POLITICAL ECONOMY AND ENERGY DEMOCRACY

Street-level climate politics

Cllr. Jon Burke and Mika Minio-Paluello

Labour currently governs most of Britain's cities and large towns. How can it use this power to respond to the challenge of climate change? Jon Burke, Labour Cabinet Member for Energy and Sustainability on Hackney Borough Council, and Mika Minio-Paluello, an energy economist and activist, discuss climate transition, local government, and the potential for a geographical and ecological rebalancing of Britain's economy.

Mika Minio-Paluello (MMP): You published Hackney Labour Group's manifesto for the 2018 elections: a practical vision for the immediate future. Your headline commitments around setting up a public energy company that will roll out renewables, especially solar, on rooftops.

Cllr. Jon Burke (JB): We have 50 per cent of the residential rooftops in the borough, yes, but that means also, in absolute terms, it's a bit more than that, because we've got all our corporate roofspace, and LEA schools that we can potentially work with. But I don't think we should be limited to that. It seems a bit kind of crude to say we'll throw everything at solar, but ultimately that's where our natural endowments are. We haven't got a waterfall in Hackney; we haven't got a dam, though I don't think that that should preclude the company, if it's successful, looking at other

schemes beyond the borough's boundaries. We would look at potentially taking equity stakes in other schemes, being part of consortiums to set up other schemes.

One of the things that I'm really excited about is the potential for 'gas-to-grid' in Hackney. We could be closing the domestic and commercial food-waste loop, alongside cuttings from our substantial amounts of green space in Hackney, to produce bio-methane and inject directly into the local gas grid. That hasn't yet been fully explored. I'm not an expert in this field, but having a vision is sometimes more helpful than being an expert. If you know what all of the very real barriers are before you encounter them, then that can be debilitating.

MMP: Yes – you end up shrinking your vision and it becomes too small. Obviously that doesn't mean being conservative: but you can end up thinking within the existing parameters, when actually transition means we need to completely transform our economy and our social space, our urban spaces. We need to imagine things we wouldn't really imagine otherwise.

JB: You can slightly misquote Ursula LeGuin: 'we don't need progress we need change'. Change is much more difficult to implement than progress, because human beings do not respond well to change. So the key to success for the great transition, in energy terms, will be to do so under circumstances that do not significantly disrupt people's daily lives.

MMP: Which I guess is one of the challenges if we are trying to change the urban fabric to some degree. It's essential to ask how we take everybody with us. If we're putting solar panels on rooftops, we're also going to have to deal with things like cars, how people move around, how people heat their homes. And one of the big challenges that comes in is, we're going to have to find a solution to gas, to heating. Part of that might be about hydrogen in some places, part of that might be about green gas solutions, but clearly a big part of it will be about electrification as well.

JB: It's funny how the CEO of Shell said recently that everything that can be electrified, should be electrified.² That's a view we share. But we also need radical alternatives using existing infrastructure, because we won't be able to pull out a lot of the gas grid. I frequently see people run down the potential for bio-gas but, ultimately, we know that a litre of organic food waste can produce sufficient gas for three hours of cooking time, and I don't need to be an expert in the gas industry to know that ergo the potential for green gas from domestic and commercial food waste is huge, absolutely huge.

MMP: I guess there's various challenges with it. One of them is that as soon as you start transporting it beyond a certain distance, the emissions rise.

JB: Yes – so you have to completely decentralise it. My vision for the future is one in which there's a small gas-to-grid piece of kit on every street in Hackney, in every

Renewal 26.3.indd 10 30/08/2018 17:37:18

park in Hackney. That for me is a way in which we could close that organic wastegas loop with minimal disruption. To me it's not a radical departure from the streets that we currently have now: one small silo on every road occupying the space that a Chelsea Tractor currently does.

MMP: That raises all sorts of other issues of scale and the difference between public and private space. Do we need to change appliances in peoples' homes? Do we need to shift boilers? How do we put energy storage in, to what extent do we end up putting batteries, other forms of storage, in peoples' homes? Would collective ones on streets not be better? It might make sense to have something slightly larger-scale that's not so individualised.

