

Cofnod y Trafodion The Record of Proceedings

[Y Pwyllgor Amgylchedd a Chynaliadwyedd](#)

[The Environment and Sustainability Committee](#)

02/12/2015

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Cynulliad
Cenedlaethol
Cymru

National
Assembly for
Wales

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Cofnodir y trafodion yn yr iaith y llefarwyd hwy ynnddi yn y pwyllgor. Yn
ogystal, cynhwysir trawsgrifiad o'r cyfieithu ar y pryd.

The proceedings are recorded in the language in which they were spoken in
the committee. In addition, a transcription of the simultaneous interpretation
is included.

Aelodau'r pwyllgor yn bresennol
Committee members in attendance

Jeff Cuthbert	Llafur Labour
Russell George	Ceidwadwyr Cymreig Welsh Conservatives
Llyr Gruffydd	Plaid Cymru The Party of Wales
Janet Haworth	Ceidwadwyr Cymreig Welsh Conservatives
Alun Ffred Jones	Plaid Cymru (Cadeirydd y Pwyllgor) The Party of Wales (Committee Chair)
Julie Morgan	Llafur Labour
William Powell	Democratiaid Rhyddfrydol Cymru Welsh Liberal Democrats
Jenny Rathbone	Llafur Labour
Joyce Watson	Llafur Labour

Eraill yn bresennol
Others in attendance

Dr Richard Cowell	Ysgol Cynllunio a Dearyddiaeth, Prifysgol Caerdydd School of Planning and Geography, Cardiff University
Bill Edrich	Cyfarwyddwr Masnachol, Cyngor Dinas Bryste Commercial Director, Bristol City Council
Jo Gilbert	Pennaeth, Robin Hood Energy Head of Robin Hood Energy
Michael Jenkins	Prif Swyddog Datblygu Cynaliadwy, Cyngor Bwrdeistref Sirol Pen-y-bont ar Ogwr Principle Sustainable Development Officer, Bridgend County Borough Council
Gail Scholes	Cyfarwyddwr Gwasanaethau Ynni, Cyngor Dinas Nottingham Director of Energy Services, Nottingham City Council
Philip Walton	Cyfarwyddwr Strategol (Prosiectau), Cyngor Bwrdeistref Sirol Wrecsam

Strategic Director (Projects), Wrexham County
Borough Council

Swyddogion Cynulliad Cenedlaethol Cymru yn bresennol
National Assembly for Wales officials in attendance

Martha da Gama	Ail Glerc
Howells	Second Clerk
Alan Simpson	Cynghorydd Arbenigol Special Adviser
Adam Vaughan	Dirprwy Glerc Deputy Clerk
Graham Winter	Y Gwasanaeth Ymchwil Research Service

Dechreuodd y cyfarfod am 09:30.
The meeting began at 09:30.

Cyflwyniad, Ymddiheuriadau a Dirprwyon
Introductions, Apologies and Substitutions

[1] **Alun Ffred Jones:** A gaf fi eich croesawu chi i gyd i'r pwyllgor? Rydych chi'n gwybod y rheolau ynglŷn â'r larwm tân. Dylid diffodd ffonau symudol. Rydym yn gweithredu yn ddwyieithog, felly mae croeso i bawb—.

Alun Ffred Jones: May I welcome you all to the committee? You know the rules regarding the fire alarm. Mobile phones should be switched off. We operate bilingually, so everyone is welcome—.

[2] Croeso—welcome, Dr Cowell. We're just going through the formalities.

[3] Mae cyfieithiad i'w gael ar sianel 1. Peidiwch â chyffwrdd â'r botymau yn ystod y sesiwn. A oes unrhyw un eisiau datgan buddiant o dan y Rheolau Sefydlog?

Translation is available on channel 1. Please don't touch the microphones during the session. Does anyone wish to declare an interest under the Standing Orders?

[4] Mae Mick Antoniw wedi anfon ymddiheuriadau. Nid oes dim dirprwyon.

Mick Antoniw has sent his apologies. There are no substitutions.

**Ymchwiliad i 'Dyfodol Ynni Craffach i Gymru?'—Perchnogaeth a
Chyflenwi'n Lleol**
**Inquiry into 'A Smarter Energy Future for Wales?'—Local Ownership and
Supply**

[5] **Alun Ffred Jones:** A very warm welcome, Dr Cowell. Obviously, the session will be bilingual. Questions may be asked in Welsh or in English. Thank you for coming to help us in our inquiry. Perhaps you'd just better introduce yourself, and your position, for the record.

[6] **Dr Cowell:** Thank you. Thanks for the invitation. I was invited earlier in the session, but, unfortunately, I couldn't make that, and I'm very grateful to be invited back again. I'm a reader in environmental planning at the School of Planning and Geography. My expertise lies in relation to planning systems, and debates about sustainable development. For the last eight or nine years, I've been looking at debates on planning for renewable energy, the formation of energy strategies, some of which is around community benefits, and community renewables as well.

[7] **Alun Ffred Jones:** Thank you. Mr Alan Simpson is our special adviser on this inquiry, and he may ask some questions later on.

[8] Can I just kick off? In your written submission, you say:

[9] 'I note that the inquiry questions lead with issues of energy mix'.

[10] And then you go on about that. And then you say:

[11] 'I do hope, however, that the committee sees the issues of technology, networks, demand management, ownership and communities as more fundamentally connected, rather than believing that technical feasibility is the dominant, driving concern'.

[12] Could you expand on that, before I invite questions from Members?

[13] **Dr Cowell:** Yes. I think it reflects my impression of Welsh decisions around energy, Welsh policy around energy, as being somewhat slightly schizophrenic, in that, on the one hand, there's been a series of energy-related strategies, which try, in more or less cohesive ways, to work out what Wales's energy strategy for the future should be, linked to decarbonisation

targets, linked to renewable energy targets—often making positive sounds about community renewables, and so on. But, at the same time, one gets the impression that almost any energy investment in Wales is treated as a positive thing, because it's jobs and economic benefits, regardless of the implications for energy and energy policy. So, at the same time as promoting green energy futures, Welsh institutions have been positive about liquefied natural gas terminals, new nuclear power—that kind of thing.

[14] I think my other point is that, in moving towards a smarter energy future for Wales, that kind of schizophrenia is no longer tenable. I think there's a greater need to see how reactions to all kinds of energy projects might fit together, how they might fit to decarbonisation, and other targets. I think that schizophrenia's no longer tenable, because, increasingly, it won't be possible for Welsh Government, for example, to use the case that these consenting decisions are made by Westminster, because, increasingly, they're going to be made in Wales. And it's also important because Wales—. You might have thought, two or three years ago, that increasing consenting powers for power stations in Wales might mean Welsh decisions about new windfarms, and that sort of thing; that's all rather up in the air. It could be more decisions about gas capacity, whether it's peaking supply, or in other forms. That brings debates about where things like gas sit, as a bridging fuel, for how much, and for how long. It's no longer an issue that can be sort of off-shored to Westminster, and which now has resonance in Wales.

[15] It also means that there's a need to start thinking about, where there are positive decisions towards large-scale energy infrastructure, what kind of space they leave for community initiatives, what kind of space they leave for more decentralised energy initiatives, in which issues of generation, demand management, and heat provision might be more closely linked together.

[16] **Alun Ffred Jones:** Okay. Julie, do you want to come in on this?

[17] **Julie Morgan:** Yes, thank you very much, Chair. I'm interested in your views about large energy being potentially attractive to Wales, as you said. You say that some of them should be refused, because of the space that they take. Could you expand on that, and could you give any examples of the projects that you think should have been refused, or should be refused in the future?

[18] **Dr Cowell:** I think there's a wider debate in terms of how we move towards a decarbonised energy future, at an acceptable cost, which raises big

questions about the existence, or necessity, or scale of things that supply base load; about the role of different energy sources in providing that base load, whether it's nuclear or gas; what kind of affordable arrangements there might be for funding supply that only comes on and off at peak times—. Some would say that gas and nuclear have an inevitable bridging role; some would say that we should start to dispense with the notion of base load altogether. I think my point is not to say that we should pursue one pathway or another but to recognise that there needs to be a Welsh-level debate about how pursuing one pathway might make others more difficult to achieve in the decisions we make in buying into one pathway rather than another. And certainly you could look at the amount of gas capacity that's been consented in Wales and say that that's clearly going to cast some kind of shadow over efforts to decarbonise, certainly for the next 10 to 15 years.

[19] **Julie Morgan:** So, in terms of nuclear, are you saying that Wales should go ahead with nuclear or not?

[20] **Dr Cowell:** My personal view is that nuclear power is unlikely to happen in anything like the amount the Government suggests. So, it may not be Wales's decision in that sense. I would certainly be grateful for a much more active debate about nuclear's role in energy mixes rather than just simply as the least bad or best job-generation strategy for Anglesey. I think there may be lots of arguments, if you look at the amount of money being put forward through the levy control framework, to support these sources. There should be an active debate about whether that could be better spent.

[21] One thing I'd refer to in that is some work I did, mainly led by colleagues in Aberdeen, which was to consider: could Scotland do more to promote a renewable energy future if it had more autonomy over energy markets and energy market support north of the border? The conventional wisdom would be that it couldn't do very much because a country of five million would inevitably depend on the kind of moneys raised by the UK as a whole to achieve significant renewable energy ambitions. However, when you look at Scotland's pro-rata share of a significant nuclear programme, bearing in mind that Scotland is broadly opposed to new nuclear power, consider what else that might be spent on, consider what kinds of contracts to new renewables Scotland might offer. Could they be longer than 15 years? Might there be investment overrun guarantees that nuclear gets—? Actually, Scotland could fund a significant renewables programme were it not obliged to fund UK nuclear power.

[22] And I think having that kind of active debate about how Welsh consumers, Welsh Government and other institutions play into these rather big decisions about energy would be really useful rather than perhaps concentrating on what might look like the more minor-scale stuff.

[23] **Julie Morgan:** And that is not happening in Wales, you believe—that debate.

[24] **Dr Cowell:** There are opponents and people criticising the nuclear agenda, but I don't see, in terms of energy agendas and energy strategies—it's seen as something that the Welsh Government doesn't have consenting powers for. It's seen as something where, 'Well, fine, if it's going to come, you want to maximise the economic benefits to those kinds of communities.' There's not been a debate about, 'Hang on, how might this fit with other agendas we have in Wales around decarbonisation, demand reduction, decentralised generation and all those sorts of things.' Those bits of the debate are not being brought together at a Wales scale.

[25] **Julie Morgan:** Right, okay.

[26] **Alun Ffred Jones:** Llyr Gruffydd.

[27] **Llyr Gruffydd:** Just picking up on some of the points that you made, you use the analogy of a sort of schizophrenic contradiction, maybe, in the approach here in Wales, and you talked about just not being able—or maybe we shouldn't be offshoring to Westminster some stuff around gas and other technologies and that we need to buy in to certain pathways. But the reality is, of course, that we don't have the powers here to realise the energy future that we would wish to pursue in Wales, and we have a very different outlook being foisted upon us, you might argue. So, in a sense, we have to ride two horses, I'd imagine. Would you not agree?

[28] **Dr Cowell:** I accept that, and I certainly accept that it's very difficult to know what to do with the distribution of powers around nuclear. I think my view would be that, to think about the kind of powers you would want, you first need to have a discussion that represents some things as contentious and worthy of discussion. I think the issues around how far Welsh consumers contribute to the levy control framework funding and what comes back for it have not been on any table anywhere, and those sorts of things just need to be brought in contention as a first step towards thinking, 'Well, how might greater leverage be exerted?' I accept that it's difficult, but I don't accept that

it's never been considered or debated, I think is my point.

[29] **Llyr Gruffydd:** So, how far could we push that within the existing settlement, and what are the key additional responsibilities that you think should be devolved for us to pursue a different course?

[30] **Dr Cowell:** Okay. I think the big issue about whether Welsh Government would get control over nuclear consenting from Westminster might be a very tricky one to imagine. As I say, I think the argument needs to come first before a decision, but I think there are a number of areas where action may be helpful or where we might think about the sorts of powers that will be needed. In some areas around energy efficiency, demand management, perhaps the generation and useful use of heat, the Welsh Government may have plenty of the powers already in its sphere. I think that the other thing is to think outside the energy box for powers that are relevant to delivering greener, smarter forms of energy, and I think you've already heard about the way that the Welsh Government governs local government to be more or less facilitative of local councils taking a role here. I think you've heard evidence from others about the provisions that are made for communities to buy assets, and therefore to have control over the kinds of assets in which energy agendas might grow. One might think that the Welsh Government should not simply try and do the same as England does on this, but also look to what Scotland has done on things like community land purchase, which, in many cases, has been a key animator of energy strategies. It's not been an energy-driven agenda.

[31] I think that the thorniest issues are in electricity generation, for all sorts of reasons, but by and large because the general trajectory of policy over the last 70 years has been increasing spatial integration of grid, of markets and so on. It's also where you need to think about whether the power to achieve outcomes that are desirable is always best achieved by more independence or having Powers—with a big, capital 'P'. So, one issue where power may not mean powers, I guess, is in the provision for the licensing of electricity suppliers. You've heard from others, and I think you might hear from local government later today that there's already an agenda about simplifying the process for alternative organisations to become electricity suppliers. Well, probably, that door's already slightly open. It's simply a question of whether Ofgem are opening it fast enough. What the Scottish Government's position has been on this—and given that parity arguments are often powerful, and it's good to look at what the Scottish Government is doing—is that they've demanded a seat on Ofgem's board.

So, having more Welsh presence has pushed those arguments as far as Ofgem—. That's maybe much easier than imagining how one could autonomously carve out a Welsh Ofgem to resolve the licensing issue. It just seems a more complex way of getting the Powers with a big 'P'. It seems a more complex way of getting of getting powers, with a small 'p'.

