolies that run the 9 regional electricity distribution grids across the UK), have stated that they intend to upgrade their infrastructure to make it more efficient and better able to handle increasing levels of distributed renewable energy.¹³ The DNOs could afford the upgrades: from 2010-2015 they made £10bn in profits, which was an average annual profit margin of 32%.¹⁴

Research shows that our grid system can also be made much more efficient (or ‘smart’, a currently popular term) by using the increasing numbers of batteries (stand alone and in electric vehicles) and distributed renewable generation to level periods of peak demand. This will mean that less is needed to be spent on upgrading the grid’s infrastructure.¹⁵ New data technology can also help the grid become more efficient and so handle more distributed renewable generation. Microgrids in Brooklyn, New York¹⁶ and Perth, Australia¹⁷ are already doing this.

¹³ <http://www.energynetworks.org/assets/files/news/publications/ENA%20Electricity%20Storage%20Guide.PDF>

¹⁴ <http://eciu.net/reports/2017/monopoly-money>

¹⁵ https://www.green-alliance.org.uk/people_power_consumer_choice.php

¹⁶ <http://www.decentralized-energy.com/articles/2016/03/brooklyn-to-host-pioneering-microgrid-project.html>

Question: What's the point of making it viable to become a local energy supplier whilst the government have placed a planning moratorium on new onshore wind schemes in England, whilst wind is our most abundant source of renewable energy?

Answer: The moratorium is wrong and should be addressed but doing so is not the purpose of this Bill. As a matter of principle, small companies should be just as able as large ones to enter this market, we should have a level playing field for energy generators. That said, smaller scale renewables are likely to benefit most from this levelling and as more people realise that the cost of onshore wind has fallen so dramatically¹⁸ and can participate in local co-operatives providing them benefit the already small number of people objecting to wind farms is likely to fall still further - which can only accelerate the much needed rethink on this.

Question: Isn't this unnecessary because fast falling energy storage (i.e. battery) costs will mean that soon a lot more renewable energy generation will be built anyway?

Answer: This Bill would increase the likelihood and speed of renewables and battery deployment because new local suppliers could also provide battery services. The one helps the other.

Question: This won't work. What happens when the badly run local supply company messes up my bill, or even worse fails resulting in me getting cut off?

Answer: Ofgem already ensures that a customer will not have their electricity cut off because of a supply company making an error or ceasing to operate. The Bill will not change this. Any company can make a mistake over things like billing and it does follow that a national company won't and a local company will. The Bill will not remove existing regulations designed to ensure that companies are responsible and provide and reliable service. The system works very well in Germany where there are over 1,000 suppliers, most of them local, operating.¹⁹

Question: Won't this set up a postcode lottery on prices whereby some areas will build lots of renewables, set up great local supply companies and so have cheap energy whilst other areas don't or simply can't?

Answer: Regarding a postcode lottery, this is why there are price cap regulations already in place. The Bill does not change these. Regarding prices, the Bill will actually help *reduce* prices as it will help create a more efficient grid. This is because the grid is currently rather inefficient due to the fact that a significant portion of electricity that is generated by the big power stations is lost through resistance as it travels along the wires and through the substations. The more distributed and smaller-scale generation that happens across the grid, the more that electricity wastage is reduced. So the Bill, by helping create this, will increase grid efficiency and ultimately reduce prices.

¹⁷ <https://bravenewcoin.com/news/power-ledger-trials-blockchain-based-energy-grid-and-market-near-perth/>

¹⁸ <http://www.bbc.co.uk/news/business-41220948>

¹⁹ <http://www.respublica.org.uk/our-work/publications/creating-local-energy-economies-lessons-germany/>

If some areas - and we hope this happens - get much better deals with cheap, clean energy as a result of the Bill, this will make it likely that similar local suppliers will set up elsewhere, which would be great news.

Furthermore, the current structure of the energy market has led to a postcode lottery whereby if an area is lucky enough to have a group of motivated volunteers with high acumen and determination then they can possibly make a success of a community energy group. These groups are hard working, well-intentioned and achieve positive benefits for their local areas, but this general situation is the opposite to the opportunity and enablement that the Bill would create for all local communities.

Question: What about places like school roofs with solar panels that aren't using the energy and are getting only a few pence per kWh for exporting it whilst customers pay many times more pence per kWh, will they become local suppliers?

Answer: It is more likely that a group of solar roofed local schools would get together, or a local community co-operative would form and bring them together as part of a new local supply company. That would mean those schools could receive more than their current a few pence per kWh whilst charging local people less than they currently pay.

Question: Is local supply needed if small scale renewables will soon be so cheap that their deployment will exponentially increase anyway? (e.g. the new Clayhill 10MW unsubsidised solar farm in Bedfordshire that used energy storage and design innovation to avoid needing subsidies)

Answer: Yes the Bill is needed, because the huge potential for community-scale renewables, described above, is not being realised under the current market structure. The Bill will mean the deployment happens much faster, as the German experience also suggests.²⁰ Clayhill solar farm is anomalous as a subsidy free renewable energy generation project,²¹ and it relied on particularly favourable local circumstances, so it does not appear to be something that is replicable, if at all, under the current circumstances.

Question: Isn't the Bill unnecessary now that Ofgem are doing their 'Regulatory Sandboxing' as part of their new 'Innovation Link'?

Answer: The Regulatory Sandbox, in relation to energy supply, is a process where Ofgem can allow selected pilot scheme projects to trial different ways of supplying that are not in line with current regulations. Some are about trialling new blockchain technology. This initiative is welcome, but it is different from what the Bill would set up, which is for local suppliers to face proportionate cost and bureaucracy when setting up. Indeed the one may help the other as learning from the Regulatory Sandbox projects may be useful when formulating how the new local supply process works.

²⁰ <https://www.cleanenergywire.org/factsheets/germanys-energy-consumption-and-power-mix-charts>

²¹ <https://www.gov.uk/government/news/subsidy-free-solar-comes-to-the-uk>

Question: Aren't organisations like Energy Local in North Wales doing this already?

Answer: Whilst we welcome what Energy Local is doing, it is different from what the Bill seeks to do. Energy Local is an example of virtual net metering and requires the agreement of a licensed *national* supplier. Virtual net metering is where a group of small scale generators who are also energy users, e.g. a local group of houses with solar panels and a nearby school, form a local organisation like a co-operative and use smart meters to show when they are, as a group, using more energy than they are generating. They then buy that excess energy from a licensed supplier.