JB: Storage is the holy grail of all of this. A 5-panel solar system, roughly speaking, can generate enough electricity for about 70 per cent of a household's needs. Of course it's generating surplus electricity in the daytime when people aren't necessarily there, and nothing in the evening. With appropriate storage that would mean that one five-panel system is providing a household with 70 per cent of all its energy needs if everything was electrified.

So for me, the potential seems absolutely huge, and when that moment happens – and it might not happen with batteries, it might happen with flywheels – it will be 'a world turned upside-down' moment. Not for people who use it, because it will be very easy. Maybe in ten or twenty years, it will be like the mobile phone: people will not be able to remember what it was like not to have energy storage in their homes. That's not me being some kind of techno-utopian. I think to make that happen is going to be an incredible political fight.

How to start a municipal energy company

MMP: That is how technological change always happens! How do you see the new public energy company that Hackney is setting up at a municipal level playing into the technological shift? Obviously, in the short term, you're putting solar PV on rooftops and seeing if you can be part of energy projects elsewhere. But do municipal authorities have a role to play in delivering that fundamental technological shift? Because I guess that's what we'd like to see from Robin Hood Energy in Nottingham and Bristol Energy at the moment. I'm not quite sure whether they see themselves fulfilling that role.

JB: Robin Hood Energy's great gift to municipalism has been to demonstrate to other politicians what's possible out there. The idea that the first iteration of any kind of company will be a huge success seems to only be applied to the public sector: 90 per cent of private enterprises go to the wall. For Robin Hood to still be trading, now, is a near-miracle. We have lost so much knowledge and experience.

Renewal 26.3.indd 11 30/08/2018 17:37:18

Our proud municipal history has basically been stolen from us. I'm 36, there are no older politicians who can teach me about municipalisation. Everything I know about municipalisation and the history of it, I've got from textbooks, and from snatches of information on the internet.

MMP: Councils have been stripped bare through cuts and everything else, so there's not the immediate capacity.

JB: Robin Hood is about political bravery. Alan Clark, who sadly died last year, along-side other councillors: they threw something at the wall and saw if it stuck. But for them to survive – and I'm not teaching them how to suck eggs, they've been in this business a lot longer than I have – my view is that they need to significantly diversify what they do as a company and get into the generation game. I think this is absolutely essential. Ultimately, getting into generation gets you into the capital and the technical side of things, and that's where you become part of that solution.

MMP: Then you're actually part of the energy system, where you can completely transform things ... you become a real player.

JB: The easiest way to get into the generation side is what we've already discussed – you can plaster the roofs with solar panels. The way to finance that is with a green bond that people can buy at a very low level.

One of the things I've always found deeply offensive about these schemes is that people can buy in at increments of £250 or £500 ... 90 per cent of the population of Hackney have never had £250 spare in their bank *ever*. Funding platforms like Abundance are changing things like that. The ability for people to buy in at £5 increments would be massive for Hackney. That means things like parents or grandparents being able to buy their kids small birthday presents; it means people on low incomes being able to set something up regularly to invest in the company. They're going to get a lot more out of that than they would out of an ISA.

I also think a local authority has got to believe in itself and put its money where its mouth is to some degree, which means borrowing or perhaps an investment from the pension fund. We can't expect other people to back us if we don't have faith in ourselves.

So you can put in panels producing electricity for wholesale energy markets, and get a return from that. That was always my preferred starting point, because it cuts down on the complexities of developing your own local grid. We don't have the internal capacity to deliver that at the moment. But at the same time, the price you're getting from the grid is 4p a unit. So you're limited to paying the electricity into the national grid unless you develop your own infrastructure beyond solar panels. You can't run a company on 4p a unit, so we have to also look at developing our own private wire systems and localising energy consumption.