[32] What I think is really tricky—. I mean, with the grid, you face the issue that at no point in living memory, perhaps, there's been any kind of autonomy of grid organisation that is coterminous with Welsh boundaries. So, you're inserting a boundary that pretty much operates continuously across that. So that's a little trickier. There may be again a case where greater presence for Welsh concerns at that table may be relevant. The Scottish Government does it, I think, to press issues around the costs of exporting its renewables south, around the funds that companies can spend on interconnectors to Scottish islands. There seems to be no reason why the Welsh Government should not be an equally significant voice in Ofgem.

[33] **Llyr Gruffydd:** Thank you.

[34] **Alun Ffred Jones:** Okay. Jenny Rathbone.

[35] **Jenny Rathbone:** One of the most telling facts in a submission that we've had from British Gas is that 54 per cent of all electricity generated is lost in the transmission back to wherever. I just wonder why a bit more attention hasn't been paid to this, because in terms of raising productivity this is massive.

[36] **Dr Cowell:** Yes, why—[*Inaudible.*]

[37] **Jenny Rathbone:** Therefore, you know, doing much more localised community generation, just as you argue—.

[38] **Dr Cowell:** It's always important to understand why business as usual, with serious problems in it, can roll upon regardless. I guess it's because if, in a private market, the companies supplying it remain profitable and consumers keep paying bills, this is an externality that has no obvious—. You know, it doesn't fall on anyone in particular. So, the system largely goes on to rather ignore it. I think it's fair to say that it's one that can only be tackled by more proactive action, and it may be that the challenge of getting beyond a situation where we get 25 to 30 per cent of our electricity or energy supply from renewables towards much higher percentages, and you make much

more significant action on demand reduction, will force these things onto the agenda. Some of it might be forced onto the agenda for carbon pricing and other sorts of things that might become more significant in the agenda.

09:45

[39] This might be the point at which to—. I talk in my evidence about work done by the Danish economist Frede Hvelplund on Denmark, which, in a sense, faces unsurprisingly similar dilemmas in that it gets 25 per cent of its electricity from renewables, but needs to move towards a much higher percentage. His argument is that you'd never affordably get towards a large percentage of renewables in your energy mix, when it's likely to be socially acceptable—if you keep rolling out a system, basically, of large production plants, be they renewables or other forms, supplying to a grid in which consumers are effectively inactive in the way that they consume electricity. What you need is a system that recognises that renewables is intermittent, that takes more scope to promote distributed smaller scale generation and starts to link up the pieces so that spikes of renewable energy supply are stored or converted to other useful forms, like heat, made available in due course for converting into transport fuels, and in which consumers are much more active. He says that that would have a number of benefits that ought to, you would think, figure as incentives to change because it would involve less high-impact infrastructure, like a long-distance grid. It would be more affordable because you're no longer coping with the economic impacts of very expensive offshore wind and having to balance off some spikes of supply. You'd be doing more productive things with that. He makes a couple of very important organisation points, which is that you'd never achieve that kind of integration either with national level action or by individual consumers. It needs an organisation that can manage what he calls the intermittency infrastructure to link these things together to make more efficient and effective use.

[40] **Alun Ffred Jones:** If I can intervene there—so, what would that look like in Wales?

[41] **Dr Cowell:** I think that it could be the sort of thing that builds on the sorts of things that local government are beginning to start to do in terms—not necessarily in Wales but in local councils in England—around local electricity supply companies going into more energy services companies, which don't just supply electricity but take more effort to supply heat and have more engagement with their consumers in terms of demand

management and so on. Hvelplund's argument is very much that those kinds of efficiency gains, which are both economic and environmental, can only be achieved at a kind of council level, and if you try to do it atomistically with private actors, the transaction costs—the costs involved in trying to get agreement—would be incredibly high. So, in a sense, it's a kind of informed argument for that sort of action. But it might be a world in which local councils or other organisations operating at that kind of scale, or at a city region scale, took a kind of more central role in the supply of energy, the co-ordination of diverse distributed generators, and where consumers—they might set tariffs that are more sensitive to things like fuel poverty. It also may help consumers to engage actively in shaping their demand to the peaks and troughs of renewable energy, which made sure that spikes in renewable energy supply were better used for other sorts of things, for generating heat, whether through heat pumps, district heating, or as some places have already been doing, convert it into transport fuel. I think Aberdeen is fairly a long way down the track of using spikes in its offshore wind coming onshore to convert it to hydrogen to run its buses, for example. I don't think it's the only place that's doing that.

[42] **Alun Ffred Jones:** Jenny, did you—?

[43] **Jenny Rathbone:** I suppose, reflecting our history of outsiders coming in and exploiting our energy, I'm struggling to understand why we haven't had a much closer focus on the need to grasp the opportunities and exploit our own—and not have outsiders coming in—particularly as we have so much wind and most of our historic communities have been built on rivers. Well, all of them are.

[44] **Dr Cowell:** I think it reflects the situation that Hvelplund might describe, which is basically that there aren't the actors for whom this is clearly the incentive and who have the capacity to grasp the opportunity. Electricity, along with all the other crowning hearts of the economy in the UK, was nationalised, but also in a centralised model, which distributed levers of control elsewhere, and that's followed through into the privatisation age. Analysts of the nationalisation of coal will say also how it didn't do a good job for the entrepreneurial class in Wales very often. So, the availability of people who can see these opportunities and can push them through are very few and are spatially unevenly available. Local governments have been supine because they've had no role in this kind of thing. It's not been core business, and a consequence of austerity is that their core business is very much focused on particularly narrow areas. So, it's not been an area where they've

had a duty or interest to get involved for 70 years, which is exactly the right point. One can see the logical arguments for doing it, but the actors on whom there would be an incentive to do things differently have not been there. Those who have no incentive to do things differently are much closer to the levers of energy decision making.

[45] **Jenny Rathbone:** So, how do we beat this conundrum? You make the point that, in any given local community, there is unlikely to be that capacity to understand energy. You know, beyond the fact that the bills keep on going up, people generally do not understand anything to do with megawatts, gigawatts or any of the other stuff.

[46] **Dr Cowell:** Well, some of that will come through things like smart meters, but I guess the conditions in which they work and the effects they might have may be varied. I certainly think there's a need to look beyond a binary of looking at energies either entirely provided by large international private suppliers, who might provide community benefit funds and might not, and the model of community renewables, in which communities develop schemes, own schemes, and all of the financial benefits are returned to them. Those ones are very desirable, but they're very much the kind of gold standard of community energy. As you pointed out, and as I think we know, the supply of communities with the capacity or interest to do that is very limited. Frankly, generating your own electricity is very, very complicated. For many people, business as usual is fine and it would be a very difficult thing to get involved in.

[47] So, I think we need to think more widely about how you deepen public, community and civic engagement in energy, looking beyond just community energy to look at local government, to look at other organisations, to look at other public bodies, to look at new private actors that are often alternative to the conventional model of supply. Local government, I guess, is sitting there as vastly unused. There are other more spontaneously emerging energy supply companies that are operating in that middle ground between the major suppliers and consumers too.

[48] **Jenny Rathbone:** Okay. So, what would be your key recommendations that you think we should put into our report, which is primarily aimed at our Government, but could also include local authorities? It's going to be aimed at the Welsh Government, but it could be a recommendation about what they ought to help local government to do. So, what do you think are the key points?

[49] **Dr Cowell:** I think there's everything to be gained from doing as much as one affordably can to promote the gold standard of community energy. There are other schemes in the pipeline. Providing a continuation of support for them is fine, but I think we should generally try to push the provision of energy towards a deeper and wider public engagement, involving communities, local bodies and other civic organisations, so that other actors out there push the interest in a problem and an opportunity. That then translates to other things, such as facilitating licensing arrangements with energy service companies and energy supply businesses, thinking about what might be done to help them to take a more interactive role in terms of supplying diverse energy services, linking electricity, heat, transport and storage together.

[50] **Jenny Rathbone:** Okay. What role do you think smart meters might play in deepening and widening the community engagement in energy per se?

[51] **Dr Cowell:** I think it's beyond simply awareness. The argument is that if consumers are more aware exactly what they're consuming, they may change their behaviour. So, it might be another force for demand management generally. What it enables is more cost-effective tariffs. If consumers are given the opportunity to look at, not just how much they're consuming, but what the cost is of consuming electricity at different times, they can adjust their behaviour. That, I think, is quite economically and socially respectable, because pulling down the peaks of energy demand means that you don't need so much capacity and, very often, it's the most polluting plant that you'll end up needing least, and the most costly.

[52] I guess that the key principle—and this comes from colleagues in psychology—is that it's done with information and voluntarism. Consumers will be quite anxious about things that force them to shift their balances of consumption, but an agenda that has them sort of actively engaged in making decisions about these sorts of things, I think, is a good thing. Smart meters are critical to that. They've already started to be critical to some of the things that are rolling out. I think that one of your earlier witnesses referred to Cornish sunshine energy, or something like that, which is an energy supply company that is trying to supply lower tariffs based on wind energy and solar energy in Cornwall. That's all about getting consumers to shift patterns of demand to times of day when there's a lot of solar and wind on the system because the wires can't take any more to be exported. So, in

that case, smart meters will help consumers to benefit from demand management, and that will provide some financial benefits for the wider system advantages that that demand management gives.

[53] **Jenny Rathbone:** How do we prevent the big six simply installing smart meters as a way of saving money on people knocking on the door?

[54] **Dr Cowell:** I think that's critical. Any kind of technology is likely to be promoted in the context of any given market, but those that can move most quickly to act. I think that one of the advantages that smaller energy supply companies might have is that they can contract with renewable energy generators in ways that are more cost-effective for both parties. One of the things that renewable energy generators always complain about is that, to supply, you need a secure contract, which often means a power purchase agreement from one of the big six, who frankly have little incentive to be particularly helpful or generous in that. A greater diversity of energy supply organisations would mean that other people, potentially, are happy to purchase that electricity and to share the economic advantage of doing so, which might be rather more positive than the big six.

[55] **Alun Ffred Jones:** Okay. Joyce Watson.

[56] **Joyce Watson:** Thank you for your paper; it's interesting. One of the key players here, as you say, are Government and local government, and one of the key drivers for the economy at the moment seems to be building more properties. So, where do you see those sorts of policies—we must build more houses, for example, which are going to consume or save energy—fitting into this in Wales?

[57] **Dr Cowell:** I think most people would agree that the first principle of any future sustainable energy strategy has to be demand management and energy efficiency. You know, you do what you can, desirably, to do that and then, against that, you work out what the supply alternatives might be. So, any measure to improve or bring forward the points at which houses are relatively low in their energy demands—perhaps you've got energy exporting—has to be a good thing. Of course, the logic of carbon budgeting makes that even more obvious, because if you frame your targets in the context of knowing that there's only a certain amount of carbon or greenhouse gas emissions that you can emit in a particular period of time, it becomes much more obvious that delaying action on that consumes your carbon budget quicker, and it means that more action needs to be taken

downstream, which might well be retrofitting the properties in which you hadn't done as much to improve their energy efficiency earlier on. So, I'm not an expert in this field. You had Malcolm Eames, I think, talking to you earlier about this, but it seems to me pretty pivotal.

[58] **Joyce Watson:** Can I just give you the other side of the argument within the housing sector? The argument goes much like this: retrofitting would be far more beneficial than taking action before you build it. The argument is this: that those houses that have stood for a very long time will stand for the same period in the future, whereas those that are currently being built, say, with photovoltaic roofs, for example, are not up to standard. So, how do we dispel this? How can you help us sell this idea in Wales and make it applicable to Wales, bearing in mind that we have porous borders, and also the threat of the big companies saying, 'If you change, harden and toughen up your policy, we'll go and build somewhere else'?

[59] **Dr Cowell:** Well, that is a dilemma. I think that many people, not just me, have been surprised just how much the UK Government and the Welsh Government Ministers have blinked in the face of the major housing suppliers. One would generally have thought that if they're happy to sell a house and make money on it, they will do that within the regulatory framework that they are given. It was very surprising that they seemed to have so much leverage so late in the day to dilute those sorts of policies. That's about political bravery and acting on the information that you've got, it seems to me, as much of an issue of selling it. Other than that, I would have thought that the logics of both strategies tend to sell themselves. We know that Wales has a legacy of poor housing stock, and that the majority of houses that will be around in 2050 are already up; therefore, retrofitting has to be part of that. When you compare that with carbon budgets, you know, the case for doing that would be clear. I think Malcolm Eames talked about some of the difficulties of the way in which it was done, and that might be a case for more locally attuned solutions that are more architecture specific and so on. Nevertheless, the case for doing it is clear. Obviously, the houses that have recently been built are going to be with us way past 2050; so, any action not taken at this point will not only make these houses more expensive to heat and run, assuming energy prices are not going to go down, and will use up more of that carbon budget more quickly.

[60] **Joyce Watson:** Thank you.

[61] **Alun Ffred Jones:** You mentioned the potential role of local authorities,

and you mentioned that there are examples in the rest of the UK, but you also referred to Denmark, and you referred to city regions as potential areas where this could take place. What about Wales, with its concentration of population in the south-east, and to a lesser extent in the north-east? Does Denmark offer us any solutions there in terms of a rural area—a very sparsely populated rural area?

[62] **Dr Cowell:** I'm not necessarily an expert on Denmark, but I know that things like district heating, for example, are much more widely available, and they do extend into what we would regard as remarkably rural areas. We tend to think of district heating as something that clearly works best in very densely populated areas, where heat doesn't have to go far. In Denmark, they've clearly found a way of making it decently feasible in much more small-settlement-type areas than we have. I guess you'd say that the logic of a more distributed form of generation would mean that there are more heat-producing sources in a much wider variety of localities.

10:00

[63] Clearly, geography would make a difference. The Valleys geography is quite challenging, for example, given the tough terrain, for installing these sorts of things. But I think the main issue is organisational. It's having local councils and others that are incentivised because it's their responsibility to take action, and then assemble the kinds of technological solutions that work in those kinds of places.

[64] I think there are issues around the imbalance between urban areas and rural areas as possible sources of supply and sources of demand, but those might not be as severe as we might think, if we were thinking that it was mainly rural areas where renewable energy would be generated, and urban areas where it's consumed. I think that the things going on in the Greater London Authority, which sees itself as setting up an energy supply company—you know, there are big, ambitious targets for London, which suggests urban areas themselves can do much more to meet some of their demands. So, for me, I think it's really an organisational issue, an incentive and responsibility issue, rather than the fact that the geographical circumstances are necessarily different. That's merely a matter of changing the balance of the different things that you do.

