



**Cynulliad Cenedlaethol Cymru  
The National Assembly for Wales**

**Y Pwyllgor Cynaliadwyedd  
The Sustainability Committee**

**Dydd Iau, 25 Medi 2008  
Thursday, 25 September 2008**

**Cynnwys**  
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Cofnodir y trafodion hyn yn yr iaith y llefarwyd hwy ynndi yn y pwyllgor. Yn ogystal,  
cynhwysir cyfieithiad Saesneg o gyfraniadau yn y Gymraeg.

These proceedings are reported in the language in which they were spoken in the committee.  
In addition, an English translation of Welsh speeches is included.

**Aelodau'r pwyllgor yn bresennol**  
**Committee members in attendance**

Lorraine Barrett	Llafur Labour
Mick Bates	Democratiaid Rhyddfrydol Cymru (Cadeirydd y Pwyllgor) Welsh Liberal Democrats (Committee Chair)
Lesley Griffiths	Llafur Labour
Darren Millar	Ceidwadwyr Cymreig Welsh Conservatives
Brynle Williams	Ceidwadwyr Cymreig Welsh Conservatives
Leanne Wood	Plaid Cymru The Party of Wales

**Eraill yn bresennol**  
**Others in attendance**

Mike Barry	Pennaeth Cyfrifoldeb Corfforaethol, Marks and Spencer Head of Corporate Responsibility, Marks and Spencer
Tony Hawkhead	Prif Weithredwr, Groundwork UK Chief Executive, Groundwork UK
Tim Rotheray	Ymgynghorydd Polisi, Cyngor Micropower Policy Adviser, Micropower Council
Philip Wolfe	Cyfarwyddwr Gweithredol, y Gymdeithas Ynni Adnewyddadwy Executive Director, Renewable Energy Association

**Swyddogion Gwasanaeth Seneddol y Cynulliad yn bresennol**  
**Assembly Parliamentary Service officials in attendance**

Dr Virginia Hawkins	Clerc Clerk
Meriel Singleton	Dirprwy Glerc Deputy Clerk

*Dechreuodd y cyfarfod am 9.04 a.m.*  
*The meeting began at 9.04 a.m.*

**Cyflwyniad, Ymddiheuriadau, Dirprwyon a Datgan Buddiannau**  
**Introduction, Apologies, Substitutions and Declarations of Interest**

[1] **Mick Bates:** Bore da. Thank you for your attendance this morning. I will start with the usual housekeeping arrangements. In the event of a fire alarm sounding, you should leave the room by the marked fire exits and follow the instructions of the ushers and staff. There is no test forecast for today. Please make sure that all mobile phones, pagers and BlackBerrys are switched off as they interfere with the broadcasting equipment. The National Assembly for Wales operates through the medium of Welsh and English. Headphones are provided, through which instantaneous translation may be received. For anyone who is hard of hearing, the headphones may also be used to amplify the sound. Interpretation is available on channel 1 and the verbatim feed on channel 0. Please do not touch the buttons on the microphones as this may disable the system and please ensure that the red light is showing before speaking.

[2] I have received apologies from Karen Sinclair, Rhodri Glyn Thomas and Alun Davies. Karen is making good progress and I am sure that we would all send her our best wishes. I would also like to welcome Meriel to the team. She replaces Joanne Clinton who has returned to the Scottish Parliament. Joanne carried out excellent work for us. I wrote to her and gave her a book about Wales so that she has something to remember us by. You will be pleased to hear that when she returned to Scotland she was working by the second day, so life carries on as normal.

[3] **Darren Millar:** Did you not give her a piece of your hip? [*Laughter.*]

[4] **Mick Bates:** I would also like to put on record my thanks to Mike German who chaired the committee in my absence. I have not brought any of the bits of my anatomy that have been removed to show you. [*Laughter.*] Thank you all for your best wishes during my absence. You will be pleased to hear that my ceramic hip is wonderful, but I think that I will go to the Health, Local Government and Wellbeing Committee to tell them that orthopaedic surgery is just like woodwork or metalwork—you cut a bit off and bang another bit in. I am much better, so thank you all for your best wishes. Did I welcome you, Meriel? I did. Good, I am just checking through my notes.

9.06 a.m.

**Ethol Aelod Newydd o'r Is-bwyllgor Datblygu Gwledig  
Election of a New Member of the Rural Development Sub-Committee**

[5] **Mick Bates:** Unfortunately, Rhodri Glyn is not well this morning and so is not here, but I would like to go ahead with the proposal. I propose that

*Rhodri Glyn Thomas is elected a member of the Rural Development Sub-committee.*

[6] I see that the committee is in agreement. Thank you very much.

*Derbyniwyd y cynnig.  
Motion carried.*

9:07 a.m.

**Ystyried Deiseb sy'n Galw am Waharddiad ar Fagiau Plastig  
Consideration of Petition Calling for a Ban on Plastic Bags**

[7] **Mick Bates:** I welcome Tony Hawkhead, chief executive of Groundwork UK and Mike Barry, head of corporate responsibility for Marks and Spencer. Welcome again. We look forward to hearing from you later. Thank you for your joint paper, which was concise, to the point and very useful. As you are aware, we have been considering a petition calling for a ban on plastic bags that was passed on to this committee from the Petitions Committee. It had arrived there as a result of the BBC Wales project, 'If I Ruled the World'—fellow politicians, do not get too excited at this stage. Previously, we have taken oral evidence on the petition from a range of organisations, including Keep Wales Tidy, the Carrier Bag Consortium, the Waste and Resources Action Programme, the Marine Conservation Society and the British Retail Consortium. The committee also carried out a fact-finding visit to gather evidence on the plastic bag levy in Ireland. Following today's evidence session, we shall be setting out our own paper with options and taking this forward.

[8] I would like to invite one or both of you to make a few opening remarks to the

committee before we move on to questions from Members. Please stick to about three minutes. Thank you.

[9] **Mr Barry:** Thank you for the kind invitation to join you again here in Wales. Our paper outlines the main reasons behind Marks and Spencer's decision to introduce carrier bag charging. To reiterate, in January 2007, Marks and Spencer introduced a 100 point plan, Plan A, to tackle all environmental and social issues across its business. Three of those 100 commitments relate to carrier bag usage. We were clear as a retailer that the usage had become profligate, not just across our business but across the whole retail space and that we needed to do something about it. The initial commitments that we made helped us to reduce bag usage by about 14 per cent, which was a start, but we were clear as a business that that was not the kind of substantial change that we wanted to effect in our environmental footprint. We therefore carried out a trial in 2007 in our 14 stores in Northern Ireland to see what would happen if we started charging. It resulted in a 70 per cent reduction in bag usage and it was successful for two or three reasons. One reason is that we gave out a free bag for life before we started charging. We gave something to the consumer. We knew that it would be a bit of an ask for consumers to do something different so, for a month, we gave out free bags for life. Secondly, we ensured that all profits from the charging scheme went to a very good charity partner, namely Groundwork, to drive urban regeneration in the province. We now have four projects running there.

9.10 a.m.

[10] On the back of that, we decided to trial charging in 35 stores in the south-west of England, which was, again, very successful, and we then decided to roll it out nationally on 6 May of this year. Since then, we have reduced bag usage across all of our food halls by about 80 per cent, which is a substantial figure. There have been a few complaints from customers and some press coverage asking why M&S has done it. However, the core M&S customer base welcomed the move and has been tremendously supportive of what we have done.