Renewal 26.3.indd 12 30/08/2018 17:37:18

POLITICAL ECONOMY AND ENERGY DEMOCRACY Street-level climate politics

MMP: Enfield has got private wire. They own and operate the electricity cables from their local power station directly to the homes nearby. Because they own the underlying infrastructure and it's separate from the broader electricity network, they bypass the private grid operators and supply companies.

JB: Barking and Dagenham do as well. In fact, Barking and Dagenham I would say are probably the leaders in this. Exciting things are going on elsewhere. It takes a lot for one or for a small group of individuals, to take nothing and create something, that's what Alan Sitkin did with Energetik – a £58 million company! – in Enfield.³ We're not ashamed to say in Hackney that we're not a leader in this field, and I'll be going to Darren Rodwell in Barking and Dagenham, knocking on his door, and saying 'Darren, I want to learn from every last mistake you've made!' I'm in awe of anyone, in whatever field, who arrives when there's nothing and creates something from scratch, it's so hard to do that. But that kind of pioneering spirit can get you 12p a unit, so I'm keen to learn from those experiences.

MMP: Because then you can sell it directly to the grid. You're only getting 4p when you sell into the wholesale market. When you're selling it directly to the consumer, you're getting your full 12p.

JB: Exactly. There is a third way in this respect, which is Power Purchase Agreements (PPA). You're generating a higher level of income because you've come to a fixed agreement with an individual energy wholesaler. The demand for clean energy is growing, the potential to achieve a higher level of return from PPA's can be significant, if you can get, 8.5, 9p a unit from a PPA, I'd say that's probably the best of all worlds.

MMP: Presumably, you could be signing PPAs with the Greater London Authority. They're trying to sign PPAs with local generators inside of London.

JB: We'll go through a full procurement process and look at prospective PPA agreements to identify the most commercially attractive one, because that's a basis on which you can get government credit via the Public Works' Loans Board. We could say: we've got a guaranteed unit price here, what can you give us?

This is essentially what's already happening with farms up and down the country. The fact that there's a market emerging for gas-to-grid from medium-sized operators, means that they can go to the bank and say 'I need a hundred grand for a silo to throw all of my pig effluent into, and this is what I've been guaranteed for the next however many years'.

Even though ultimately we see ourselves as being a generator, at this stage we won't be acquiring a supply license. I'm not snooty about energy companies like Robin Hood, which purchase electricity and gas on wholesale markets and sell it to local residents, even though we want to go beyond that and become a generator, and I'm

Renewal 26.3.indd 13 30/08/2018 17:37:18

not snooty about white label arrangements for supplying power to people because they can be a really effective mechanism for change. There's a mechanism through which we can use the unique relationship that we have with our local residents, and the high level of trust that we have, as a means of bringing those people into using greener and fairer energy while minimising the financial risk associated with that process, and that's what we want to do alongside generation.

MMP: But I think there's a crucial point in what you say: when councils are doing white label companies, they need to be aware that it has to be one part of a wider vision.

Democratising municipal energy

JB: I've challenged a few people to find an energy company that has anywhere near the level of public participation that our proposed municipal company will have. I think it's important that residents will be able to sack us at the ballot box; you can't sack the board of EON or EDF. You will – theoretically – be able to sack the board of our energy company.

MMP: This is where the question of the relationship between who is selling the energy and who is generating it becomes essential. Yes, people can sack your board, but then you're just a white label: you are buying the electricity from someone else.

JB: That's true, but you have to look at the bigger picture. We'll be a generator as well as providing a supply offer, and the use of white label energy for supply can still be transformative. For example, we're looking to negotiate a deal with a third party company that is providing 100 per cent renewable electricity – that's an absolute red line for us. By doing that, we'll be helping to drive the deployment of renewable energy infrastructure elsewhere in the country and beyond. That in turn drives down the unit cost of renewable energy, which is a catalyst for energy transition. Effectively it's Hackney's residents, who by becoming customers, will be using their existing spending on energy to drive the transition.