[65] **Alun Ffred Jones:** Jeff Cuthbert and then Llyr Gruffydd.

[66] **Jeff Cuthbert:** Linked to this, later on this morning we'll be seeing representatives from Nottingham and Bristol, and we'll undoubtedly be asking them how they think the lessons that they've learned from their locally owned energy generating companies can be applied here in Wales. What's your view? What would your advice be? Obviously, in Wales, as the Chair has alluded to, the population is spread out differently than in those major conurbations like Bristol and Nottingham; so, very different. However, there are issues that they've pursued that we can benefit from here.

[67] **Dr Cowell:** Yes, some of it's about being an energy supplier. Being an energy supply company's all about contracting with suppliers over their distributed energy and supplying to a particular set of consumers. I don't think that's necessarily something that relates to a particular kind of geographical context. It's an organisational thing.

[68] I think some of the technical issues in terms of how far they feel able to go beyond being an energy supply company towards knitting that together with heat and other dimensions of energy is a critical thing in a variety of contexts. I think fairly few English local authorities have gone much further than that. I guess in rural areas, yes, there probably are unique challenges, and it would be worth pursuing that, but I guess that might relate to another question, which is to what extent local authorities are facilitators of actions by others—communities, villages, smaller settlements, and so on. To what extent are they engaged in helping them do rather more with energy in their localities? How could they help and extend what existing community energy schemes are doing?

[69] **Jeff Cuthbert:** So, if I understand you correctly, you think there are far greater opportunities for local authorities within Wales, presumably especially looking at mid Wales with a very sparse population compared to the south-east or the north-east, and there could be much greater direction—call it what you will—for local authorities there to work with smaller, community-based organisations to do this work. Would you support that view?

[70] **Dr Cowell:** I would support that view. It's very good that you've got local government coming up, and I think that's one of the things I'd be pursuing with them—not just what they could do themselves, but how they could do it in a way that involves other kinds of actors. Particularly with the population more dispersed, you would need a more polycentric approach to this. You'd need a variety of places doing what they can, in tune with their

particular conditions.

[71] **Jeff Cuthbert:** Okay.

[72] **Alun Ffred Jones:** Llyr.

[73] **Llyr Gruffydd:** You mentioned the need to incentivise, and you've also recognised earlier on that local authorities are straining every sinew just to retain existing services. So, what do you think could be a sufficient incentive for some to act in this respect?

[74] **Dr Cowell:** That's an interesting question. I haven't thought that far down the line. To some extent, it comes down to the goals that are set for local government—the framework within which they're required to deliver certain goals. It involves making sure that we can see and showing how energy links to goals around energy poverty, and that sort of thing. These things could at least be revenue neutral once they're set up. One of the advantages of looking at local government as a source of action is that in their own coffers, and in things like pension funds, there are sources of money that could go into this. That's one of the things that the Institute for Public Policy Research has pointed out. So, insofar as it's revenue neutral, it might deliver on wider goals for that local area, and you'd think that those are incentives. It may come down to issues around how carbon targets are structured, and to what extent they are disaggregated by local authority areas to provide that kind of framework. One of the advantages of a carbon budgeting-type framework is that it's scalable in that kind of way. One can imagine what a Welsh picture would be, one could imagine what a Pembrokeshire picture would be, and what a Powys picture would be, and then energy would be located in that kind of context.

[75] **Llyr Gruffydd:** So, would that kind of carbon budgeting be preferable to setting targets around the generation of renewable energy or community energy?

[76] **Dr Cowell:** I think so. It seems to me that the kind of targets you set should be reflecting the kinds of things that you think are ultimately important, and the kind of goals you think the numbers should have—you know, how it is that they govern various things? There are a number of advantages to a carbon budgeting-type approach. It makes the issues of the fact there's a biophysical limit to how much the atmosphere can absorb pretty clear. I think you've got communicative advantages; people might

understand what that means in a way that they might not renewable energy targets. It's scalable, in that one can imagine a Welsh picture, and one can imagine a local authority picture, and communities that are themselves badging themselves as zero or negative carbon can see themselves in that kind of picture. It is an ultimate end and, by and large, one should try to govern in ways that set the ultimate ends that everyone can agree on and allow communities different ways to move towards that kind of goal. So, I think that is an important area for target development. Also, after that, I'd probably suggest that an energy demand reduction target might be the second most important thing. It's one facet of Germany's Energiewende people almost entirely ignore: there's an energy-reduction target there. They're going to transition towards renewables in a way that actually means consuming and producing less energy.

[77] Once you've done those two or three things, I think the renewable energy targets become a little bit more—you can see why they might be a bit more problematic. One can only set targets for renewable energy if one knows what one might achieve by way of demand reduction. Thinking about renewable energy targets requires them to take a view on, you know, 'Do we have a concept of baseload, what that would be, what space is left for different kinds of renewable energy technologies?' Ambitious renewable energy targets are certainly seen as good, as there are a number of things you can do that seem to create a stable context for investment. But the kinds of renewable energy targets we had in Wales weren't easily scalable. So, our target to generate, what is it, by 2025, twice the amount of renewable energy that we consumed in 2005, or something like that, that's not a target that maps easily on to different parts of Wales at different scales, and it magnifies, perhaps, the distributive effect, in the sense that certain places are bearing more of the burden than others, I think. So, I would certainly suggest carbon targets, demand-reduction targets, and then think very carefully about what a renewable energy target would do in addition to that.

[78] **Alun Ffred Jones:** I think I'm bringing the session to a close, slowly. William Powell, then Russell George.

[79] **William Powell:** Diolch, Gadeirydd. Good morning. Just thinking back to the earlier comment about local authorities not having been active in this field, there is one exception that I would bring to the table, and that is the special purpose local authority of the Brecon Beacons National Park in relation to its work with Chris Blake, Grenville Ham and others around the Green Valleys, which I had a very small part in helping to encourage. What do

you think we need to do within Wales in terms of adapting our planning policies—possibly in terms of guidance, but also at the local development plan level—to facilitate greater development of renewable energy schemes?

[80] **Dr Cowell:** I think there's a number of elements to that. One is the concerns that have built up around the slowness and complexity of consenting, which I think you've had plenty of evidence on. I also get the impression that it's shared amongst this committee that we need better evidence to know exactly what that problem is. Is it a problem of what we might call gratuitous or needless delays, which is to say things could easily be done swifter and consistent with their purpose to the satisfaction of everyone, or is it because there are just issues out there that need dealing with? So, for example, is one of the reasons why hydro schemes are said to need nine licensing schemes because there are nine other legitimate interests attached to rivers that cannot be ignored, really, or is just that people are being unnecessary in dividing these sort of things up? So, better evidence is certainly relevant.

[81] The issue has been raised about whether there should be a presumption in favour of community energy, as a way of expediting schemes that might find the planning system particularly difficult to navigate. I think we know some of the issues with that, which is that planning consents tend to run with the consent, and not be related to a particular kind of owner, because the owner may change; planning consents may be passed on. But it's worth knowing that the national planning policy framework in England does include a clause inviting local authorities to be positive about community-led initiatives—it's paragraph 97 in the NPPF. I looked it up. It's broadly worded, so it gets around the need, I think, to define what is the kind of community energy initiative to which it would be positive, but it does show that Westminster doesn't see those sorts of things as impossible. The other sorts of things would be, I think, more proactive, upfront, strategic dialogue between potential community energy schemes, planning authorities and NRW to share information about where the best opportunities are, where the best opportunities in planning terms are, upfront, so that these issues aren't loaded onto the planning application process. But, as in so many other areas of planning, we put more faith in pre-application discussion. So, I think conversations and discussions between local authorities and potential community energy providers would be very, very useful there and may take the sting out of the downstream consenting process.

[82] But the other thing—and it's more suspicion than anything I've been

able to put any data on—is that one of the reasons why planning is such a subject of concern, and planning delays are such a subject of concern, is because our financing system of supporting renewable energy is so subject to peaks, troughs, cliff edges and short-term funding, which means that being held up six months in planning, it's not just being held up for six months in planning, but it's pushing you beyond the end of some financial provision, which you might have hoped would be designed in a more stable, long-termist kind of way.

[83] **William Powell:** Is it your view that a presumption in favour of community energy schemes has got a role to play in the development of this area?

[84] **Dr Cowell:** I can't see any problem in policy language that encourages local authorities to be positive about that. The issue, in going beyond that, is that you'd be inevitably pushed into essentialist debates about what a community energy scheme is and isn't, which would be difficult, and might exclude those that have strong credentials but may not reach the gold standard of community ownership, and I also wonder to what extent the community credentials of community energy schemes are fixed by the time they apply for planning permission or whether, actually, downstream decisions, such as 'over what wide geographical area do we solicit shares from?', follow that kind of thing. I do wonder to some extent whether it's not trying to talk round the wider issue, which is what kind of level of change, particularly landscape change, we're happy to accommodate to achieve a low-carbon energy system. Because many of the concerns are visual and landscape, and, if that's the crux of the concern, then maybe that can be dealt with in other ways.

[85] One dimension of renewables, particularly wind and solar, that I thought is entirely under-recognised is the extent to which, compared to other energy supplies, the effects of those infrastructures are almost entirely reversible. If future generations felt, 20 years down the line, that there was a more compact form of solar, they could get away without wind, those things could be removed, leaving much less lasting effects on the things that future generations inherit than almost any other energy infrastructure. And maybe that temporariness, or relative reversibility, would be a better ground for thinking more flexibly about where renewables fit in the landscape, without getting around issues around community—

[86] **Alun Ffred Jones:** Right. I want to get Russell George in as well.

Russell.

[87] **Russell George:** Thank you, Chair. You mentioned the role for county councils in answer to Llyr—you were talking about incentivising them and so forth—but I wonder what role there is for town and community councils. In my experience, very often there's more political will from them to take forward a project, a very localised project, and it's more about perhaps not so much incentivising them, but enabling them as well. I'm just wondering what your views are on the role for town and community councils.

[88] **Dr Cowell:** Absolutely. I think it's all about helping a greater diversity of actors in the system to be engaged in thinking about production and issues around consumption of energy. I didn't mean to miss out town and community councils—yes, they could have a perfectly important role there. One links that to the issues around whether or not town and community councils should have greater control of other kinds of assets, which may have its own validity, but also then form the basis for energy initiatives. I think that's entirely positive. So, yes, in many ways it could be seen about being facilitative of town and community councils. Certainly, one would not perhaps want—. One might find it undesirable to promote a role for local government in the provision of energy that excluded the scope for other organisations, other levels of government, to have an important role.

[89] **Alun Ffred Jones:** And, Alan, do you have a final question?

[90] **Mr Simpson:** Yes. I just, Chair, wanted to thank Richard on the record for the quality of your submission, because it did consistently address a future that is about energy systems, and not just energy supply. So, I think we should thank you for that.

[91] **Dr Cowell:** Thank you very much.

10.15

[92] **Mr Simpson:** The point of challenge I want to offer, though, is also an invitation. From the various meetings that I've done around Wales, I haven't found a community reluctance to not just go down this path, but to want to race down this path. The most consistent points that are made are that people don't want to be made to look fools and so they complain about the number of hurdles that there are in the path and the absence of safety nets. The most powerful figures from that were ones supplied by Chris Blake and

Calvin Jones pointing out that, whilst Scotland has 504 MW of community-owned renewable energy, Wales has 1 MW. And so it comes down to leadership. Now, I wonder if you'd care to think about giving the committee, perhaps, your pecking order of priorities about what the Welsh Government should do. You touched on carbon budgets, the possibility of compulsory land purchase rights, local supply, setting tougher building standards from which you don't blink, and maybe also setting carbon standards or obligations on district network operators. The committee will have to come up with recommendations about what Wales does and that's the step on from processes. Would you be tempted to do that, either off the cuff or on reflection, to give the committee that shopping list?

[93] **Alun Ffred Jones:** If you're doing it off the cuff, you've got three minutes.

[94] **Dr Cowell:** Okay. Gosh, that's enough rope, isn't it, really? I think the one thing I haven't mentioned is what might be done just to sustain the supply of grant or other relevant funding to make sure that the risk capital required for communities to take a greater role in energy provision is maintained beyond Ynni'r Fro and in the face of uncertainties about Westminster funding. So, I think there are things that would help that journey that many communities want to make to continue. It's entirely, it seems to me, another thing that they should do. I'd just like to follow up on the 500 MW that Scotland have achieved. That, perhaps, goes back to my remarks about being more open-minded in what's required to give the public, communities and local government a role in energy provision, because my understanding is that the thing with Scotland's 500 MW target is that it is community and locally owned energy that they've set a target for, which may be great for all sorts of other reasons, but it doesn't just include the gold standard community schemes. It includes others in which local government has a role, other public bodies, farmers, small businesses. It's about the non-major players, really. There are all sorts of reasons to believe that's also good, I think, but it's just shows that, in a sense, Scotland too—I think, of that 500 MW, the data I saw from a few years ago suggested that the gold standard community schemes are still quite a small fraction, I think, and that's why—

[95] **Mr Simpson:** My question to you was about leadership. What does Wales have to do to provide the leadership?

[96] **Dr Cowell:** Okay. I think some of those are in the strategic direction,

around the targets and the various points that I've made around things that would generally seem to hold the agenda together at various—[*Inaudible.*] The points about demand reduction and carbon targets would be another thing. I think to tackle what we feel about the relationship between renewable energy and landscape and to think about what are the kind of acceptable changes required to accommodate these new facilities would be important and path-breaking, because in a sense any other discussion about planning details, really, seems to be an after the fact issue around that—you know, what kind of landscape change you'd be prepared to tolerate—not least because that's been a major barrier to development. I think it's leadership in other arenas, so working on its own and with others, with Ofgem, around issues around licensing, issues around grid, and so on, to present the kind of agenda that would help other people engage in energy. And, also, I think lead local government and, I guess, offer local government the opportunity to avoid embarrassment and to feel that this is a long-term agenda as well. I think there's action to be taken there.