[11] So far, we have raised £0.5 million for Groundwork and have now committed to 22 projects that will be under way across the UK by the end of the year. So, in terms of a successful model, it has worked for Marks and Spencer, but we are clear that it requires effort, hard work and acceptance that there will be a degree of criticism when you change things so substantially. It would have been easier for us to do something voluntary and to have a reduction of between probably 25 per cent and 40 per cent, but we decided that if we stood for something, we had to do something more substantial. For us, charging has worked.

[12] **Mr Hawkhead:** I think that you know a little bit about Groundwork. We are a large federal charity and spend about £100 million a year in England, Wales and Northern Ireland, carrying out a range of projects in areas of need, all connected to the environment, but with a very broad range. We have four trusts operating in Wales and they co-own a body called Groundwork Wales, an independent body of which I am a trustee.

[13] So, why do we work with Marks and Spencer? That is the key question. Groundwork has always worked with businesses that share a commitment to changing the environment, and the due diligence part of our activity looks carefully at whether they are truly committed. We took a very close look at Marks and Spencer, which we have been talking to for many years, and we believe that Plan A is a genuine commitment to change the whole way in which businesses operate in the retail sector. We then signed up and alongside Mike we carried out some trial work in Northern Ireland and the south-west of England. That worked as well for us as it did for Marks and Spencer, so it was a win-win situation for us. It is the only project that Groundwork has ever been involved in where we have been glad that the money we expected to get in has been less than we had hoped.

[14] **Mick Bates:** Did I hear you correctly, Tony, that the money that you got was less than you had hoped?

[15] **Mr Hawkhead:** Yes.

[16] **Mr Barry:** We were surprised by an 80 per cent reduction. We were hoping for at least a two-thirds reduction; that is where we imagined that it would come out. We have seen a two-thirds to 70 per cent reduction in the trial areas, and to deliver 80 per cent across the UK was better than we expected.

[17] **Mick Bates:** Thank you for your presentations.

[18] We are looking at this in the context of reducing waste. We are also carrying out an inquiry into carbon reduction, which could also have some relevance here. What do you think is the significance of carrier bags in the wider debate about waste reduction?

[19] **Mr Barry:** Plan A is about 100 commitments, of which 17 pertain to waste. So it is clear that Marks and Spencer, as I mentioned the last time that I was here, has held its hands up and said, 'We have to do something about the packaging that we use.'. We use too much, so we have made commitments to reduce the amount and to ensure that it is all recyclable.

[20] We have also made very substantial commitments on our product waste. For example, we sell 350 million items of clothing a year, 80 per cent of which was destined for landfill, so we have developed a successful relationship with Oxfam to encourage clothing recycling in the UK. Since we launched that in January of this year, a quarter of a million M&S customers have taken back over 1 million items of clothing to Oxfam and received a £5 voucher to spend at M&S as a reward. That will, by the end of this year, probably raise about £2 million for Oxfam to spend on overseas development work.

[21] So, we are intervening on packaging, on our products and on carrier bags. In terms of tonnage, we were originally using several thousand tonnes of plastic in carrier bags. That is not the biggest issue in the world; the world is not going to end because carrier bags are being used. However, we believed that it was a visible issue, where consumers could make a difference. Fifty to 60 per cent, if not more, of Plan A is invisible to the consumer: it is in supply chains, in ensuring that workers in Bangladeshi clothing factories or Scottish or Welsh hill farmers are well looked after. It is about dealing with all of the parts of our footprint that do not touch the customer. However, you see carrier bags every day of your life, so we decided that we not only did we have a waste obligation to intervene on, but, in the wider context of Plan A, it was one way to mobilise those millions of M&S customers who were asking for change and of getting them involved.

[22] **Mr Hawkhead:** Mike has said 99 per cent of what I would say. This is not an earth-shattering issue, but it is a totemic issue. Our experience in the communities where we work—which, in some ways, are those that will find it hardest to deal with the impact of climate change and the rapidly changing world, because they are the poorest—is that this issue is something that begins to shift the way that they think. Shifting the way in which people think is how we will tackle climate change in future.

[23] **Darren Millar:** You have already told us, Mike, why you decided as an organisation to go further than the voluntary commitments in the Courtauld agreement, saying that you felt that you could achieve only a 30 to 40 per cent reduction if you went down the voluntary route. However, you have not really explained why you chose charging and how you arrived at that decision. Can you tell us more about that?

[24] **Mr Barry:** We had decided that we needed to go beyond what we thought that we

could achieve through a voluntary initiative, that is, asking people at the counter whether they need a bag, promoting bags for life, and introducing a more exciting range of bags that cost a couple of quid—many people find having an image of Twiggy on their shoulder quite desirable. We then had a variety of options ahead of us. We looked at several, but we kept coming back to charging because it was the one thing that our customer research showed would make people stop and think. With all the other options, people tended to put them to the back of their minds—they were easy to forget. However, charging—whether at 1p, 3p or 5p—makes people stop and think. Sometimes, it makes them stop, think and get angry, because they are being charged for something that used to be free. However, for the vast majority of people, it made them pause, think, consider their behaviour, and plan to do something differently. That is why we ended up with charging.

[25] **Darren Millar:** So, it was not customer-led; I assume that your customers were not asking to be charged for bags.

[26] **Mr Barry:** Remember, the premise of Plan A is that 75 per cent of consumers generally in the UK—not just M&S customers—are asking for business and Government to take a lead on environmental and social issues on their behalf. There is very little that they will come to you and specifically ask for. They are sending us a message, asking us to interpret the way forward, take a lead, and take specific actions. Once they see that specific action, they will let us know whether they like it or not. For example, as we discussed last time, very few people understand that most of the climate change issues around food are to do with meat production. They expect you and I to be working on that on their behalf to solve the problem. It is the same with carrier bags. Nobody was jumping up and down, saying, ‘Please charge us for carrier bags.’. However, they were saying, ‘Find a way to solve this problem, M&S.’. We think that linking the charge with the giveaway to a good charity partner, so that the money is recycled back into communities, has been the right model for us.

[27] **Darren Millar:** Eighty per cent is a pretty impressive reduction in carrier bag use, but can you tell us whether there are regional differences in the attitude to carrier bags? Is there a different picture in Wales to the south-east, north-east or north-west of England, for example?

[28] **Mr Barry:** That is a good question. We trialled this in Northern Ireland and the south-west of England because we wanted to try two very different areas. Interestingly, our market research had told us that consumers in Northern Ireland are among the greenest in the UK, so we started there because we would be pushing at a semi-open door. We took it to the south-west of England because the interest in environmental issues there was not quite as high—it was not dramatically different, but was not quite as high. We wondered what it would be like if we could reach a 70 per cent reduction in both areas, and then extrapolated from that, saying that if the south-west of England and Northern Ireland could hit the 70 per cent target, it should be possible across the UK, and that has proved to be the case. I would not pick out one region of the UK as being uniquely supportive or opposed to this. We have been pleasantly surprised by the uniform acceptance.

[29] **Brynle Williams:** Given the measures that have been taken to reduce the use of plastic bags in the Republic of Ireland, would you say that Northern Ireland has taken lessons from that?