At the same time, it's saving them money. We know it's possible for a company to provide 10 per cent biomass in the gas mix, 100 per cent renewable electricity, and offer a tariff of around $\pounds 850$ a year. If that kind of offer didn't exist in the market-place, we'd probably obtain a supply licence, but it does, so we can tap into that transformative mechanism in a relatively risk-free way. We can offer a negotiated deal that brings more transparent, cheaper energy, addresses fuel poverty, and provides cleaner energy.

Then there's the dimension of the revenue the company gets from its customers. We can do the thing that politicians and civil servants in particular hate doing,

Renewal 26.3.indd 14 30/08/2018 17:37:18

which is hypothecate some of that to creative stuff. One of the things that I would like to do, as part of the unique selling point of the company, is to hypothecate some of the income from the supply side for investment in green infrastructure, and in particular street trees. We've pledged to plant another 1000 over the 2018-22 term.

I want people to be looking out of their window and saying, by being a customer of this company, I'm spending less money, the energy's cleaner, and there's literally trees on my street that it's paying for. It's part of the common treasury of the borough. It's about building civic pride in an area, and people thinking I'm actively engaged in the politics of the borough. When I look out of my window, I see those trees being planted.

A national agenda for municipal energy.

MMP: Hackney's plans are ambitious and very exciting – in the current framework. But we've also got the possibility that we'll have a Labour government in four years – hopefully less. The General Election manifesto last year and plans on how to completely transform our national energy system need to be linked in to how we scale-up initiatives on the municipal level. How do we make it possible for Hackney to go way beyond what you're planning now? What can happen at the national level to make it easier for cities and boroughs like Hackney to get involved in distribution, for example? Obviously, everyone agrees that the privately run, regulated monopolies just don't really make sense.

JB: So there's a number of things to address there, really big questions.

I think we need to be very careful that while we embrace public ownership, we do not remain wedded to a traditional, pathologically centralised publicly-owned energy system, for a variety of reasons.

Firstly, it's very, very easy for a future government not of your political persuasion to convert a heavily centralised nationalised energy system into a privatised one. So what you need to do is ensure there are a very large number of municipalities, some of which will be controlled by Labour local authorities, some of which will be Tory, who are generating income from the energy system. A future Labour government has to think how it can create the circumstances in which a future Tory government would have to fight a guerrilla campaign against every local authority in the country: authorities that have become accustomed to generating energy and financially accounting for it in their budgets every year.

The next reason I'd caution against a centralised system is that there are massive problems of scale – both in a capital sense and in an administrative sense – in a highly developed modern economy. There are big questions about the extent to

Renewal 26.3.indd 15 30/08/2018 17:37:18

which a department in Whitehall can not only manage the existing energy system that we have but also transform that energy system. I don't believe that they can do that. The problem is easier to address at the municipal level. I can envisage a point where Hackney could be generating the vast majority of its energy from clean sources. I find it more difficult to envisage how we do that at the UK level; but once every municipality is doing that, in aggregation, that's how you get there.

MMP: I don't think a Labour government will centralise the distribution grids into one national entity – that's not what Corbyn has been proposing.

Beyond that – there are two important questions to start addressing. Firstly, how do we take the distribution grids into public ownership? For that, we do want the state to nationalise the current distribution grid companies, as it's the most efficient pathway to bring the infrastructure into public ownership. This will allow Parliament to set a fair compensation price – preferably based on how much capital these private companies have actually invested, and how much they extracted in dividends.

But I've noticed the word 'nationalise' confuses people. Just because we nationalise the distribution grids, that doesn't mean we have to then own or operate them at a national, centralised scale. That takes us onto the second question: once in public ownership, what is the appropriate scale for the distribution grids?

Does it make sense to keep them at the current scale, where London is currently one electricity distribution network, or East Anglia or the North-west of England? Given the potential for smarter decentralised networks to integrate local renewables, it could also make sense to enable cities like Manchester, boroughs like Hackney, or even parishes, to run their own electricity distribution grids. Handing more control to local communities.