[97] **Alun Ffred Jones:** Okay. Diolch yn fawr iawn. Thank you very much, Dr Cowell, for coming this morning. If you have any further thoughts then please feel free to contribute any further comments that you might like to make.

[98] **Dr Cowell:** Not at all. Thank you very much.

[99] **Alun Ffred Jones:** That's fine. That concludes our first session, then. Diolch yn fawr iawn. Thank you. We'll take a break now and we'll be back in 10 minutes.

*Gohiriwyd y cyfarfod rhwng 10:19 a 10:33.
The meeting adjourned between 10:19 and 10:33.*

**Ymchwiliad i 'Dyfodol Ynni Craffach i Gymru?'—Perchnogaeth a
Chyflenwi'n Lleol
Inquiry into 'A Smarter Energy Future for Wales?'—Local Ownership
and Supply**

[100] **Alun Ffred Jones:** Bore da; good morning. We'll resume the committee's deliberations this morning and welcome the next two witnesses from Bridgend council and from Wrexham council. Welcome. Croeso.

[101] Alan Simpson is our special adviser and he may ask questions later on, after the Members have asked some questions themselves. Could you just introduce yourselves: who you are and who you represent, and any other comments you may wish to make before we start questioning?

[102] **Mr Jenkins:** Sure. My name is Michael Jenkins and I represent Bridgend County Borough Council, where I'm the lead on a lot of our external energy projects.

[103] **Mr Walton:** I'm Phil Walton, strategic director at Wrexham County Borough Council.

[104] **Alun Ffred Jones:** Diolch yn fawr; thank you. Who'd like to kick off on this one? Joyce.

[105] **Joyce Watson:** Good morning both. Clearly, what we're looking at is trying to give some shape to our recommendations, so we're looking to you to help with that. But my first observation, certainly, to Wrexham, is that you moved forward quite rapidly to take advantage of those things that were in place at the time that they were in place, and that was a model good for its time. What would you do, given the changes now—the feed-in tariff, quite frankly—that you can't take advantage of? So, how will you move to the next phase?

[106] **Mr Walton:** I'm going to give a very direct answer to that, because next week we're actually undertaking some soft market testing for two more solar farms. In terms of the financial modelling we've done thus far, and, obviously, the huge changes in the feed-in tariff, we're also mindful of the fact that the cost of solar and installation of solar has come down dramatically, and also there's been a big change in terms of the effect that the Chinese market has had on the European market prices. So, we are looking at a different approach this time, because previously we sought planning permission and we did all the work with the distribution network operator, and this time round our approach, potentially—I say 'potentially' because it's soft market testing—is to offer a long lease on the land and look for the best payback that we can get on that opportunity.

[107] **Joyce Watson:** And if I can ask, then, the next question. We had in the previous evidence session a suggestion that maybe it would be advantageous to all in Wales to set up and run your own energy, in terms of controlling all parts of it—the grid, the energy production—and yet it seems that, moving

on, you're only able to control part of it. So, what do we need to do in Wales to really deliver this agenda?

[108] **Mr Walton:** Do you want me to start? A broad, challenging question. My professional view is that I think that—. One of the things that's happened in Wrexham, from our experience with our work on our two big solar schemes, is that I think it was a bit of a wake-up call for the distribution network operator, Scottish Power, because of the demands that we were placing upon them, and this is going back four years ago. And of late, they've formed a strategic stakeholder forum for north Wales and the north-west of England, which I sit on, which I think is a very good starting point to bring together a strategic discussion around the generation, supply and distribution operators in this very complex field, and also, for the first time, in my experience, anyway, to bring together local authorities around the table. So, it's very much a starting point, but I think it's a good starting point for a strategic discussion about the way forward.

[109] **Alun Ffred Jones:** Do you see yourselves as energy producers and also selling electricity on to the consumer? Is that how you see your future?

[110] **Mr Walton:** Sorry, do I see the local authority—

[111] **Alun Ffred Jones:** Yes.

[112] **Mr Walton:** I see local authorities being major stakeholders in this. I'm aware, obviously—. I've got the Nottingham 'Robin Hood' document here, which I know you're talking about later, and I had the benefit of sitting behind closed doors six weeks ago at Nottingham and getting a better understanding of how they've taken their project forward, which I think has got an awful lot of potential benefits for the future for Wales. Certainly, that was my feeling when I left that meeting.

[113] **Alun Ffred Jones:** What would be the advantages? Why would we want to do it at all?

[114] **Mr Walton:** I think, again, it would bring together the key stakeholders. It would take a strategic look at the energy requirements across Wales. I think also it would be an opportunity in terms of a bit of a wake-up call, if that's the correct term, for local authorities to actually really get involved with this, because local authorities are big energy users and have got a real interest in this. Obviously, the Nottingham situation is slightly different,

because Nottingham has got a history over the last 40 years—it's got a big energy- from-waste facility in the middle of Nottingham, and it's got a district heating network system, which the council's had a very detailed involvement with over the years. They've got a stake in it, and an interest in it. But I think one of the key drivers, certainly politically, was around the fuel poverty agenda, which I would think would be a key driver for Wales, and a key benefit. That brings to the fore things like making switching from one energy provider to another a much easier option for members of the public, who, I think find it very, very complex. I know that's just skimming the surface.

[115] **Alun Ffred Jones:** Okay. Joyce, did you want to come in?

[116] **Joyce Watson:** Yes, just because you've brought in the idea about switching. We still haven't got control. That's the issue. You're still at the behest of the big six—or four, or whatever—in Wales. So, what we're really trying to get underneath here, and I'm going to put this to Bridgend, is how we take control in Wales. You have a view, you say, that the creation of the local energy service company offers—the challenges and associated risks with that. Could you talk to that, because that actually in itself is about the fuel poverty?

[117] **Mr Jenkins:** I think where we possibly differ from Wrexham is that our focus has been on heat, as opposed to renewable electricity. So, we've focused in more on heat. We would look at that heat, really, as being locally generated. One of the two options we were looking at is using waste heat, which is local, so it's generated locally and it's distributed locally, so we're more in control of all aspects of it locally. That is slightly different with electricity, obviously. The other option that we're looking at is using mine water. Obviously, Bridgend has a strong mining history, and the Valleys communities have got lots of mines in them that have now closed, and that offers an opportunity to draw that water out of the ground. It's warmer than the water that we would use in our current system, so actually we're looking at using that. Again, that's locally generated, locally distributed, and locally used. So, it gives us far greater opportunities with heat, I think, to manage both the generation and the distribution, and the use locally, than actually renewable electricity does. That's not to say that there's not a risk, and I think that's something that we're grappling with at the moment, really.

[118] There's a financial risk, and obviously, I think, most people would like control up here, and risk down here, but it doesn't work that way. They're a

partnership; they go hand in hand. If you want more control, you have to accept greater risk. I think it's being clear on the role that local authorities want to play in that, and the appetite for risk. I do feel that we, really, have to be clear on what we want from this agenda, and what we want as a benefit. Is it about jobs; is it about fuel poverty; is it about addressing health; is it about energy security? I think, once we're clear on what we want, then we can be clear on the role that we want to play. We're looking at a number of options at this moment in time. One of them could be local authority-led—and that's perceived as quite risky, and I think we would probably have a real battle to get everybody to agree that that's the best way forward. It could be like the Aberdeen model, which is public sector-led, but as an arm's-length company. That's an option in there. Or, something along the lines of a joint venture with the private sector, and then being clear on the role that we want within that—do we want a 51 per cent stake of that joint venture, or do we want a 19 per cent stake, or do we want to contract out completely to the private sector? So, we need to be clear on the roles that we want.

[119] I would advocate that having it completely local authority-owned, because we're new to this space, would be quite risky. I think we would need to learn how you run these schemes, first of all, but, also, I wouldn't really want to hand it completely over to the private sector, because that would replicate at the local level what we've got now within the current system. So, something along the lines of a joint venture, I think, would be the way forward.

10:45

[120] **Alun Ffred Jones:** Thank you. Very interesting. Right, who's coming in on one of these points?

[121] Llyr, ac wedyn Russell.

Llyr, and then Russell.

[122] **Llyr Gruffydd:** You've listed a lot of the benefits, and that's great, and I concur with a lot of that, but the question I need answering is: what would incentivise more local authorities to engage in these types of approaches towards energy? What can the Welsh Government do that will draw more local authorities to see themselves as playing a proactive role in this?

[123] **Mr Jenkins:** I think it's not just about finance—it's really not just seeing Welsh Government as being something that can actually provide funds. It's not about that. I think where we've come from on the heat, we

participated in a Smart Systems and Heat programme that was led by the Energy Technologies Institute, so it's UK Government on one side and private sector on the other. We participated in that, and there was a sort of bidding process of about 18 months with two bids, an interview, and we got to the end of that process and we were fortunate enough to be one of the demonstrators for that project. I think, when we started off and were told, 'Okay, you're the demonstrator now', the first question that I asked was, 'Are Welsh Government in it with us?' Because it was perceived that we were in there with Newcastle and Greater Manchester—two very large English city authorities, and Bridgend. It was, 'I don't think we can deliver this on our own'. So, we kind of wanted Welsh Government in there just because it de-risked it, to a degree, from our point of view. It was almost that we having a senior partner there, working on that agenda with us, who was there to get the best deal for Wales, really, and obviously, from our point of view, Bridgend. So, I think it was important to have them there from that point of view.

[124] I think where Welsh Government have also helped us was in facilitating discussions. When we started off, we didn't really have that much of a relationship with our distribution network operator—with the gas network provider. They facilitated those discussions, so we got that role. I think it's important to have some sort of policy backing in there as well, to make sure that local authorities going down this road are not ploughing a lone furrow, and, if it goes wrong, you're not going to be pointing at us as saying, 'Well, we told you not to do it'. I think it's important to have that policy framework in there that's supportive and enabling, as well.

[125] **Llyr Gruffydd:** But all of those depend on the authority coming forward in the first place, and I'm just wondering how we get that light switched on in people's minds, that actually it is a role we should be playing. One suggestion has been made around the possibility of disaggregating carbon budgets to a local level, so that authorities see a role in that respect, or setting demand reduction targets, or even a level of renewable energy generation locally.

[126] **Mr Walton:** My response to that is, looking at it from a very hard-nosed commercial, financial perspective, to be honest—and also my experience since 1996 of the landfill tax, and the financial incentives that have been put in place, which have driven in my view a major change in philosophy and approach by local authorities—I would have no doubt at all that, if Welsh Government want to drive this agenda forward with some pace,

that would be my suggested approach to it, without a doubt.

[127] **Alun Ffred Jones:** Llyr.

[128] **Llyr Gruffydd:** So, you'd suggest higher landfill taxes and those kinds of levers.

[129] **Mr Walton:** Absolutely, fiscal measures, to drive and focus. Because obviously it was the public sector, and local authorities on an annual basis are under major financial pressures, obviously—budget pressures. Just in my own experience, these sorts of areas tend to suffer more, and more quickly, than other areas that are protecting vulnerable members of society that we're serving, which is understandable from a political perspective. But the stark reality is that to drive these things forward, I think there needs to be a fiscal measure in place.

[130] **Alun Ffred Jones:** Russell. A number of you want to come in now.

[131] **Russell George:** My question is to Mr Walton. It's really following on from your last point about the financial pressures that you're under. You seem to be leading the way when it comes to solar, with 3,000 properties and schools, but to me—and it's not a criticism; it's a positive point—you're leading the way in this, but then councils are at the moment under great financial restrictions and austerity measures and difficult settlements. So, I want to know what is driving you to take forward your approach. Is it political? Is it financial? What are the differences for you, because other councils aren't doing it; they're focusing on what's statutory and you're going above and beyond that? What's driving you to do that? Is it political or is it financial? What's the motive?

[132] **Mr Walton:** I think the honest response to that is, if I was sat here today with a blank piece of paper and we hadn't had the experience that we had in delivering successfully 3,000 houses back in 2011–12, and locally, that scheme has been very positively accepted—it's actually generating substantial revenue for the council that is going back into the council's housing services as a reinvestment—. That then led to the confidence to move forward with developing our first ever solar farm.

[133] As I said earlier, we are undertaking some further soft market testing because of the huge changes to the tariff, just to dip our toe in the water. We don't want to go through an expensive procurement exercise to find out

there isn't any real interest from the commercial sector to invest in the two projects I referred to earlier. So, we are going tentatively forward with the next two projects and, clearly, if there isn't an appetite from the marketplace, then, there'll be no appetite, I'm sure, politically to proceed any further.

[134] **Russell George:** As a committee, we've got to make recommendations and what we would like to see is other councils incentivised to do what you're doing. So, is there anything else you can add that you would suggest as a recommendation to us, to Welsh Government, to encourage local authorities to do what you're doing?

[135] **Mr Walton:** I would go back to my previous response in terms of fiscal measures and having to take quite a hard line, but also, actually pointing to local authorities that have succeeded in this agenda. Lots of local authorities have substantial land banks available to them to develop these sorts of projects. As I said earlier, I think the solar market is something that we're not going to be rushing at, but there is the potential over the next six to 18 months, as the price of solar comes down and the inevitable cost of fossil fuels keeps rising, and the pressures on local authorities in terms of our gas and electricity bills rising, that that, in itself, provides an incentive to look at alternatives.

[136] So, in the past, we've rushed because we've had to rush to meet the requirements of the feed-in tariff changes back in 2011. I signed a contract on 25 October 2011 and, two days later, the Government declared the changes to the feed-in tariff, which could've been retrospective, but fortunately they weren't. So, that put us under major pressure to deliver a project by the following April and get as many properties registered at the higher level feed-in tariff. We're not in that environment, now; we're in an environment where we can look at things in, maybe, a more measured way, and see if the market has got the appetite. As I say, it's going to be a case of keeping our eye on the cost of solar, as that comes down, but as the cost of fossil fuels goes up, there's going to be a crossover point where it clearly still is, even without tariffs, financially advantageous to pursue renewable energy projects.