[30] **Mr Barry:** Yes. Part of our thinking about going into Northern Ireland first was that there is a shared media and a shared experience across the island of Ireland, and therefore people were perhaps a bit more ready for charging, and so it was an easier place to start the debate. When we took it to the mainland, to south-west England, we did not have any of that history to lean against, and that is why we were very pleased that the south-west trial went so well.

[31] **Mick Bates:** Do you have anything to add on this regional issue, Tony? It seems to me to be quite interesting.

[32] **Mr Hawkhead:** No, I think that Mike has summarised it well. We were expecting this to start slowly.

9.20 a.m.

[33] What has surprised us, from the work that we do on the ground, is the rapidity with which bag use has dropped. It is an interesting thought. It is difficult to be absolutely sure about whether that is because of the very clear connection with charging or the excellent environmental project that we are doing on the ground, which I hope we agree on. Our suspicion is that there is a strong connection there. There is a sense of 'I am being charged but the community is getting something back for it', but it is very difficult to prove that.

[34] **Mr Barry:** As Tony has mentioned it, I will reiterate that that is enormously important. If M&S as a retailer just charged people and pocketed the money, it would have had only a fraction of the success and would have caused a great deal more concern, but the fact that we can show that the money is not only going to a charity but back into the community has made an enormous difference.

[35] **Mick Bates:** That is interesting. Lesley has the next question.

[36] **Lesley Griffiths:** Evidence that we have received during this inquiry has shown that some large retailers are reluctant to do what you have done and impose a charge on bags, for fear of seeing a drop in their market share. Has that happened with M&S?

[37] **Mr Barry:** The most recent trading figures for M&S, back in July, showed that it has been a very difficult time for us; we cannot pretend otherwise. However, all our detailed market research—and, believe me, we drill down into this to the nth degree—has said that charging for bags has had no effect on M&S trading whatsoever.

[38] **Lesley Griffiths:** You mentioned that you gave away free bags for life. Do you think that that had an impact?

[39] **Mr Barry:** I will go back to why I think that the model has been successful for us. We have put our hand in our pocket and given something free to the consumer to begin with. So, we have not just launched this upon them; we have said, 'Sir, Madam, here is something upfront to help you with this change.' It is different. We are giving away a free bag for life for a month. Then we started charging, which makes the customer think about whether they really need a bag, and then we made sure that the profits were recycled to our charity partners and back into the community. Those three things together bring success. Take any one of those three things away, and I do not think that we would have had a fraction of the success that we have had.

[40] **Mick Bates:** Brynle, are you happy?

[41] **Brynle Williams:** I was going to ask about the success of this because of linking it with a charity, but that has already been answered. When we were in southern Ireland, we heard that the funding there was ring-fenced so that it went to charitable programmes, but you have done that without having to ring-fence the money, and that shows that people will respond to that.

[42] **Mr Hawkhead:** There is an example already on the ground, outside southern Ireland,



namely the landfill tax credit scheme, where the income from charging for landfill has been hypothecated back to environmental projects. It has been narrowed down, and some of us might argue that it has been narrowed down too finely, but the benefits of making a direct connection between charging people, which is never a popular thing to do, and a clear, beneficial result for the community are huge. There is no doubt that there is a big distinction, as Mike was saying, between charging people tax and introducing something that changes behaviour and benefits the community. Landfill tax has made a big difference to how it has been received. My guess would be that those connections need to be sustained, which, as I understand it, they are in southern Ireland.

[43] **Mick Bates:** That is true. There is evidence to suggest that the take from green taxation is reducing in the western world, as you have also found.

[44] **Darren Millar:** On the charitable front, when we took evidence in the Republic of Ireland, we found that the income from ‘plastax’, as the plastic bag tax is called, was being ring-fenced for environmental projects, but it was not necessarily charitable organisations that were spending the money. Do you think that it would be detrimental to the public perception of a scheme like this if the money were being spent effectively by Government departments, to see whether the money could go further, rather than being invested in the charitable sector?

[45] **Mr Barry:** I think that the fact that the money has gone to charity has helped a lot. We picked Groundwork UK for very clear reasons. I think that Tony would accept that the brand is not as well known among British consumers as some charity brands that we could have selected are. We could have stuck a famous brand on the side of our bags, but we picked Groundwork UK because it has the best record, bar none, on project delivery in the community, involving the community. That was very important to us. We did not want to turn around at the end of the first year of charging consumers and say, ‘Do you know what, guys? Nothing has changed.’. So, we picked Groundwork UK, because it gets on with it. It gets things done, and it has fantastic links to individual communities, including some very difficult communities. You could argue that a national scheme might require Government involvement in the spending of the money, but the charity side of it is very important.

[46] **Darren Millar:** What do you think, Tony? If local government got its sticky hands on some of this cash, it might reduce the potential benefit to the local environment in different places. Is that a view that you would share?

[47] **Mr Hawkhead:** Groundwork UK’s No. 1 partners in delivery are local authorities, and we work with some very dynamic and effective authorities. Indeed, in our experience, there has been a sea change in local government over the past five to 10 years. However, we have to recognise the reality that people see those in Government—that is, in the public sector—as being a way away from real life, in a sense. For us, because of how we operate, working on the ground, people know us and see us from day to day, and so there tends to be a greater degree of trust, which, particularly in the most deprived communities, is a scarce commodity. So, if you are to hypothecate that money and then put a lot of it through something that is seen as being more distant—local government—I sense that it would not be very well received. It may be very effectively delivered, but it would not be anywhere near as popular as if it were to be delivered as close to the community as possible, by intermediaries like us.

[48] **Mr Barry:** I will offer another observation, if I may. We see carrier bags as a stepping stone because they are a tool by which we can engage millions of consumers in change. Collectively with business and Government, we will have to ask them in future to make some quite substantial changes to their way of life. Taking action on carrier bags is the first step of the journey to get consumers and the electorate to buy into change. If it is viewed like that, people will be more willing to give the money to trusts and charitable organisations

rather than spending it via Government, because it will require the building of trust in the long term to ask consumers to change. The charity relationship makes it easier in the short term to buy that trust.

[49] **Darren Millar:** You seem to be suggesting that people do not trust politicians.  
[*Laughter.*]

[50] **Mick Bates:** How unusual.

[51] **Mr Barry:** I have to be careful as a businessperson about throwing bricks in that direction.

[52] **Darren Millar:** I think that we ought to terminate this meeting immediately.  
[*Laughter.*]

[53] **Mr Hawkhead:** I would like to say for the record that I am not saying that. However, we have to recognise that, if you are going to start charging for things, the more people can see a clear benefit from the charges, the more likely it is that they will be happily received.

[54] **Brynle Williams:** It goes back to the Republic of Ireland model, where the funding was not going straight to central Government. That is what made it a success. The evidence that we had there was that consumers were reporting retailers if they forgot to charge them; it was that intense. The public had embraced the idea. You have done the same thing from a commercial aspect.

[55] **Mr Barry:** Whatever mechanism you pick, the involvement of the community in selecting, designing and delivering the project is vital. Every one of the Groundwork UK projects in which we are involved that has advanced has involved the community. It has not been M&S parachuting Groundwork UK in and saying, 'There is a project, so take it or leave it.'. It has involves consultation right from the beginning on what is right for that community. That is the most important thing.