I believe that a Labour government can design a system where regional energy companies are the default owner and operator of the electricity grid. But that within the region, control can be devolved down to smaller scales, where local authorities or democratic co-operatives demonstrate their ability and potential. That could revolutionise the concept of community energy.

JB: The position in the manifesto didn't explicitly refer to grids, it talked about regional energy companies in general.

I've been very clear that the level at which energy companies need to be set requires a corresponding level of political governance. If you're going to have regional energy companies, as proposed in the 2017 Labour manifesto, you have to have a regional tier of government. I'm not convinced that that's absolutely necessary, but if you believe in transforming the energy system, you have to have mechanisms through which those companies that are operating in the energy industry are accountable to the electorate. If you fail to create a tier of regional government and

Renewal 26.3.indd 16 30/08/2018 17:37:18

POLITICAL ECONOMY AND ENERGY DEMOCRACY Street-level climate politics

you create a series of regional energy companies, there are big questions about who they answer to.

My view on the whole issue would be – why create a series of regional energy companies? I suppose the argument is that they're about the right scale. Why would you go through the process of creating a series of regional energy companies and potentially a tier of regional government, just to hold them to account, when there are municipal structures that make sense to the actors that are operating them, at the moment?

MMP: But there can be challenges at a municipal level too. Running generation like solar etc. totally makes sense – that's clear. Operating a retail business and maintaining relationships with customers – councils have advantages here if the customers are local, not so much if the customers are outside their area. Running the distribution network – I guess that's a critical question. Do we want to be running distribution networks at a borough or council level? And it partly depends on the technological shifts that we're seeing.

JB: Municipalities are tricky, there are so many tiers of local government. There's a very strong argument for establishing one tier. But that's a conversation that we don't have time for now!

Networks are a bit like public health spending, you can't internalise all the of the public health threats that exist. HIV or smoking don't recognise borough boundaries. It makes good sense to scale that up. The other question is about technology as well. To what extent can, for example, local micro-grids transform distribution?

MMP: Microgrids can totally transform it. But even with new microgrids, we will actually rely on the existing distribution grid even more – to distribute energy between different local areas, between renewables generators that are plugged in directly to the distribution grid. Instead of obviating the necessity for the existing grid, microgrids, smart systems, demand response and renewables will transform it and increase its importance.

What we crucially want to see in that future transformed energy system that hopefully a Labour government will help give us, is something that has public ownership at multiple levels, and almost allows a subsidiarity going down to the most accountable level, wherever possible. You can have a microgrid where it makes sense, and people can get the most control that they can possibly have. And where you need some balancing going on at the London level, we still have that, and that has to be accountable at a London level.

There isn't one uniform solution. We need to let communities, through local authorities, form how we transition 'here'. What a national Labour government can do is create the processes and allocate the resources and the institutional transformation that empowers that change to happen everywhere.

Renewal 26.3.indd 17 30/08/2018 17:37:19

From energy democracy to industrial strategy

MMP: Corbyn gave a speech to the Alternative Models of Ownership conference in February that talked a lot about energy and energy transition, and what the role of municipalities could be: where you could centralise and where it's more challenging to do that. I think there is quite a lot of interest and ambition there.

One of the questions that really needs to be explored is how we tie in energy transition and municipal control with industrial strategies. How do we make sure that we are generating good jobs? How do we make sure that factories, for example, are building wind turbines, that we're using public sector procurement enough, linking it in with national and local and regional industrial strategies? There's some stuff you can think about industrial strategy at a Hackney level, but then Hackney, Waltham Forest, Barking and Dagenham, Enfield, the whole of East London, are ultimately also economically one collective unit.

JB: I think that's a really important question. I come from a city, Liverpool, whose population has halved since 1935.

One of the biggest drivers of the housing crisis in London – even though people on the left have been addicted to supply-side solutions, building more houses – we know from an empirical perspective that house-prices and rents are much more sensitive to demand than they are to supply.