[137] **Alun Ffred Jones:** Thank you very much. Jeff Cuthbert.

[138] **Jeff Cuthbert:** The points I was going to raise have more or less been covered.

[139] **Alun Ffred Jones:** Okay, thank you. Julie Morgan.

[140] **Julie Morgan:** I'm sort of struggling to know what the incentive was that made you start to do all this at the beginning. Was it political leadership that made you venture into this solar field?

[141] **Alun Ffred Jones:** You may say 'no' if it's true [*Laughter.*]

[142] **Mr Walton:** No, no. I'm casting my mind back. What drove it originally was going back to around about 2008–09, when we, as a council, like many councils, were getting criticised because we had far too many corporate priorities across the council. So, politically, there was a focus and we got down to three top priorities, and one of them was around the carbon energy efficiency agenda, and that was driven by carbon taxes that we could see coming in terms of the carbon reduction commitment and the effect that that was going to have on the council's budget. So, yes, it was politically driven, but clearly, financially, when you looked at the financial business case at that particular time, when we were in the realms of registering 43p per kilowatt, compared to 21p—and it's now down to just over 1.6p or something like that—and when you actually looked at being able to bank a feed-in tariff for 25 years at that sort of level, the risk was actually getting the project delivered. Once the project is delivered, it's a dead cert, more or less, from an investment perspective. So, looking at it from a commercial investment, it made eminently good sense, even when the tariff actually reduced down to 21p.

[143] Obviously, added to that, there is a whole raft of other issues in terms of local employment opportunities, carbon reductions, the corporate leadership, community leadership from within the council, the reputational issues. So, there are a whole range of added issues, but it was primarily driven by it becoming a top corporate priority, driven by carbon taxes, and that's what really led the whole thing forward.

[144] **Julie Morgan:** It's admirable. Just quickly, one other question. I think that you've referred to times when these sorts of issues don't have a high priority in times of austerity, basically, and local authorities wanted to look after the most vulnerable people. Wouldn't you see these sorts of ventures as being very important for vulnerable people in terms of fuel poverty, which we've already referred to, and how can we keep this high on the agenda in difficult times? I think, in your paper, you refer to this as well, don't you,

from Bridgend?

[145] **Mr Jenkins:** Yes.

[146] **Mr Walton:** Yes, fuel poverty is an absolutely critical factor. Again, that was another key political driver, particularly in terms of the scheme for the 3,000 houses, which, for the tenants who have benefited from that, with fuel reduction costs at between £100 and £300 a year, is a very substantial benefit. In terms of looking at the broader picture, I think that initiatives such as the Nottingham initiative that you're going to consider are very worth while in terms of looking at that broader picture and the benefits that that will bring in terms of fuel poverty.

[147] **Mr Jenkins:** Fuel poverty is important, and that comes back to that element of control. Particularly when we talk about a heat network, we need to be able to have a great deal of control over the tariff—so, what people are actually paying for that heat—but also the ability to control where the network goes. It might not be economically advantageous to take it into a high fuel poverty area, but it's socially advantageous to do that. I think that's probably what the local authority's role is, really. It's to ensure that it goes where it's needed, not necessarily where it makes the most business sense.

[148] **Alun Ffred Jones:** Jenny Randerson. Sorry—Rathbone. My apologies there.

[149] **Jenny Rathbone:** I've got a charitable box that you can contribute to.

[150] **Alun Ffred Jones:** Thank you.

[151] **Jenny Rathbone:** I'd like to congratulate Wrexham on having grasped the nettle in a timely fashion, only just. Obviously it was very tight—the objective that you set yourself. Really, why is it that other local authorities weren't jumping on this bandwagon back in 2010 or 2011? This is the key question for us, you know, because I can recall that, in 2011, ordinary folk on my housing estate were starting to put solar panels on their roofs, and then suddenly the gate went down. So, obviously, you made a major achievement here. Is this information shared across local authorities? It contrasts so greatly with Carmarthen, where they recently cancelled the solar panels that they were going to put on all their social housing.

[152] **Mr Walton:** Yes, obviously, you'll appreciate that I've just given you my

personal perspective in terms of your broad-ranging question. Just starting with the latter point, in terms of those local authorities and registered social landlords that backed out of these projects—and they were doing that during the latter part of 2011, I remember—as I say, we recast the financial model, we reviewed the risks again, we went back to our members very, very quickly and we were able to demonstrate that, from a financial perspective, this made eminent good sense to continue, especially given the fact that we'd just signed the contract and we were mobilising this whole thing. And, at that time, the other relevant issue locally was the presence of Sharp in Wrexham, which, ironically, at that time, the factory in Llay, which is five miles from my office, became the largest producer of photovoltaics in the world, and three years later, the line closed down. I've never seen such a dramatic change in an industry, ever.

11:00

[153] Going back to the first point, in terms of my personal perspective about why the local authorities weren't pursuing this, I don't know whether it's a culture that exists within many local authorities about maybe not taking a broader commercial view—being quite risk averse. The sort of invisible thing is around confidence within a council. So, we had just delivered a major private finance initiative—a £400 million waste and energy project that had taken—. We started in 1997, with major backing from Welsh Government. We delivered that phase 1 in 2007 and we just delivered phase 2 in the last few months. But, I think, because we'd gone such a long haul on that 10-year project, and actually delivered it successfully, I think politically there was a confidence to take this agenda on. So, I think success breeds confidence. That's my personal perspective.

[154] **Jenny Rathbone:** Okay; that's very interesting. Could I just ask you what are the Part L requirements on building regulations for new buildings in Wrexham? You know, the energy efficiency regulations—the Part L—are they the same in Wrexham as they are in the rest of Wales, or do you have higher requirements?

[155] **Mr Walton:** No, they're the same.

[156] **Jenny Rathbone:** Why are they not higher in Wrexham, given that carbon reduction and energy efficiency is a priority for your council?

[157] **Mr Walton:** I honestly don't know the answer to that question. I'd have

to look into that.

[158] **Jenny Rathbone:** Great. Thank you. In terms of Bridgend, it seems a no-brainer, really, to be tapping into the mine water that has just been pouring down the mountain, to be cooled down by Dŵr Cymru, and then put back into people's homes. Could you just explain, really, why we're still talking about this rather than doing it at the moment?

[159] **Mr Jenkins:** Doing it, yes. I think, partly, it's a new technology, and new is perceived as risky. It's risk from the private sector's point of view as well. There are no other mine water schemes in the UK that I'm really aware of. There's one in Scotland which they're looking at. We're proposing it up to around about 300 homes, so it's not a large scheme in a district heating sense, but it's quite large; not a lot has been done to that scale yet. So, it's perceived as risky. And, really, I think the business case for it, because we've just done a piece of work on it, heavily relies on having an element of renewable heat incentive coming in there—that element of subsidy to get a good level of return. I think that gives confidence to investment and confidence that it actually works as well. I think there's possibly a school of thought that actually thinks, 'Is this really going to work? Are we really going to be able to get it off the ground? Are we really going to be able to pump it around? Are people going to want it?'—there's that as well. It's that giving up your gas boiler and having a heat pump in your home. That's new; there's not that many people out there with heat pumps in their home at this moment in time, so there are lots of elements of risk attached to that one, which are possibly not present in other models. You're absolutely right; it's a resource that's there. It has been there for a long time, and we should use it, and hopefully, that's what this project will do: it will demonstrate that you can use it, it can be invested in and it does work.

[160] **Jenny Rathbone:** And it's adjacent to some of the communities—the former coal-mining communities—which are some of the poorest.

[161] **Mr Jenkins:** The area we're target it at—I think it's the fifth most deprived in Wales on the Welsh index of multiple deprivation, so there's a real need to go in there and offer something different. We've done work in there with Welsh Government schemes before in terms of Arbed and the community energy savings programme and the carbon energy reduction targets, which are looking at the fabric of the properties, but we're still not getting to that part, or the nub of fuel poverty, which is fuel price. If we can get in there and actually offer something that's different, that's ideally lower

than grid prices, then that would be great. I think we'd really then get to a point where we can really deal with fuel poverty.

[162] **Jenny Rathbone:** So, what about other schemes that you might be doing in your former coalfield communities? A lot of them are on rather windy locations, so wind power generation—

[163] **Mr Jenkins:** Our focus has really been on heat, largely because it's a small team, really. There are opportunities, absolutely, to look at what Wrexham has done, and other authorities, to look at hydro, to look at wind and to look at solar, but we really didn't want to, I suppose, spread the resource too thin. So, we're really focusing on core business initially being heat, and we can build those other things in at a later date. To try to do them all at once would probably be stretching it, really.

[164] **Jenny Rathbone:** Okay, but all these green levies that we've all been paying into and the delays in actually getting on with doing things means that most of that money has just left the country and has not been reinvested.

[165] **Mr Jenkins:** Absolutely.

[166] **Jenny Rathbone:** So, what are the lessons that we have to learn from this? Scotland, for example, has hugely benefited with the amount of community energy generated compared with our very minimalist position.

[167] **Mr Jenkins:** I think it's partly being more—this has been alluded to—commercial in our thinking and being more agile, and being able to see where an opportunity exists and actually exploiting that opportunity quite quickly. Windows of opportunity open up and they close as well. I think we need to be a little less risk averse, a little bit more commercial in our thinking and just be able to act quicker than we currently do.

[168] **Jenny Rathbone:** Okay, because back in the day, local authorities used to be municipal generators.

[169] **Mr Jenkins:** Absolutely.

[170] **Jenny Rathbone:** So, it's really—

[171] **Mr Jenkins:** It's almost going back.

[172] **Jenny Rathbone:** —re-engaging with all that.

[173] **Alun Ffred Jones:** So, it's back to the future, is it?

[174] **Mr Jenkins:** Back to the future, yes.

[175] **Jenny Rathbone:** So, in terms of all of the discussions about the future shape of local government, how do your plans for instituting municipal energy generation and supply—how are they impacted on that and how can you plan for that, because there's some uncertainty about that?

[176] **Mr Jenkins:** There are two ways of looking at it, really. When we did a risk register for the project, local government reorganisation was flagged up as a risk. But, actually, I see it much more as an opportunity. Bridgend has opportunities within its boundaries, but whoever we merge with, actually, they have opportunities as well. If we can get a structure right in Bridgend, that's an ideal opportunity to roll that structure out into whatever that new authority is. So, whichever direction our boundaries end up going in, it opens up almost a wider customer base and offers greater opportunities. I'd say you can look at it in one of two ways, really, and I'd possibly look at it more as an opportunity.

[177] **Jenny Rathbone:** So, where are you today? I mean, you need to get on with this because money is going out of people's pockets into the big six energy companies—

[178] **Alun Ffred Jones:** Well, I think we want to broaden the discussion away from—. Bridgend is here as an exemplar, but we ought to try and see what implications that has for the broader picture.

[179] **Jenny Rathbone:** Indeed, but obviously if Bridgend can provide an exemplar in the same way that Wrexham is a clear exemplar, then that would be very good news for lots of other local authorities.

[180] **Mr Jenkins:** Where we are at the moment, we're probably into—as part of the Smart Systems and Heat programme—a two-year development phase where we're trying to scope out the exact scope of the schemes, so work out exactly where the schemes are going to go and what they're going to look like, how big they're going to be, cost them out as well, and develop a funding package around that. I think, with district heating, it's not at the

point yet where—I think it needs a level of grant support still, but it can't be met solely from grants. So, we need to work on that funding blend between grant and loan, so that funding package is quite important. We need to really work through the customer engagement making this acceptable to people. I still think people are happy with their gas boiler—it does everything you want it to do. They might grumble about the bills and that kind of thing, but, actually, suddenly saying, 'Actually, you can take that away and offer us something else'—I think that might be a step too far for a lot of people. So, I think we really need to work on that and make this technology acceptable to people. I think that's important. I think we also need to look at the supply chain element. I mean a big driver for us is seeing this as an economic development opportunity, so we need to look at that supply chain. What supplies do we need? Can we meet those locally? By 'locally' I mean that the circle starts in Bridgend and then widens out. So, we need to see where those opportunities are and get an understanding of the delivery structure as well. So, how are we going to deliver this scheme? How are we going to manage it long term? If that energy service company model is right, what does that EScO look like? Understanding our role in that as well is a big piece of work to get right. But we're looking at that over a two-year period to begin construction in 2018. That's the deadline that we're working to at the moment.

[181] **Jenny Rathbone:** And in terms of your attitude towards carbon reduction in other aspects of the local authority's role, what are the standards you require of new buildings like new schools or other public buildings in Bridgend council?

[182] **Mr Jenkins:** That they align with building regs, really. I think the only thing we've possibly done differently—. Our whole way of looking at heat started within planning. We were doing our local development plan and we said, 'Okay, how can we really look at heat and how do we make it different?' What we built into that was a policy that says, 'If a heat network exists in the borough and there's a new development going in, we would expect them to connect to that'. I think developers are quite resistant to developing a heating network themselves. But if the heat network is there, then it's merely connecting into it. So, that puts the pressure back on us, then, to make sure that that heating network is in place, which, again, is part of the driver as to why we've been looking at heat networks.

[183] **Alun Ffred Jones:** Right. I just want to bring in some other Members who've been waiting patiently. William Powell, then, Janet, I think you

indicated. William.

[184] **William Powell:** Diolch, Gadeirydd. Good morning. You both are representing exemplar initiatives from, broadly, areas of relative population density. How does this translate across to Wales's more rural and sparse local authorities?

[185] **Mr Jenkins:** Part of the Smart Systems and Heat programme for us is to develop a low-carbon transition plan for the area. So, although we've focused on Bridgend town, which is our biggest area of population, the area we're looking at in the upper Llynfi valley I would class as more rural. It's a valley town, but there's certainly not a dense urban population. There are a few hundred people there. But what we want to get to is to have a plan for the area that poses solutions, not just urban solutions but rural ones as well, and gives us a sort of route-map as to how we do that, because the two schemes we're looking at are just almost the start, really. It doesn't end there; it needs to be rolled out and offer another solution for a rural area, albeit it might look a lot different to an urban solution.