[56] **Mr Hawkhead:** I am sure that you will be doing this, but I strongly advocate looking closely at the long-term effect of the landfill tax credit scheme, because that has some very important parallel lessons.

[57] **Leanne Wood:** Given the success of your initiative, what do you think are the barriers to other large companies introducing voluntary charges?

[58] **Mr Barry:** That is quite difficult to answer, because I live and breathe M&S; I know my business intimately, but I would struggle to put myself in the shoes of some of my opposite numbers. For us, the big influence was whether we wanted to get a safe number of around 30 to 40 per cent, and tick the box for having done something, or to do something radically different. We decided that M&S and Plan A stood for radical change. Therefore, we decided to do that. Whether other companies want to tick the box for achieving a reasonable target or whether they want to go to a radical level is the fundamental question for them. I cannot put myself in their shoes to answer that. That was the toughest decision for us.

9.30 a.m.

[59] **Lesley Griffiths:** You charge for carrier bags in the food halls, but do you plan to extend it to clothes?

[60] **Mr Barry:** We decided that food was the big issue. That was where we were giving out the vast majority of our bags, and that was where consumers were shopping with us daily,

rather than once a month perhaps for clothing. So, we decided to do it there and get it right. Once we have delivered it, and proved that the model works, we will consider taking it out to our clothing business.

[61] Clothing is different. If you buy a brand-new white blouse and spend £20 or £30 or £40 on it, do you really want to put it in a bag that you have used many times before? We would have to get over that and discuss that with our customers first, but, for now, we are concentrating on getting the food aspect right. I think that we are still some months away from making a decision on that.

[62] **Lorraine Barrett:** Would M&S have welcomed a Government-imposed levy prior to initiating your Plan A, and would you be in favour of a Government-imposed levy now?

[63] **Mr Barry:** Would we have favoured one before? I think that, at the time that the debate was happening, we would have been ambivalent. We probably started out on this journey thinking that we could do this voluntarily and that we did not need Government to intervene and charge. However, it is only when we started trying to do it ourselves—and saw that voluntary action got us to 14 per cent but that we could perhaps stretch it to 30 or 40 per cent with a fair wind—that we began to recognise the limitations of just voluntary action. So, I am not going to be mealy-mouthed and pretend that M&S was jumping up and down asking for Government charging a few years ago, as we probably were not, because we thought that we could do it ourselves. We have proved to ourselves that charging has worked for us.

[64] Would we support one now? Yes, we probably would. From our context, it has worked. You have a much more complex job than me. I am just trying to do this job at little old M&S; you have to look at the national economy and at hundreds of different companies and millions of different consumers as a part of that. I have had a relatively easy job compared with yours. However, from an M&S perspective, we would have no problem with it.

[65] **Mick Bates:** Tony, how do you receive the money? Can you tell us about the trail of accountability from M&S to you and how transparent that financial side of the deal is?

[66] **Mr Hawkhead:** It is very transparent. Essentially, we aim for a total project spend of £50,000. Of that, £20,000 plus £5,000 comes from the bag charging scheme—that is £20,000 to spend on the project and, crucially, £5,000 to build in sustainability, which could be helping to create or support a local residents' group, for example. A strong underlying principle on which all Groundwork UK projects are designed and built is that sustainability be built in. In other words, we do not want to create a green space that is in rack and ruin two years later. We expect each project to match that with 100 per cent; if that sounds like a tall order, I can tell you that all of our experience, over many years, has shown that it is not. If you can provide that degree of anchoring funding, it is much easier to bring in things such as local authority and local community funding, and you can also get match funding from lottery grants and so on. So far, I think it fair to say that we have found it relatively straightforward to find that kind of match funding.

[67] The projects are selected by the local Groundwork Trust and our partners—as this operates in areas where we do not operate, such as Scotland and the Isle of Man—putting forward projects, and saying, 'This is what we think could be a good idea.' It is then a combination of Marks and Spencer and Groundwork looking at the projects and making a judgement about which is likely to provide the best bang for the buck, if you like. As part of that, we are committed to having a strong set of evidence around community involvement and sustainability around community involvement. For us, that is the key area of transparency. It is a project that involves both of us doing that.

[68] Mike can say more about this, but the other thing that Marks and Spencer has brought to that is an element of considering what would work best for its own staff's involvement. That is another exciting thing for us: we are looking for ways of getting local stores involved, through those projects, in the local community, in a myriad different ways.

[69] **Mr Barry:** There is a timely example from our Nottingham store. It did some good work on reclaiming a sunken garden that was used by drug abusers and turning it into a community space. People from our store are helping with that project, and Groundwork people from the project have come into the store to explain what is going on. Our staff at the till-point can explain to customers why we were charging, although some of them were not happy with it. However, it has been powerful for them to be able to say, 'I have visited the project; I have seen the difference that it makes and I feel proud to be involved in it.'. It has also helped them to sell the story.

[70] **Mick Bates:** You are telling us a positive story and we congratulate you on that, but you mentioned that implementing it nationally was a different task. How much of an additional administrative burden was created by your imposing a levy?

[71] **Mr Barry:** Across the Marks and Spencer operation?

[72] **Mick Bates:** Yes.

[73] **Mr Barry:** Okay, I will explain how we did it. On the burden, we had to put our hands in our pockets to buy more bags for life upfront to distribute for free to get consumers moving. That was a burden to the business. We also had to brief 75,000 store staff to tell them that the world was changing. In fact we briefed 40,000, which is the number involved with the food hall. This was a different policy, so customers were going to be asking questions at the tills.

[74] We have huge briefing sessions every week for different approaches adopted by M&S. Interestingly, our execution of these projects has been consistently good across M&S—it has been much better than has traditionally been the case for the normal roll-out of our projects. A reason for that is that our employees have felt passionately about doing the right thing for the environment. We have found that plan A has got a big roll-out scheme that is more effective and efficient than is traditionally the case with commercial projects, and that is good.

[75] So, we had to brief people and typically that involved getting the store staff together at the start of the day in a huddle for 10 minutes before the store opened. The store manager briefs staff on what is happening and why. There are posters backstage explaining what we are doing, including questions and answers on what is going on. This has not been hugely burdensome for M&S. You have to do something, let us be clear about that, but it has not been particularly difficult.

[76] **Mick Bates:** So, how often is money transferred to Groundwork UK?

[77] **Mr Barry:** Quarterly.

[78] **Lorraine Barrett:** While Mike Barry is here, I would like to ask him about paper bag use. We heard evidence before recess from the plastic bag industry, which explained that shops are now starting to use paper bags, and I am thinking specifically of clothes retailers that use the big heavy paper bags with string handles. I have a great deal of sympathy with their case that they are not the answer and are not a replacement for the plastic bag. Has M&S been looking at that? I can see that you are concentrating more on using the recycled polythene. Is that something that you will continue with for your clothes departments rather

than using paper bags? There is not much you can do with paper bags once you get them home.