I became interested in industrial strategy because of what I could see of the crazy situation of throwing vast amounts of housing supply at London and the South East, which only entrenches the economic dominance of London, which causes London to spin out even further, which leads to the atrophying of the rest of the country.

Industrial strategy is the key mechanism through which we will address the fact that London has too many jobs and not enough houses, and Liverpool has too many houses and not enough jobs.

There is also a global element. We need a world-wide price on carbon, so that you can rebalance the price of factors of production involved in manufacturing commodities. Ultimately, if the price of wind turbines and solar PV manufactured in China internalised their full CO2 cost in manufacturing and shipping, then it would make those commodities much less attractive to the British market, which would make manufacturing those commodities in the UK and in Europe more attractive.

Not only, of course, would you be re-shoring jobs and improving the uneven economic geography of the planet, but you would be looking at the desperately uneven economic geography of the United Kingdom.

Renewal 26.3.indd 18 30/08/2018 17:37:19

POLITICAL ECONOMY AND ENERGY DEMOCRACY Street-level climate politics

But that's the holy grail. We appear to be a long way from that. So our question is what we as socialists do in the interim. How do we create the conditions in which it's possible to ensure that our economic renaissance isn't a hollow one, that we're rebuilding a manufacturing base? This is the exciting thing. For almost the entire time that I've been a member of the Labour Party, for almost the entirety of that time, the prevailing political culture was one of abject and contemptible fatalism when it came to the industrial composition of this country. I've never shared that view. There's 200 years' worth of jobs there in the energy transition.

MMP: Jobs that could end up being shit, or they could be decent: they could be precarious or unionised. A private company, who owns a coal-mine, or a coal power station, isn't going to take responsibility for the future of those workers. We can try and push them to do that, but they are not going to do that. That's where the state has a role. We're, as a public, making a choice that climate change is an existential threat, and therefore we want to survive, and therefore we will have to close down some things that are destroying us, and the planet, and society.

JB: The consequence of the transition can be to radically transform the society in which we currently live, to give people the freedom to participate in their communities and to feel that they have control over their lives. The purpose of socialism is to create the circumstances in which people can pursue their conception of the good.

MMP: Climate change creates, almost, creates a greater possibility of us delivering that than we've had previously. We are going through a massive transformation anyway. But we can see why, for instance, trade unions would need assurances, and be quite doubtful, about promises from large political parties about the protection of their members' jobs, given they've lived through decades of neoliberalism and false promises. Corbyn has said that every energy worker who loses her or his job as a result of the energy transition, will get a new equivalent job in the future.

JB: But that was Hillary Clinton's line. You've got to go even further than that. Firstly, don't ever make it possible for someone to misquote you, as Clinton was misquoted, as someone who is going to destroy those jobs, because that was never her intention. Secondly, you've got to say, we're not just going to train your coalplant workers to do new jobs, when you cut their jobs, we're going to offer them that trade-in and assistance now, we're going to take your workers from you, and we are going to build Jerusalem from the ashes of your industry.

MMP: But it has to be: we are going to build those new industries, and not just offer people retraining. Transition isn't a charity thing. It's those highly skilled workers who should be at the centre of the transition.

JB: You have to do it when people are in their early and mid-career, rather than wait until industries have stopped recruiting and you've got a much older workforce that

is much less flexible. Which is exactly what happened with places like Sheffield; there's an endless list of tales of this kind of industrial decline.

There are people in this city who will say to you, 'I loved the 8os, I bought my own house'. We have to create the circumstances in which people look back and say, that coal-fired power plant I was working in, it was damaging my health, damaging other peoples' health, I wasn't learning anything, it was being driven into the ground; then Jeremy Corbyn and his government came along and created the circumstances in which I'm now in senior management in this area of renewables, my son or my daughter has just started in this industry, and I can see them retiring from it in another 50 years' time. That's how you win hearts and minds. That's hegemony: it's how you change the world.

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Further Reading

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Renewal 26.3.indd 20 30/08/2018 17:37:19