[186] **Mr Walton:** I have two responses to your question. One is that, just in relation specifically to the solar initiative, one of the major constraints that we faced was the constraints of the distribution network. So, the major partner that was involved was Scottish Power, being our district network operator, and they determined very, very clearly which areas of the county borough could withstand an additional load on the system. So, that is a major constraint—the distribution network—without a shadow of the doubt.

[187] In terms of a broader sort of response to your question about size and scale and mix of rural and urban, I think this is a clear agenda where, in my view, the bigger the better in terms of the size and scale of the organisation, whether it's local authority, and their engagement with the big six or big four and the DNOs. I think that there's more chance of getting that sort of constructive dialogue going where you've got a much larger economy of scale involved. So, I'm talking about local authorities.

11:15

[188] **William Powell:** Sure. So, you see local government reorganisation, in that context, as being a potential plus point.

[189] **Mr Walton:** There's no doubt about it, it's a huge opportunity and I

think that, in terms of the immediate future, with things like the public service boards coming to fruition, I think, again, this whole agenda is something that needs to be on the agenda of public service boards because of the organisations that are involved there. I think that you get far more chance of getting the big six engaged and involved at that sort of level.

[190] **William Powell:** You anticipate my next question. A final question: what more can be done for the success that you're in the process of building to be shared across local authorities in Wales? Is there a role that the WLGA hasn't fully been fulfilling or has that been a useful network to showcase what you're developing?

[191] **Mr Walton:** To be absolutely honest with you, the main organisation that we've engaged with is the Association for Public Sector Excellence, which is based in Manchester. There are a number of local authorities in Wales that are involved with APSE, as it's called, but the majority are in England. So, I think that more could be done within Wales to promote the best practice that's out there.

[192] **William Powell:** That's helpful.

[193] **Alun Ffred Jones:** Diolch yn fawr. Janet.

[194] **Janet Haworth:** Yes, I have a couple of questions—just some technical questions about the Bridgend project because it's very innovative; it's the only one of its kind. So, the water, which is already quite warm leaves the mine and is pumped around to the houses. Presumably, it still has to be warmed further to provide central heating and that's done through a heat pump.

[195] **Mr Jenkins:** We've done a high-level study, but we're hoping to do a more detailed analysis in the new year when we can actually get to what is the proposed solution, but at this moment in time, there are two options really: we can extract it from the ground at the temperature it is at and pump it around the network with a heat pump in the homes, or we can extract it from the ground, pass it through a larger heat pump at that point and pass it around the network and there'll be a heat exchanger in the homes then, which takes the heat from the water coming in and passes it around your system. On the latter option of pumping it around at a higher temperature, at this moment in time, it looks like the costs are higher. With this procedure, it's swings and roundabouts really. We need to do that detailed piece of work

that's going to say what is the best solution for us, and there's an element of acceptability from the resident as well—do they want a heat pump?

[196] **Janet Haworth:** How would this heat pump be powered?

[197] **Mr Jenkins:** Electricity.

[198] **Janet Haworth:** By electricity.

[199] **Mr Jenkins:** Yes. One of the things that we're looking at is, instead of offering heat, we talk about comfort, so there is a package. So, we could look at putting solar panels in as well and that comes as part of a standing charge that the resident pays, so that all those costs are factored in there. That's another thing that we need to work through when we get to the detailed feasibility because that point has not been lost on us actually—if we're lowering their heating bills, but upping their electricity bills, that's not going to work is it really? So, we've got to offer a solution in there as well.

[200] **Janet Haworth:** And then you've got to look at the carbon emissions that are driving that pump. It's a whole cycle of energy production, isn't it? That's very interesting.

[201] The other thing I'm interested in is capacity building within the local authorities. So, we're at a difficult time with reorganisation, but you two have been very positive in seeing the opportunities that that offers. I think other authorities are going through a bit of inertia, waiting for things to happen, but clearly, there's the opportunity for local authorities to get into generating power and delivering it. So, it comes back to capacity building then within those authorities: what skills do you need in place to make that happen? Because as you both said, local authorities tend to be, by their nature, quite conservative and quite risk-averse—this is not the game they're in really. So, how do we start to move along the more reluctant ones? And one area I think they could easily get involved in is the switching. You know, that's probably the easiest bit, to be honest brokers and to take their thousands of customers to the big six and say, 'Okay, what are you going to do for us?', and negotiate on an annual basis the best deal. And that would start to get them involved in the energy markets.

[202] **Alun Ffred Jones:** Can we get to the question?

[203] **Janet Haworth:** Well, it's really about capacity building within those

local authorities that are not doing what you're doing, and how we, sort of, bring them on board to get involved.

[204] **Mr Jenkins:** Certainly, for Bridgend, we don't have a large team; in fact, there's a 100 per cent turnout today, because it's me. *[Laughter.]* So, we certainly haven't got a large capacity in there. Going forward, how have we got this point? We're probably far, far more reliant than ever before on partnership working, and developing those partnerships. What we've created is a local delivery board, so we've got universities on that, which I talk to regularly and do rely on for support. Welsh Government sit on that as well. The district network operator sits on that, and the gas network provider, plus some of our main social housing providers sit on that as well. So, I think it's one of the best ways to get over it, because local government resources are what they are and we're not going to have a large team of people, although we do recognise that we do need some people. But, it's that partnership working that's got to us to where we are now; it's working with others and marrying what we want to do with what they want to do, and driving the agenda forward.

[205] **Mr Walton:** I'm in danger of being controversial here, but given the fact that I'm actually leaving local government next March after 40 years, and I've lost quite a lot of my team who have been involved with delivering the projects I've referred to already, I do fear that local government is going to be losing a lot of experience and knowledge in the interim before we get up to whatever the outcome of local government reorganisation is going to be.

[206] So, the controversial bit from an officer perspective is that I hear loud and clear every day from senior colleagues the wish to actually know what the landscape is going to be so we can actually get on and plan. But, in the interim, the worry is that we are going to lose a lot of good, experienced people over the next maybe year or two years.

[207] What's the answer in the interim? Again, to be controversial, it's active collaboration between local authorities, because, clearly, where you lose experience in one sector of a local authority, you can assist another local authority and that can help and assist on an interim basis, and vice versa, to have that collaborative arrangement. Again, from officers' perspective, we see the sense of doing that.

[208] **Alun Ffred Jones:** Okay, thank you. I don't know, Joyce, did you want to—

[209] **Joyce Watson:** A very quick question. The only question is, particularly perhaps for Wrexham: how do you sell the idea that the community benefit is greater than the cost of your fuel, because it should be, and we are the committee we are? Also, selling alongside that the idea of tackling climate change and energy saving.

[210] **Mr Walton:** I suppose it all depends what your definition is of 'community benefit' in that, because there's a broader definition, which I think is what you're alluding to, and there's a more narrow definition—

[211] **Joyce Watson:** I accept that; I accept all of that, because we're running out of time, so I'm sorry I'm cutting across you. But, I haven't heard any of you say that this is actually—unless I've missed it—about effecting changed behaviour in terms of climate change.

[212] **Mr Walton:** And I think to be absolutely honest in terms of the Wrexham experience, we were chasing the financial benefits of the feed-in tariff at the time; that was the No. 1 driver without a shadow of a doubt. It would be disingenuous of me to say otherwise. But, clearly, this was part of our carbon and energy efficiency climate change strategy and approach, but the key driver at the time was the financial benefits.

[213] **Alun Ffred Jones:** Okay, thank you. Did anybody else want a final question? Jeff, I think you've been—.

[214] **Jeff Cuthbert:** Yes, very quickly, on economic development. You mentioned earlier, in terms of deciding priorities, whether it was about being a supplier of electricity, or whether it was about jobs, and I see no contradiction in any of those things. Have you done any analysis of the likely output in terms of new jobs as a result of this move towards renewables and new technologies?

[215] **Mr Jenkins:** For the programme that we're engaged with, part of what we're doing is using a suite of tools—these energy path tools—and one of those is called 'energy path economics', and what that's going to tell us is what jobs and training opportunities we would expect to get from the schemes going forward. So, we would want to look at that and really use that to say, 'Okay, this is the baseline; this is what we can expect', and almost, when we develop those schemes out, those are what we demand from contractors: 'The model says that we can get 300 jobs or 200 jobs, whatever,

okay, well, that's what we want'.

[216] **Jeff Cuthbert:** New jobs?

[217] **Mr Jenkins:** New jobs, yes.

[218] **Jeff Cuthbert:** New jobs; right.

[219] **Mr Jenkins:** And that's involved in the construction of it, and all elements of it, really.

[220] **Alun Ffred Jones:** We're running out of time. Do you have a response at all, Mr Walton?

[221] **Mr Walton:** I can't add any more than that, actually.

[222] **Alun Ffred Jones:** Okay. Alan, do you want to have a quick question?

[223] **Mr Simpson:** Yes, just very quickly. Congratulations both of you, whatever the motivations behind it, for actually doing some pioneering work; I think Wales hasn't been overburdened by pioneers. But, I just wanted to come back on this question about what would be the drivers going forward. You said that, in a sense, financial incentives and financial penalties were very strong focusers of attention. So, would it be helpful if the Welsh Government, for instance, considered setting carbon budgets that were obligatory duties placed on local authorities? That's the first part. And, the second is: you mentioned the Nottingham Robin Hood not-for-profit energy company. Just as a gut feeling, if this was to be replicated by local authorities across Wales, do you think it would be best if everyone had to do their own Robin Hood energy company, or would it be better for the Welsh Government to take that sort of lead in having a not-for-profit energy company, in the same way that you have for water, with it being then badged out to local authorities to be able to do their own version within the umbrella?

[224] **Alun Ffred Jones:** Two questions, so brief answers please, if you can.

[225] **Mr Walton:** Very brief answer in terms of the latter point. My initial gut instinct regarding the Nottingham model was for that initiative to be driven forward by Welsh Government, but to be hosted within a single local authority, if that makes sense.

[226] **Mr Jenkins:** And as for the carbon budget bit, I would welcome a local carbon budget because, I think, where we are at a national level at the moment, that doesn't translate down to local level, and people don't understand what that means for them. But, also, it mustn't be seen as an additional burden either. I think it's carrot and stick; there must be some support that would go with that as well.

[227] **Alun Ffred Jones:** Okay. Diolch yn fawr iawn; thank you very much both of you for coming in and sharing your experiences with us. It's very valuable and we appreciate it greatly. Diolch yn fawr iawn. Thank you.

[228] **Mr Jenkins:** Thank you very much.

[229] **Mr Walton:** Thank you very much.

[230] **Alun Ffred Jones:** I was hoping to do the letter now, but, in fact, time being as it is, we'll take—. Pardon?

[231] **Ms Howells:** We're trying to track down Nottingham.

[232] **Alun Ffred Jones:** We're trying to go track down Nottingham.

[233] **Mr Simpson:** It is sort of central. [*Laughter.*]

[234] **Alun Ffred Jones:** So that we could go—.

**Cynnig o dan Reol Sefydlog 17.42 i Benderfynu Gwahardd y Cyhoedd
o'r Cyfarfod**

**Motion under Standing Order 17.42 to Resolve to Exclude the Public
from the Meeting**

Cynnig:

Motion:

*bod y pwyllgor yn penderfynu that the committee resolves to
gwahardd y cyhoedd o'r cyfarfod yn exclude the public from the meeting
unol â Rheol Sefydlog 17.42(vi).*

*in accordance with Standing Order
17.42(vi).*

Cynigiwyd y cynnig.

Motion moved.

[235] **Alun Ffred Jones:** Okay, we'll go into private session.

Derbyniwyd y cynnig.

Motion agreed.

Ailymgynullodd y pwyllgor yn gyhoeddus am 11:49.

The committee reconvened in public at 11:49.

**Ymchwiliad i 'Dyfodol Ynni Craffach i Gymru?'—Perchnogaeth a
Chyflenwi'n Lleol
Inquiry into 'A Smarter Energy Future for Wales?'—Local Ownership and
Supply**

[236] **Alun Ffred Jones:** A very warm welcome to the committee. We are very pleased that you were able to make it and find us. We appreciate greatly your presence here in assisting us in our inquiry. Are you happy to proceed?

[237] **Ms Scholes:** Yes.

[238] **Alun Ffred Jones:** Perhaps we could kick off. If you could just introduce yourselves and who you represent, and make any other comments you wish to make before we start any questions.

[239] **Mr Edrich:** Ladies first.

[240] **Ms Scholes:** I'm Gail Scholes. I'm from Nottingham City Council. I'm the director of energy services.

[241] **Ms Gilbert:** Jo Gilbert. I'm the head of Robin Hood Energy.

[242] **Mr Edrich:** I'm Bill Edrich. I'm the commercial director of energy at Bristol City Council. Also, I'm the chair of the low-carbon energy and resilience portfolio for Core Cities. I'm also the acting managing director of Bristol holding company and I'm a director of Bristol Energy.

[243] **Alun Ffred Jones:** Thank you very much indeed. Right, we'll kick off with Janet, as you had some questions to address to Bristol.

[244] **Janet Haworth:** Yes; I was interested particularly in Bristol's approach

to this, where you haven't just looked at the challenges to promote energy and deliver energy, but you've also linked that with broadband digital network requirements as well.

[245] **Mr Edrich:** I'm sorry, could you speak up a bit, as I'm partially deaf?

[246] **Janet Haworth:** I'm sorry, I'm losing my voice. I'm interested in the way Bristol has—

[247] **Alun Ffred Jones:** You can use your headphones; they're mainly for translation, but can be used for amplification.

[248] **Janet Haworth:** Yes, that will help, because—and the Chair may be relishing this—my voice is going.

[249] I'm interested in the fact that you weren't just looking at the energy challenge, you also embraced the broadband digital challenge as well. So, you linked those two together, and I'm just interested in hearing about why you did that and how you did that, and how many megabytes you're delivering to people through your broadband network.

[250] **Mr Edrich:** When we looked at establishing an energy company, it was really in line with how we were going to commercialise our services within the council as a whole, in light of the challenges that local government are actually facing with regard to spending pressures. So, the energy company fits within a much larger strategy of what the council's actually doing. So, in addition to the energy company that's established this year, which is a trading company, we've also established a Bristol waste company, which is a Teckal company, and we've also established a joint venture with the University of Bristol and a number of other private sector organisations with regard to digital.