[79] **Mr Barry:** That is a good question. This is why we start with the basic premise of reducing bag usage. It does not matter whether the bag is made of plastic, hemp, jute or whatever, we just want to reduce bag usage; that is the reason for 80 to 90 per cent of our effort. Having reduced it as much as possible, we want to use the best material possible. We have selected recycled plastic because it drives the market for recycling. If we want to encourage more local authorities to recycle more, then there has to be a market for it. So, we have supported a big project in Dagenham, which is one of the biggest plastic recycling plants in Britain, by buying the recycled plastic from it to put back into our food packaging. We apply the same model with our bags by using the recycled polythene and we drive the market for recycling by doing so. As a scientist, I think that there are pros and cons to every material that you can use, but I do not see any material that is compellingly much better in terms of environmental burden and we believe that plastic brings the benefit of driving the recycling market.

[80] **Mick Bates:** The definition would mean a levy on single-use bags and that would apply to both types of bag. So, if that law were implemented by the Government, what would be your view on that? That there should be a levy on single-use bags rather than on only plastic bags?

[81] **Mr Barry:** Absolutely. There has to be a level playing field. With any bag that you use, no material is without its environmental burden. So, I think that you should seek to reduce bag usage generally, which is what we are seeking to achieve, rather than pick out particular materials as being better or worse than any other.

[82] **Mick Bates:** Thank you. Are there any further questions? I see that there are none. Thank you for your attendance and evidence this morning. On behalf of the committee, I congratulate you on the work that you do. I am sure that you will watch with interest to see what happens here and we will send you a copy of the Record and the recommendations that we will make as a result of our inquiry, which I remind you was the result of a petition issued to the Assembly. This committee was the one to deal with that in the form of this inquiry. If you wish to send us any further information, please do so because it will be some time before the Government makes a decision on this.

[83] However, we look forward to following your positive example and to ensuring that the link and partnership with communities become strengths in raising the levy rather than creating the public perception of this as a burden of taxation. Thank you both very much.

9.40 a.m.

## **Ystyried y Ffordd Ymlaen o ran y Ddeiseb sy'n Galw am Waharddiad ar Fagiâu Plastig**

### **Consideration of Way Forward on Petition Calling for a Ban on Plastic Bags**

[84] **Mick Bates:** Members can see in the paper provided that, under this item, there are four options. I will start by thanking the petitioner, Neil Evans, for bringing the petition forward. I am sure that the petitioners have followed the process with great interest. I am very impressed by the Petitions Committee and the democratic process of engagement with citizens that it unlocks. I hope that the timescale of what we now do will suit people because, all too often, people's engagement is followed by heightened expectations and then by some frustration and disappointment. In this session, therefore, I invite Members' views on how we proceed based on the options that have been presented.

[85] The petition called for a ban. Do people have any views on the use of that term?

[86] **Darren Millar:** The evidence that we have gleaned suggests that a ban may not be the best way forward. It certainly would not raise any income for investment in environmental projects. Because we share a border with England, if other parts of the United Kingdom follow another route, it would be very difficult to enforce a ban and costly to Government rather than actually producing an income.

[87] **Lorraine Barrett:** The petition called for a ban on plastic bags and only that, did it not? From the evidence that we have, it does not seem as simple as that. It is easy to say, 'We want to ban plastic bags.', but what does that mean? I am buying more plastic swing bin liner bags now to put our recycling in, because we do not have so many plastic bags to hand, as we are using the bags for life when we go to the supermarket. We will still need plastic bags of a sort unless someone comes up with something different, and so we need to think about the wording, because it is not as simple as a ban on plastic bags. That is not the way forward. It is about reducing the amount used and using different types of plastic, as we heard today. So, yes; we need to think carefully about the wording.

[88] **Brynle Williams:** As Lorraine said, the word 'ban' was there initially, but I do not think that it is physically possible to ban them. I think that we are looking for a hybrid of what we have heard about from Marks and Spencer today and what we saw in southern Ireland. We may need to look at both those aspects.

[89] Darren brought up another issue. If we in Wales go it alone, it might not affect those of you who live in Cardiff so much, but what happens with the main shopping centres for north Wales, which are marginally over the border in Liverpool and Manchester? How will we enforce such a ban? I therefore agree with Lorraine; banning is out of the question. It is a matter of finding the middle way forward with, if needs be, a hybrid.

[90] **Leanne Wood:** It seems from the evidence that we have received that the levy is the option that we should pursue.

[91] **Mick Bates:** It seems that there is unanimity on the matter.

[92] There is an interesting point in bullet point 3 of the options:

[93] 'Make recommendations to the UK Government who are considering a potential levy on plastic bags which could be introduced through clauses in the Climate Change Bill'.

[94] Of course, interestingly enough, on the very last day of discussions on the Climate Change Bill in Westminster, an amendment was made that included the ability to raise a levy on single-use bags. Once the Bill has received Royal Assent, which is likely to be in November—it will not, of course, be enacted for a further two months after that—the Welsh Assembly Government will have the power to impose a levy on single-use bags. That adds another dimension to matters which, given the evidence and what we have just said, indicates that we have an opportunity to move forward, as I am certain that they will be doing in England.

[95] **Darren Millar:** I have a query. I am obviously delighted that the Climate Change Bill will enable some action on this front because it is abundantly clear that the Environmental Protection and Waste Management LCO is stuck, is not going anywhere and has been held up for more than 12 months since the committee here finished its work on it, so I am delighted that this is included. However, the difficulty that I have with the information in the Bill at the moment is that it refers to single-use carrier bags. What is the definition of a

‘single-use carrier bag’? I think that we need more information on that, if you have some, Chairman.

[96] **Mick Bates:** I do, indeed, have some information on that. In her reply, Joan Ruddock said,

[97] ‘I am delighted to be able to respond to my hon. Friend. Although I will come on to explain how the bags will be defined, they are single-use carrier bags, so there is no distinction regarding the material from which they are made. I am sure that she will know that the environmental impact of paper bags can be even more detrimental than that of plastic bags—although people might think that that is counter-intuitive.’

[98] That is the introduction to this, and I think that it is already clear from our discussions that Marks and Spencer has targeted its efforts and gone forward incrementally. It has gone with the recycled plastic bags and, from Mike Barry’s answer this morning, it seems that it would have no objection to that levy being charged on single-use carrier bags.

[99] **Darren Millar:** I am not concerned with the materials because, as you know, I have already expressed a preference for the levy to be charged on all disposal bags; it is the term ‘single-use’ that I am not particularly comfortable with. ‘Single-use’ implies that it can be used only once and, as we know from the evidence that we have gleaned, many people might use a carrier bag three, four, five or six times or for purposes other than carrying shopping.

[100] **Mick Bates:** They might use them for lining the bin.

[101] **Darren Millar:** I think that the term ‘single-use carrier bags’ either needs to be more clearly defined as ‘disposable bags’ or removed and replaced with the words ‘disposable bags’. I am not particularly comfortable with the term ‘single-use’. I am very comfortable with the fact that this is being considered seriously as part of the Climate Change Bill and I think that, if we need to make representations to the UK Government over the definition of the term ‘single-use’, we ought to do so.

[102] **Mick Bates:** I think that you are right. The reason for the term, of course, is to distinguish between single-use and long-life bags—the linen bags and so on—so that there is no levy on them, in order to encourage their production. As you are aware, quite an industry is developing around properly environmentally friendly bags. That is where the ‘single-use’ definition comes from, to distinguish between single-use and multi-use bags.