[251] So, when we actually then look at the rationale for establishing the energy company, and then look across the council generally about what we actually want to do, which goes back to three core principles of why were actually entering into doing this—what's the competitive advantage to the council of actually entering into a particular market, and what's the market opportunity? That enables you, then, to look at things in a slightly different way. So, for us to actually really improve the energy efficiency and energy delivery of the system to Bristol, we've got to look at a number of things. So, absolutely, we need to look at supply, absolutely we need to look at

distribution, and then absolutely we need to actually look at the twenty-first century digital infrastructure that we need to be smart cities and to be competitive, effectively, going forward into the twenty-first century against other cities, and in the global environment.

[252] So, for us, one of the outcomes that we actually see as part of establishing Bristol Energy is that it will actually support our digital drive within the council. Our digital drive comes in a number of ways. Firstly, it comes in terms of the infrastructure that we're actually installing across the city. So, we have radio frequency meshing across the city already. We have superfast broadband linked up to the second or third fastest computer in the world, so people can come along and test devices on that broadband. But, more importantly, it then links to what we're going to be doing in terms of smart metering. One of the things where we think we can really get benefits out of this is in how, actually, our citizens and businesses interrelate to a whole range of services, and that will come together, effectively, at the smart metering point. So, for us, it would be really interesting to know that Mrs Brown has actually got into her car in the morning and is driving to work, and we know that 98 per cent of the time, she drives that route. So, instead of having banks of computer monitors, and people sat behind them controlling the traffic lights, we'd actually have a logarithm in there that can actually do a prediction based upon people actually getting into their cars. It's that type of approach that we actually want to drive through in terms of establishing the energy supply company.

[253] **Mr Edrich continues:**

[254] **Alun Ffred Jones:** Quite frightening. Can I interrupt you for a minute? I'll come back to you, now. Have you, in Nottingham, done something, are you involved in something similar at all, in terms of the digital—?

[255] **Ms Scholes:** I think, obviously, all cities are looking at how we can create a smart city, but I think our approach has very much been, 'Let's start with some of the platforms that we know we'll be able to build upon, in terms of trying to tackle the whole agenda of smart city', because I think it's a bit of a monster, when you're trying to look at everything to go at once.

[256] We have done things around broadband, but I'm not the expert in that area, so, I'm probably not going to sit here and tell you what I don't know. But what we have done is, we've taken those principles into our energy infrastructure and we're trying to create that kind of smart energy

infrastructure and we're hoping to really build out. We think energy is a really good platform, actually, to start with a smart city, because it's something that you can really get hold of very easily at the point of use and knowing exactly who wants to use what bits of energy when in your city, whether that's your business or whether it's your domestic customer, and that's what we're building on in Nottingham.

[257] **Janet Haworth:** Two things I wanted to ask you, going back to Bill. You mentioned that you used a range of different companies to provide your broadband services, so I'd be interested in what sort of companies you were working with. Also, back to my question—very important—how many megabytes are people getting and are you connecting people up to fibre, rather than copper?

[258] **Mr Edrich:** Currently, we are putting in what is known as a radio frequency, so that is actually there to enable the internet—for things to talk to things. Therefore, it doesn't have any fibre or copper at all; it's actually a radio frequency.

[259] **Janet Haworth:** Right.

[260] **Mr Edrich:** In terms of the broadband, we have a broadband loop in the city centre that connects the whole of the city centre, which we actually own and we obtained ownership of that around about 2000 or 2002, something like that—before my time. That is actually ultra, superfast broadband, and that's really for business to business.

[261] **Janet Haworth:** And that's using fibre optic.

[262] **Mr Edrich:** Whatever ultra, superfast broadband is, yes.

[263] **Janet Haworth:** What about the wider group of people in the city and their access to broadband?

[264] **Mr Edrich:** We currently don't have any plans to go off and install broadband ourselves.

[265] **Janet Haworth:** But you've used smaller companies to deliver this digital revolution.

[266] **Mr Edrich:** We have used some small companies to engage with us,

yes, especially with regard to engagement in the software in terms of apps. For instance, we have a small company set up by somebody who is in a wheelchair; they developed an app using open data to enable wheelchair users to go around the city and explain where all the dropped kerbs are. We didn't do anything there; we just enabled the information, so that somebody could actually do that.

[267] **Janet Haworth:** Thank you.

[268] **Llyr Gruffydd:** I'd like to ask a few questions about energy, if I may, and the energy supply businesses that we're looking at here. Could you tell us, maybe, what some of the key risks are, in your experience, in setting up such a venture, and maybe how you'd advise people, or how, from your experience, you've mitigated some of those risks?

[269] **Ms Edrich:** If you could maybe take the general risk, Jo, and then we might take specific local authority risks.

[270] **Ms Scholes:** Yes. Just as an authority risk, you know, the first big risk is making sure you're state aid compliant. You know, that's a huge risk in terms of—you know, we're the first, probably, to go, in terms of local authorities. We're going to be closely looked at, certainly by the rest of the energy market. I'm sure the big six are very interested in looking at our models in particular. So, one of our risks has always been out there in terms of state aid and making sure that we're getting all that correct legal advice—you know, that you're setting up your right procurement mechanisms, you've got your financial risks covered in terms of commercial loan rates, et cetera. So, from a local authority point of view, Bill, I think that's kind of one of the risks that we looked at right from the word 'go'.

12:00

[271] **Mr Edrich:** So, just to carry on the local authority, and then we can—

[272] **Ms Scholes:** And then we can go on to Jo, yes.

[273] **Mr Edrich:** Then we'll get into the other stuff for you, Jo. From our perspective, absolutely, the governance risk was key. How do we actually govern a local authority company? So, we allow this tension between commercial freedom and democratic control. And how do you actually then oversee that to allow it to go and do what it needs to do, but keep to the

democratic aims and ethos that local authorities want their companies to carry out? So, I think that, for us, that is probably one of the key risks that we've really explored consistently over the last year.

[274] The other one, then, is about reputational management.

[275] **Alun Ffred Jones:** Can I ask you, how did you overcome that risk?

[276] **Mr Edrich:** I don't think we'll ever overcome that risk. What we've done is, we've put structures in place with the establishment of a holding company and subsidiary companies, and then its relationship, effectively, to the council will actually allow that holding company to become the interface between the commercial drive and freedoms that the companies want and democratic control that the council actually wants. There will always be that tension there. So, you need to put a structure that allows that tension to be discussed and changed over time, going forward into the future. We know that the structures that we're establishing at the present moment aren't just for now. They could be for decades, and certainly for potentially up to maybe the rest of the century. So, we need a mechanism right at the beginning to actually do that. That is well documented. So, any future elected members and other directors, effectively, of the company who come many, many decades down the line will understand the founding principles that we've actually established that on.

[277] Then, obviously, the other one was reputational management. For us, reputational management is absolutely crucial in terms of the risks that we need to actually manage. That, once again, is done through that holding company and council interface, effectively, with the subsidiaries that are actually delivering the services on the ground.

[278] Do you want to maybe take the industry, Jo?

[279] **Ms Gilbert:** Yes. So, for me, anybody looking to enter the market—. Particularly, I was brought in as one of the industry experts, having been in the industry for 17 years, and you're working with people from local government—local authorities—that have got experience of the energy industry, but not experience of being an energy supplier, and all of the regulation and supply licence conditions that actually come with that. So, it's a huge education piece to make sure that everybody knows and embeds compliance into processes from day one.

[280] In terms of financial modelling, it's all of the actual costs that come with actually being a supplier. So, trading costs, renewable levies, all of the distribution transmission costs and all of the costs of shipping gas. There are so many different costs that need to be factored in and modelled. So, one of the key risks there is making sure that you've actually covered all bases financially as well. So, there are so many variants of models around at the moment, and it only takes one small item to be missed from that model and it could be very, very costly. So, it's making sure that that due diligence is there when you're looking at modelling for becoming a new entrant into the market.

[281] Another new risk: so, this really didn't exist about 18 months ago when Nottingham were first looking to set up, but the competition currently amongst new entrants and small suppliers is rife. So, prices are changing daily. It's like a game of cat and mouse at the moment. So, you need to make sure that your price is pitched at the right level, and that you're not making any knee-jerk reactions to sudden reductions in price in the marketplace. You've got to make sure you go back and have a look at your model to make sure that you can sustain that price if you're looking at reducing prices, but also it's the volume of customers that you can actually obtain to make your business model work. So, if you haven't got that customer volume coming through, then that's another huge risk to the business as well. So, it's all about customer appetite and we know in the industry only about 20 per cent of customers currently switch, and probably 15 per cent of those are very switch-savvy, affluent switchers who are deal seekers. So, it's how you actually attract the 70-odd, 80 per cent of the market that really are quite content to stay where they are. They're not engaged in energy switching at all. It's those customers that we need to actually be—. That's a risk—if you can't get those customers engaged—in terms of everybody's model, because we're all going after the same 20 per cent, if you like. So, that is quite a key risk.

[282] **Llyr Gruffydd:** Thank you, all three of you, for that. One of the things that we're grappling with here is to what extent we actually expect local authorities in Wales to deal with a lot of these risks, or whether we see a role for Welsh Government to maybe address some of these and then use local authorities as a means of delivering some elements. So, would you have benefitted from having an element of these risks being mitigated at a higher level in the government chain?

[283] **Ms Scholes:** I think there are some risks. One of the risks that we came

across was, as a new entrant, we actually wanted to do pre-payment meters right from the word 'go'. Part of our ethos in Nottingham, to set up, was to tackle fuel poverty. We know that pre-payment customers, on average, are paying probably £300 or £400 more than a dual-fuel customer. So, it was really important to us, but, actually, the industry is not geared up to deal with an energy supply company going in with fewer than 50,000 customers. So, when we went off, as we did, wanting to set up our pre-pay from day one, we then found, actually, the supply chain that we were going to isn't regulated until you get to 50,000 customers. So, you're very much down in the pecking order and priority order in terms of they'll get around to you eventually. They're not moving with your priorities, and I think that—

[284] **Alun Ffred Jones:** 'They' being—?

[285] **Ms Scholes:** 'They' as in the suppliers that we're trying to use. There are a number of contracts that you need to put in place to get into pre-payment markets, and, unfortunately, some of those, we've had barriers put in place. Now, at that level, we definitely need somebody else to help us out here, whether that's Government, whether it's Ofgem, but that needs to be elevated and there needs to be something else in place to try and help us through. So, I think it's kind of both, you know—you would probably definitely need both to move some of this forward.

[286] **Mr Edrich:** I've probably got a slightly different view from Gail. I'm sorry.

[287] **Ms Scholes:** Okay, that's fine.

[288] **Mr Edrich:** It's always useful to have a different view on the panel, isn't it?

[289] **Llyr Gruffydd:** It is. That's what it's all about.

[290] **Mr Edrich:** So, I think where we were coming from is a slightly different philosophical position, insofar as we are, as a council, extremely supportive of the devolution of powers and resources to local authorities. The last thing that we wanted—. One of the reasons why we moved so fast on the energy front was that we could get on and do it. We didn't have to ask for permission. Therefore, that's exactly what we did, and we see absolutely no reason why we should be treated differently from the rest of the market, and I think, if we went down that route, we'd be opening up a can of worms that I

don't think we want to get into.

[291] **Alun Ffred Jones:** Are you both set up similarly, or are there quite—?

[292] **Mr Edrich:** It's different.

[293] **Ms Scholes:** We are different.

[294] **Mr Edrich:** Similar, but different.

[295] **Ms Scholes:** We've got pretty much the same goals, but we are very different in terms of how we've been set up.

[296] **Mr Edrich:** So, would it be useful for you to explain yours and then I explain mine?

[297] **Mr Simpson:** Sorry, could we just clarify—?

[298] **Alun Ffred Jones:** Sorry. This is Alan Simpson, our resident expert who will now butt in. [*Laughter.*]

[299] **Mr Simpson:** Did you not have the same problems as Nottingham over pre-payment meters?

[300] **Mr Edrich:** No. We haven't moved into the pre-payment meter market yet.

[301] **Mr Simpson:** Ah. Okay.

[302] **Mr Edrich:** Insofar as offering that out as a tariff, we have got all the contracts in place.

[303] **Ms Scholes:** I think it's very different when you start going into some of the complexities—and it's not just us, this is any kind of new energy supplier who wants to enter into the market, of which, in Wales, you've probably got a number that do want to enter into this market, and they are all going to face the same difficulties. I know that we're heavily lobbying, now, Ofgem—we're constantly at the door—just because of the complexities around this. So, I think as you start to get a bit into pre-payment and some of the other tariff structures you may well start thinking the same way.

[304] **Mr Edrich:** I look forward to that. [*Laughter.*]

[305] **Ms Scholes:** Just one point, just going back—I know Jo mentioned resource and setting up these company structures. We took a very focused approach on that, because we did want to get our staff in the city council to be, not experts, but certainly very knowledgeable about the energy company business. So, right from day one, we actually put together an internal team. So, we brought in a couple of industry experts—but only two—to help us through this process, but the rest of it, we’ve kind of grown our own, in terms of staff in the city council. Because what you need to be very careful of is, at one point, those consultants are actually going to walk out the door and leave you behind with almost a bit of a monster of a beast, if you’re not careful. It was so important that we got our legals, our finance teams, all up to speed with everything that they needed to know about that energy company. I think now we’ve got a very, very good structure that’s in place that will be sustainable. That was just a point I was going to make.

[306] **Mr Edrich:** So, ours is slightly different. We went down a route of having a very small team of council employees running, effectively, the programme management office to set up the company. We brought in probably in excess of around about 20 consultants. Then we went out quite quickly to recruitment, and have got the permanent directors in place and they’re effectively taking that forward as the consultants effectively back out of that approach. The other key difference between us is that, on our companies, the council is not appointing elected members, and I think in Nottingham you have elected members on yours.

[307] **Ms Scholes:** We do, yes.

[308] **Mr Edrich:** So, the recruitment to our boards would be via open recruitment with no guaranteed elected member appointment. Obviously, if one is extremely experienced in, I don’t know, legal matters or something like that, they can apply and, if they’re good, we’ll appoint them, but there’s not actually any automatic appointments.

[309] **Alun Ffred Jones:** William Powell.

[310] **William Powell:** Diolch, Gadeirydd. Could you see the kind of models that you’re developing applying in areas of less population density than in your own local authorities, and what adaptations do you think would be necessary?

[311] **Mr Edrich:** Do you want me to take that one?

[312] **Ms Scholes:** Well, either of us. But, I mean, I think Jo's already mentioned that the key to this is volume of customers, and I think that your small communities definitely play a part, because I think that's where you can really get your microgeneration going. In terms of PPAs, which are power purchase agreements, you know, that's the kind of model that you want to start building into your pricing of your energy companies. So, I think they definitely play a part but you have got to be able to get a volume of customers.

[313] **Mr Edrich:** So, in my view—I'm the same. I don't think any district council will go ahead and actually set up their own company like Nottingham and Bristol have done. However, will there be relationships between municipalities, and especially district councils and companies that have been established? Absolutely. The rural community plays a really important part in the approach that certainly Nottingham and we would be taking in providing sources of renewable energy. We think there's a real link between the cities and the rural hinterland in terms of power purchase agreements and actually supporting rural communities in that way.

12:15

[314] **William Powell:** Moving for a moment to the regulatory framework, what changes would you advocate in that framework to actually facilitate the kind of development that you're in the process of just now?

[315] **Mr Edrich:** We haven't had any problems in any part of the regulatory framework.

[316] **William Powell:** Is that also your experience?

[317] **Ms Scholes:** Yes, up to now—you know, touch wood. [*Laughter.*] I'm not saying that there won't be, but not up to now.

[318] **Alun Ffred Jones:** Before I bring in Jeff Cuthbert, how far have you been involved in terms of thinking of renewable energy and production of energy? Is that part of the model or is it something that's ancillary, or is it something else?

[319] **Ms Scholes:** It's definitely part of Nottingham's model. Before we started the energy company, we were already supplying heat and power to 5,000 domestic customers in the city and around about 120 commercial properties in the city.

[320] **Alun Ffred Jones:** How?

[321] **Ms Scholes:** Through private wire electrically and through heat networks. So, we have 68 km of heat network across the whole city.

[322] **Alun Ffred Jones:** How do you produce the energy?

[323] **Ms Scholes:** Sorry?

[324] **Alun Ffred Jones:** How do you produce the energy?

[325] **Ms Scholes:** How do we produce it? It's through high-pressure steam. We've got an incinerator in the city. We're quite fortunate, because you're not going to get one of those now, but we did have one built. So, we were building very much on a platform that we had energy, and in the city and we were already selling heat and power, albeit off grid. So, we've had those energy networks there. Where was I going with this? I've lost my train of thought here.

[326] **Alun Ffred Jones:** Green energy—is it part of your—?

[327] **Ms Scholes:** Sorry, yes. So, we've got, obviously, spare capacity that we're generating currently. We've also got plans to build a new energy park in the north of the city that would give us another 30 MW of electrical load from 2017 onwards. So, our model is that from year 3 of our trading, we were then going to be starting to bring in the power purchase agreements through the spare capacity that we're actually generating as a city. We're also interested, obviously, in large-scale photovoltaics. We've got around about 6,000 homes in Nottingham that have got—social housing—PV on the roofs.

[328] If we take the smart city principle, this is about how we can now move to a city where we're actually using all of that energy produced without having to spill it to grid, because as soon as we spill to grid, you get paid 4p, if you're lucky—5p if you're going through the carbon floor price at the moment. But that's a big difference, you know, between what you're then selling at domestically—you know, 15p domestically. There's a large gap

there, and so, as a city, we've got to get better at making sure that we're using and utilising that energy much more smartly than we have been.

[329] **Alun Ffred Jones:** Mr Edrich.

[330] **Mr Edrich:** Obviously, Nottingham have had their district heating for a long time. We've come from a slightly different perspective. So, Bristol has been very much community driven. So, we've had things like community power, we've put our own wind turbines up—we've got 5 MW of wind turbines—and we're putting on 10 MW of solar. So, most of our work has been in terms of embedded energy, absolutely. Will that be supplying the energy company? Absolutely it will be, going forward. We will then encourage, through contracts, other embedded energy and other energy sources to come on that are either renewable or low carbon.

[331] **Alun Ffred Jones:** Jeff Cuthbert indicated, and then Janet.

[332] **Jeff Cuthbert:** Thank you very much, Chair. I'm very interested in what's been said so far. Can I ask you both: is your operation economically sustainable at this point? What are the sources of funding that you used to set yourselves up? Here in Wales, we have access to European Union funds, for example; I'm not sure whether that's the same with you. Bill, you alluded to recruitment—new jobs, I assume. To what extent, in terms of economic development, do you think that your operations can lead to new jobs and new skills, in terms of these new technologies?

[333] **Alun Ffred Jones:** Three questions there.

[334] **Mr Edrich:** Three questions—right.

[335] **Ms Scholes:** OVO have been trading now for three years, and I think they've got—how many jobs now, Jo? Over 300?

[336] **Ms Gilbert:** Yes.

[337] **Ms Scholes:** They've got over 300 jobs in their call centre. So, these are low-grade jobs in the city; there are 300 new jobs that have been created from having the energy company set up.

[338] **Mr Edrich:** In terms of investment from us, we've taken it straight out of reserves.

[339] **Ms Scholes:** Our approach has been a little bit different. So, we've taken advice and we've got a commercial loan rate agreed. We've not taken it from reserves, but we have negotiated a commercial loan rate. Just in terms of the state aid, which is what I started with, you have got to make sure that you aren't getting preferential borrowing rates as you start this process up.

[340] **Alun Ffred Jones:** How much do they cost? How much have you raised?

[341] **Llyr Gruffydd:** What level of money are we talking about?

[342] **Mr Edrich:** I can say mine, because mine's in public. So, it's £3 million we've put into it straight out of reserves, as Gail says, at commercial rates. So, that will be paid back by the company when it actually starts making a profit. We've probably had a further £0.5 million in staff time and things like that. So, you're talking about £3.5 million or £3.6 million to get the whole thing up and running in a year.

[343] **Jeff Cuthbert:** In terms of your business planning, when it starts to make up a surplus or profit—when do you expect that to start?

[344] **Mr Edrich:** Currently, around about 2018, if it all goes to business plan.

[345] **Ms Scholes:** Ours is similar: it's between two and three years at the point of when we start to make some surplus. Ours is not for profit, so that surplus is going to be reinvested. Our start-up cost was £2 million. In terms of our staff cost, that's come in at under £200,000 to set up the whole company. So, I think that's the difference in terms of sometimes using a large proportion of your local authority resource as opposed to going to a consultancy. So, that's just a gauge of where costs are.

[346] **Ms Gilbert:** Just one point, in terms of the creation of local jobs, with the Nottingham model, there are already 30 new employees now working for the council directly for Robin Hood Energy, so there's already those 30 jobs that have been created, and we're bringing more on a rolling recruitment basis as the customer numbers grow. So, it takes six weeks, on average, to train somebody as a sales adviser or call centre operative, so you have to have that rolling recruitment there, because attrition levels, particularly in low-grade jobs and call centre jobs, are quite high. So, it's around about a 25 per cent attrition level, usually, in an energy company. We've tried to get

that down.

[347] **Alun Ffred Jones:** Jeff.

[348] **Jeff Cuthbert:** Finally from me, if either of your models were to be adopted in Wales, or parts of Wales, based on your experience, is there anything you would advise us not to do?

[349] **Ms Scholes:** Not to do—.

[350] **Mr Edrich:** That's interesting. No.

[351] **Jeff Cuthbert:** No. Good. [*Laughter.*]

[352] **Mr Edrich:** What I would say is: go in with your eyes open. The advice I would really say is that you really, really, really need a very, very good project manager—programme manager—to run the management and just manage the programme, because it is an extremely complex business plan you're developing. You take knowledge from a wide range of sources, and then you try to actually corral that to actually meet the process going forward.

[353] **Alun Ffred Jones:** Okay, Janet and then Jenny.

[354] **Janet Haworth:** I was just interested in asking the Robin Hood group, because we've just heard from Bridgend—. Knowing you've got a lot of old mines in Nottingham as well, Bridgend has been using the water that is stored in a redundant mine—putting that through heat exchange and delivering that as a heat source to a community. I just wondered whether Nottingham had looked at this or might look at this in the future.

[355] **Ms Scholes:** I think Nottingham—. Again, we've got large community interests as well, and we've had a number of feasibilities done around the city, particularly in terms of more innovative ideas around energy.

[356] We've had some very early feasibility done on that; I know we have, because Nottingham Trent University, you know—. That's the other benefit we've got—we've got two of the leading universities right in the heart of the city. So, we do get an awful lot of this work free gratis to us, which is really helpful. But we've had some early feasibilities, but we've not really developed that.

[357] The one thing that we have looked to develop as a city is the recovery of hot water going to drain, because this is really good in a retrofit environment. You know, there's an awful lot of hot water and energy that goes to drain at that single point, and just recapturing and recovering that amount of heat and energy is just a no-brainer. So, we have done a fair bit of work around things like that.

[358] **Janet Haworth:** Right. Thank you.

[359] **Alun Ffred Jones:** Jenny.

[360] **Jenny Rathbone:** Could I just ask Robin Hood Energy how you are managing to target your differential rates on residents of Nottingham city, and particularly those who are in fuel poverty, without the accusation of state aid? Could you just explain that?

[361] **Ms Gilbert:** So, in terms of Nottingham residents what we had to do was create a specialist tariff that pointed to Nottingham postcodes. So, that took some work with industry because, obviously, there are lots of switching sites that we have to work with, and they normally point to a distribution network operator, rather than a postcode. So, we've had to do some additional work with them to actually get this in place so that we can actually offer this tariff.

[362] In terms of state aid, I think Gail's already covered that. Everything that we do from, you know, the loan that we've actually taken is paid back at a commercial rate, so—.

[363] **Jenny Rathbone:** Yes, but how are you able to give preferential treatment to people living in fuel poverty without getting into trouble? That's perfectly okay, is it?

[364] **Ms Gilbert:** Yes, it is. So, as an energy supplier, you're able to offer four core tariffs, and we have used two of those tariffs for Nottingham residents and two tariffs for national residents. Yes, you know, the unit rate is slightly different for residents in Nottingham; it is a preferential rate, but that was the intention.

[365] **Jenny Rathbone:** But, that's okay; Ofgem is perfectly happy with that.

[366] **Ms Gilbert:** Yes, absolutely fine with that. You know, we're not the only

ones that are doing it, so—.

[367] **Jenny Rathbone:** Okay, and then within that, you're quite transparent in terms of the targeting of even lower tariffs for those in fuel poverty.

[368] **Ms Gilbert:** Yes.

[369] **Jenny Rathbone:** And that's completely acceptable within the—

[370] **Ms Gilbert:** Yes, so it is visible on all national switching sites, so you can see the Nottingham tariff, and then straight underneath it you can see the east midlands tariff, which is slightly more expensive.

[371] **Ms Scholes:** But it is all visible.

[372] **Ms Gilbert:** It is all visible.

[373] **Alun Ffred Jones:** I just want to bring in Alan Simpson here. Time is defeating us, but Alan—.

[374] **Mr Simpson:** I just want to congratulate the Nottingham lot for having broken through this sort of glass barrier about local tariffs, because that seemed to be the nightmare facing all local energy initiatives in the UK. So, perhaps sharing any thoughts you have with the committee would be incredibly helpful for how that might be applied in Wales.

[375] I just wanted to ask and pick up on Gail's point: this gap between what people get paid for from local clean generation—4p a kilowatt—and what they get charged, is this the spacing that you're going to try to grow the company to become, in a sense, when the feed-in tariffs are emasculated, as they look as they are going to be—is that the space where, commercially, you're going to be able to grow the company? And if so, what lessons might there be for Wales as a whole? I ask that because some of the previous witnesses have said that what would be helpful would be to perhaps take the Nottingham scheme and have it (1) under the umbrella of the Welsh Government, but located in a specific city and white-labelled out—. Do you have views on how that can be grown on the same not-for-profit model?

[376] **Ms Gilbert:** Well, my view—. I'll go back to the customer volume. So, as long as you've got customer volume, I certainly think a white-label model can work, but it really does come down to the end consumer and where their

trust lies.

12:30

[377] So, if that's with the Welsh Government and they're likely to switch and stay with you as a supplier as a whole—or would they prefer Swansea energy, for example? Would they be more trusting of Swansea or Port Talbot or, you know—? So, the people of Nottingham know the local council, they know the services that they get and there's that trust element there, but we definitely needed a national brand. When we're looking to white label with other councils or other housing associations, what they're saying is that some are happy to adopt the Robin Hood Energy brand and some want to adopt their council brand, because their residents actually trust that brand. So, it really—I guess, for me, you'd probably have to do some kind of study with the actual residents to find out about their levels of trust in terms of local or the wider councils.

[378] **Alun Ffred Jones:** Okay. Any last question to be asked? No. Well, if so, can I thank the three of you for coming in and sharing your experience?

[379] **Mr Edrich:** Thank you very much.

[380] **Alun Ffred Jones:** If it's all right with you, if there are some questions that we thought about during the session, can we write to you and ask for any further clarification just to help us in our deliberation? We really appreciate it—it was very interesting. And congratulations on the work that you have achieved so far. Diolch yn fawr iawn. Thank you very much indeed.

[381] **Ms Scholes:** Thank you.

[382] **Ms Gilbert:** Thank you.

12:31

Papurau i'w Nodi Papers to Note

[383] **Alun Ffred Jones:** Can I continue with the rest of the committee? Item 5 is papers to note and the next meeting is on 10 December, on Thursday, when we will be discussing a number of legacy issues.

Daeth y cyfarfod i ben am 12:31.
The meeting ended at 12:31.