[103] **Darren Millar:** As you will know, Chair, the information that we took from Ireland was that a plastic bag, regardless of whether it is a long-life plastic bag or one that you would use once or twice, has the tax imposed on it. I think that that would perhaps be a better way forward. If you were to be taxed on a paper or plastic bag, regardless of the longevity of the life of the bag, the effect of that tax would be that you would get more bang for your buck—to use one of the expressions that was used this morning—if you were able to reuse and reuse it.

[104] **Mick Bates:** You made some very good points, Darren; thank you very much. The first thing I would say on the Climate Change Bill and the implications for the Welsh Assembly Government would be to ask for a paper to outline what it actually means. If we could get a lawyer to give us an opinion, that would help us with making our recommendations following this inquiry. The second point that you raised about the definition is obviously a critical one. For our recommendations, I think that the details of the evidence from Ireland and from what we heard from Marks and Spencer this morning will be extremely useful on that. There is no objection to a levy on all bags, but we need to establish whether it is possible to find a definition that distinguishes between those that are disposed of very

quickly, after one use, and those that are used over and over again. That is the difficult bit.

[105] **Lorraine Barrett:** I presume that the lawyers—there are probably a lot of lawyers with different pieces of advice—would have to define in the legislation what a single-use carrier bag would mean.

9.50 a.m.

[106] I think that we all have a definition in our minds, but there still needs to be a bit of a cultural change in some supermarkets. You get to the till and they have already prepared about 20 carrier bags for you because they see that you have a trolley full of things, but you may have your five bags for life hidden underneath. It is those bags that I am thinking of; they are easy-to-throw away bags that we can use again, but the lawyers will have to define that.

[107] **Mick Bates:** When the paper is presented with our key recommendations, that is a key issue that we will put to the Minister.

[108] **Brynle Williams:** In Ireland, if I remember correctly, they were extremely careful to ensure that single-use plastic bags related to the food industry did not increase the cost of living. If I remember correctly, the definition had many problems, and that is why they did it. For example, a gentleman's outfitter or a lady's boutique might be using plastic in the straps of their bags or a massive plastic face over the paper of the bag. Some aspects of the retail industry were trying to get around it by using the plastic in another way. This is where the definition came, if I remember correctly, in that it had to be for food only and they were meticulous about where and when this was used. I think that everything else was taxable, such as fashion bags, bags from electrical stores and Lord knows what else. We have one store in this country, which I have been to with my wife, putting stuff in paper bags now. It is cutting down on the plastic packaging.

[109] **Mick Bates:** Thanks, Brynle. Are there any further points before we wind this piece up?

[110] **Darren Millar:** I suggest that we seek a definition of the UK Government's intention when it describes single use carrier bags. It is clear that it is not distinguishing between materials, from the answer that was given in the House of Commons, but it is not clear what a single use bag is. We should also work-up recommendations on a levy on bags, regardless of the material of which they are made, through a paper that consolidates the evidence that we have gleaned so far. I think that that would be helpful.

[111] **Mick Bates:** It is also important that the partnership working that was mentioned to us by Groundwork UK and Marks and Spencer should be noted when we look at the recommendation. An important point was raised that, if it is viewed as a tax, people's perception would change. If it is viewed as something that you pay that is helping the community or improving the environment, there is a massive difference in public perception. If possible, we should word it that way. Were they all used exclusively for the environmental element—

[112] **Leanne Wood:** I am a bit dubious about the idea that a large company can decide to which charity to pay vast amounts of public money—if we are talking about a levy, it is a tax—so there should be some type of public interest decision made in terms of where the money goes.

[113] **Mick Bates:** Absolutely, but what I was looking at first was the principle of how any levy that is collected would be used. You are quite right—we have organisations such as the Wales Council for Voluntary Action, which has national connections, so it may be possible to



use other public sector organisations to administer it. That is the way in which we need to travel.

[114] **Leanne Wood:** They were strongly advocating the charity approach, where the company decides to which charity to allocate the money, were they not? I think that we need to be wary of that.

[115] **Mick Bates:** However, that is their scheme. This is different; it is regulation. We need to consider how it is administered. Although we did not mention figures, I asked how transparent this all is, and that is one of the key factors, namely that the money raised has to be seen to be spent, and that the administrative burden does not use up too much of the levy.

[116] **Lesley Griffiths:** I asked whether they had plans to extend this, because I was in T.K. Maxx last week, which has started charging for carrier bags, and the person in front of me was asking whether this was a Government-imposed levy, and, if so, why had there not been more information about it. That was why I asked whether they were extending this, because that is a good point—it is a tax and people will want to know where it is going.

[117] **Brynle Williams:** In Ireland I believe that the environmental agency went to the Treasury saying that it should collect this levy, but that it should be ring-fenced it so that it did not go to Government bodies for redistribution. It was kept solely for environmental schemes. I forget how many millions they were collecting, but the administration costs were about €300,000 a year, which was very cheap. It was successful because the public, as you just said, could see that it was not a Government tax but that it was of benefit to the community.

[118] **Mick Bates:** That is an important link.

[119] **Lorraine Barrett:** I presume that this will lead to another discussion, because it has opened up a whole new piece of work. I think that we all feel that this should be of environmental benefit, and I think that that is what the public would want to happen to the 5p or whatever amount is paid for a bag. I would like to see us have a paper and a proper discussion on this once we know what the Welsh Assembly Government or the UK Government's views might be as to the levy.

[120] **Mick Bates:** It is important to establish the legal position on the Climate Change Bill. I also need to write to the Minister to ask about the status of the environmental and waste management LCO, to keep us informed of its position. We will then produce a paper with our recommendations, which we will discuss again. The important point is that we produce a paper and ask for a debate in Plenary on this issue, so that the issues that are raised in the debate are put on the record.

[121] **Lesley Griffiths:** Are you going to write to the Minister about the amendment to the Climate Change Bill?

[122] **Mick Bates:** To clarify, would the be in my letter to the UK Government Minister?

[123] **Lesley Griffiths:** Yes, but if the Welsh Assembly Government Minister has the power to impose a levy—

[124] **Mick Bates:** She will have.

[125] **Lesley Griffiths:** So, are you going to write to the Minister to see—

[126] **Mick Bates:** To see what she is going to do? Do you mean the Minister here?

[127] **Lesley Griffiths:** Yes.

[128] **Mick Bates:** I think that that will form part of our recommendations. However, I will write to the Minister to clarify the timescale of the LCO. Those are two separate issues. I think that the recommendation in our paper will be sufficient, but we can discuss this again.

[129] **Lesley Griffiths:** Okay.

[130] **Mick Bates:** We are saying that, as far as we are concerned, our inquiry into the petition has come to an end. We will make recommendations and they will be circulated. In principle, we favour a levy, to be used for environmental work. Given that the Climate Change Bill is to be enacted, we see an opportunity for the Welsh Assembly Government, through regulation—that is, secondary legislation—to introduce a levy here along the lines of our recommendation.

[131] **Darren Millar:** That will be on all disposable bags, regardless of material.

[132] **Mick Bates:** That is right. However, that is the bit that we need a definition on, to clarify the whole issue. Does anyone wish to add any further points to that?

[133] **Darren Millar:** I assume that you will be writing to the Chair of the Petitions Committee to explain where we have arrived and that, if the answer from the UK Government Minister as regards the definition of the term ‘single-use bag’ is not satisfactory, we could pursue other avenues that are identified in the paper, such as a specific LCO—

[134] **Mick Bates:** Would that be from this committee?

[135] **Darren Millar:** Yes.

[136] **Mick Bates:** One of the considerations prior to learning about the amendment that has been made to the Climate Change Bill was that this committee could put forward an LCO to push for this levy. However, things have changed and Welsh Ministers will have the power under the Climate Change Bill to impose a levy on single-use bags.

[137] I see that you are content with that. We will write the paper and two letters, one to the UK Minister about the definition and the second about the current status of the LCO.

10.00 a.m.

**Ymchwiliad i Leihau Allyriadau Carbon—Sesiwn Dystiolaeth ar Gynhyrchu  
Ynni  
Inquiry into Carbon Reduction—Evidence Session on Energy Production**

[138] **Mick Bates:** It is timely to draw Members’ attention to a statement issued on 23 September, ‘Greenhouse Gas Emissions in Wales in 2006’. The total emissions of the six greenhouse gases in Wales were 51.1 megatonne equivalent, which represents a 3.9 per cent increase in emissions on 2005, but a 7.4 per cent decrease on the base year. Total carbon dioxide emissions in Wales for 2006 were 42.5 megatonne equivalent, which represents a 4.7 per cent increase on the 2005 figures. Our inquiry continues this morning and it is a great pleasure to welcome Tim Rotheray back to the Assembly in his new role as policy adviser to the Micropower Council, and Phil Wolfe, who is the executive director of the Renewable Energy Association. Thank you both for your papers. I invite you to give a brief outline, in three to five minutes, of the main points that you wish to present to the committee. This will

then be followed by questions from committee members. Would you like to start, Tim?

[139] **Mr Rotheray:** Thank you for inviting the Micropower Council to give evidence to the committee this morning. The Micropower Council represents industry and suppliers of zero and low-carbon microgeneration products. We promote microgeneration when it is a viable option that can make a substantial impact on carbon dioxide emissions. We advocate the use of microgeneration only when other energy-saving measures and demand-reduction measures have been employed. We are not in competition with other forms of renewable and low-carbon energy. The task of carbon dioxide reduction is huge and the Micropower Council is not competing against others. We believe that all forms of energy should be examined in each given situation.

[140] We welcome the committee's inquiry into carbon dioxide reduction, particularly the role to be played by low and zero-carbon energy sources. We believe that Wales has a real opportunity to be a leading light in the microgeneration sector. Wales has devolved powers at the level of 50 MW onshore and 100 MW offshore, which provides a real opportunity for Wales to take the bull by the horns and move ahead, and become an exemplar to the UK and even Europe as a whole.

[141] We also welcome the stated support of the Welsh Assembly Government to increase zero and low-carbon energy sources in Wales. However, we would say that there has been substantial inertia; an example might be the zero carbon homes initiative by 2011, which looks like it will not be met. The energy route-map states that we do not yet know how much microgeneration is installed in Wales, which is a fundamental problem if you are trying to encourage the installation of such devices.

[142] Microgeneration has a threefold role to play in tackling climate change. The zero and low carbon products reduce carbon dioxide emissions, some of which are extremely efficient; they reduce grid demand and, therefore, you reduce losses and costs associated with grid transmission. They are a fantastic tool for public engagement. Members of the public can see the link between energy generation and energy use, which can help with behaviour change. As I am sure that you are aware, behaviour change is one of the biggest problems in reducing carbon emissions.

[143] Microgeneration also supports decentralised energy, which helps on the issue of security of supply and a diverse range of energy sources. Despite these potential benefits, significant barriers still remain, four of which are limited financial support, planning red tape, a lack of legally binding targets backed up with policy support and comprehensive reporting and monitoring, and a lack of clear and unbiased consumer information. The paper that I am presenting to you today highlights these problems and, hopefully, presents some opportunities that Wales can still exploit in order to become the leading light and fulfil its sustainable development commitments, which it has in its constitution.

[144] **Mick Bates:** Thank you for keeping to time and for raising some really interesting issues, which I know Members are keen to follow up on.

[145] Philip, I now invite you to give your headlines and short presentation.

[146] **Mr Wolfe:** Thank you for inviting the Renewable Energy Association to give evidence to you.

[147] I will start by considering this in the international context. As I am sure that you are aware, the European Union has set stretching targets for sustainable energy in terms of energy efficiency and the adoption of renewables. These are to be commuted into a renewable energy directive, which, hopefully, will be passed by about the end of this year, and is likely to hand

down a target to the UK of a 15 per cent contribution of renewables to total energy, which is an increase from today's figure of about 1.5 per cent contribution of renewables to total energy. So, we in the UK, while we start rather behind most of our colleague nations in Europe, are likely to be accepting a demanding target, at least in proportional terms, of increasing the penetration of renewables by a factor of 10 in the next 11 years. The implications of that are that the energy portfolio of policies that we need to adopt will need to be much broader than they have been in the past. In particular, they will need to embrace decentralised energy alongside centralised energy generation, embrace heat and transport energy, as well as just electricity, and, importantly, they will also have to look at demand-side measures, energy users as well as energy suppliers. All of those aspects are an extension on what the policy has historically been in the UK. Historically, it has been focused on large-scale centralised generation, mainly electricity generation. All of these other aspects have not really been taken into the portfolio, but they will need to be taken in fast if we are to meet these demanding targets.

[148] I would like to focus in particular on the user aspects, because they are the ones that will give some new opportunities for devolved administrations, local governments, and so on, because they will start to bring policies into the areas that are no longer the Westminster preserve of centralised energy supply policy. In particular, there will be opportunities in things such as positive planning for renewables in the built environment, for strategic community infrastructure for things such as heat networks, for community energy systems and for the integration of energy with waste policies—for ensuring that waste is not just treated as a negative resource, but as a positive resource that can be reused for energy production. Waste can be used for things such as anaerobic digestion for producing biofertiliser and energy. Finally, there is the opportunity for all Governments to lead by example and to push the envelope in terms of what is being done and encourage the population to follow the lead taken in adopting renewables within government buildings, vehicle fleets, and so on.

[149] We see a whole lot of new opportunities coming up because of the much more coherent and broader policy portfolio that must be adopted. You referred to the paper that we submitted, which I would like to think that some of you might have slogged your way through—I note that the version that you have was circulated backwards, starting at the last page and finishing at the first page, so maybe you did not. However, that helps to put into overall perspective where we would like to see a broad and coherent suite of policies emerging.

[150] **Mick Bates:** We all got through the paper very well and we loved the ideas.

[151] **Mr Wolfe:** We will write them all backwards in the future. *[Laughter.]*

[152] **Mick Bates:** Thank you for the presentation. I would like to start by taking up your point about the portfolio and how we are going to reach these ambitious targets that are now being set across Europe. Could you both give me your views on the timescale within which Wales, and the UK as a whole, should respond to the challenge of achieving substantial carbon emissions reductions from energy generation?

10.10 a.m.

[153] **Mr Wolfe:** That is arguably the most crucial point. We do not have a lot of time, and urgency is fundamental to achieving this. We would like to encourage you, and all those who formulate policies in this area, to quickly produce policies that are nearly right, rather than to strive for perfection and take your time in doing so. First, perfection tends to be rather elusive in any case, and, secondly, we do not have that luxury. We would encourage identification of what can be done fast, and ensure that it is implemented rapidly. If some of these things need

to be deferred for further consideration, do not let the entire portfolio wait while every last ‘i’ is dotted and every ‘t’ crossed.

[154] **Mr Rotheray:** I would just add that it is the science that has determined the level of emissions cuts, and the year 2050 is generally regarded as the cut-off point, with everything being set according to that. The Intergovernmental Panel on Climate Change and the Stern report have mentioned targets of 60 to 80 per cent across the UK. In terms of meeting those targets, the biggest issue is that efforts slip because the targets are not binding. If we are to meet the 2050 target, we will need intermediate targets for 2015, 2020, 2030 and 2040. It is also important to note that it is more effective to reduce carbon dioxide emissions now than to do so later, because of the long half-life that carbon dioxide has in the atmosphere. Reductions now are potentially much more effective, so the need for action is pressing. Everyone recognises that the targets are challenging, but the more we defer, the more challenging they get.

[155] **Mick Bates:** We will come to targets in a moment, but first I want to clarify the timescale. In your paper, Philip, you make it clear that it is just not achievable. Is that correct?

[156] **Mr Wolfe:** No, we do not believe that it is unachievable. It is achievable, but we need to take the early opportunities when we have them. In the Westminster context, there is currently an Energy Bill going through Parliament, and there are measures that could be added to that, which I think that we can all see will be needed and useful in future—for example, a feed-in tariff or renewable energy tariff. We would encourage the Westminster Government to take this early opportunity, and not to miss this window and have to wait another two years for another legislative opportunity.

[157] **Lesley Griffiths:** Looking at the current targets for Wales, the UK and Europe, your paper says that they are achievable, although you accept that that is a daunting prospect. Do you think that the targets are an appropriate response to the challenges of climate change, and, importantly, the security of supply?

[158] **Mr Wolfe:** Definitely, and an aspect of both microgeneration and renewables that is often neglected is the contribution they can make to energy security. In many countries, energy security is seen as the main driver for renewables. The renewables industry is progressing much faster in the USA, for example, than it is here, against the background of a Government that does not even believe in climate change. That is because it is seen as a major contributor to energy security. So, that is an important driver.

[159] To be frank, economics is increasingly becoming a more important driver. Although historically renewables have been seen as being more expensive, that is in the context of traditional energy sources that are not fully costed, and do not include the cost of carbon dioxide emissions, nuclear waste storage, and so on. Also, renewables have a far more definable and certain cost than most so-called traditional energy sources. If you install a windfarm or a wave generator or a biomass boiler, the costs are pretty well defined at the time. You know what your energy costs will be for the life of that system. If you install a gas-burning power station, you have no idea what the future costs will be. So, the cost predictability of renewables is another factor. I think that these targets are achievable, and it is vital that we achieve them. Furthermore, one must not think of the 2020 target as being the end of the road; it is just a point on the road, and we will probably need to set targets to take carbon out of the entire energy generation sector, probably by 2050. So a contribution of 15 per cent by 2020 is just one step on the road to a contribution of 100 per cent by 2050.

[160] **Lesley Griffiths:** What percentage do you envisage will come from renewables, and what from coal, gas and nuclear generation?

[161] **Mr Wolfe:** I see the endgame inevitably as being where we started before we discovered coal, and that is 100 per cent renewable energy. By definition, if we are to have a society in the long term, we can only do that through using sustainable technologies. The longer-term picture is that all of our energy production will have to be sustainable, and, therefore, it will all be renewable. I think that we would unashamedly put the timescale for that at some time before the end of this century.

[162] **Mick Bates:** Returning to an age before coal is an interesting concept. That would be an interesting lifestyle for a great many.

[163] **Brynle Williams:** You started your presentation on the very serious note that we have to do something now. You said that we have a certain timescale but that it is imperative that we get on with it now. You mentioned planning in your opening remarks. A lot of the problems seem to stem from the fact that the culture that we have is that we do not particularly want to use waste because it has to be in somebody else's backyard. How do you see our getting around this? There is massive potential in the utilisation of waste. In my constituency, there is company that has tried to speak to the council about establishing a wood pellet plant at a cost of £4 million, and the council does not want to know about connecting it to a development of 300 adjoining houses—the waste heat could be going into that development. How do you see us moving forward practically? You people are telling us about this and we as politicians are aware but we are trying to get it over and sell it to the public that the problem is here and that renewables have to come in; there are no two ways about it. You mentioned gas and oil, and we do not know what the future is—it is running out. Oil was very cheap two years ago—it was at \$40-odd a barrel; it is now at \$140 a barrel and we are suddenly in the middle of a crisis. How do you envisage us getting this message over?

[164] **Mr Wolfe:** That is an extremely important point, Mr Williams. Arguably, because we as a nation are relatively far behind the rest of Europe, there is an awful lot that we can learn from Europe. You mentioned planning. If there is the prospect of a new windfarm going up in Germany, all the locals get together, immediately hold a meeting, and discuss how they can get something out of it and make the most of it. If there is a prospect of a windfarm going up here in the UK, more often than not, all the locals will get together and say, 'How can we stop this?'. Part of that is about the way in which the planning system operates, but part of it is to do with things that we in the industry can help with. In the German model, there is a far higher prevalence of community ownership of renewable energy projects, which, in the UK, is almost unheard of. That is partly because the UK support model is a renewables obligation. It is an obligation on the large energy suppliers and, therefore, it has meant that the large energy suppliers are, effectively, controlling what is happening. In Germany, because the feed-in tariff approach has been adopted, the impetus, if you like, is coming from the energy user and, therefore, there is an incentive for the communities to get involved. One of the things that we are advocating is the adoption of a tariff in the UK, not to replace the renewables obligation but to work alongside it. We believe that that would, in part, help to get the local people keen and interested in projects, rather than seeing them as negative.

10.20 a.m.

[165] However, we would like to see local planning authorities being more robust on that. They need to prevent local inquiries from yet again going over a whole lot of ground that has been covered time and again. There are a certain number of issues, such as whether we need renewable energy or waste treatment facilities, that should be dealt with once on a national basis and then taken outside the scope of local inquiries. That way, local inquiries can focus on local issues and not get bogged down, slowing the whole process down, with the reconsideration of issues that have already been played out nationally.

[166] **Mick Bates:** Tim, would you like to respond to Brynle's point about planning? We

often hear that the planners stop people from installing insulation and microgeneration measures. What is the truth?

[167] **Mr Rotheray:** First, there has been a substantial extension of the development that is permitted for microgeneration, which is very positive. However, micro wind turbines and air-source heat pumps are still outside the scope of that. At a UK level, despite having had different indications that support is going ahead, we still see ourselves as being in the same position. That is a huge barrier, because, even if you capitalise installations, if people have to go through a huge planning process, it will put them off and they will not bother. So, removing planning red tape is absolutely the key.

[168] On the wider issue, community engagement is also central. If you are in a community and someone installs some kind of renewable energy project and gets all of the financial reward for that and the community does not, the community is bound to be put out, to some extent. However, communities often do not have the financial wherewithal to lever in that capital. We have drawn attention to the issue of how to lever in capital for microgeneration, as that is stopping people from installing microgeneration.

[169] **Mick Bates:** To return to planning, I have seen the case of a small turbine that would generate less than 1KW being turned down for planning permission on the grounds that, in a force-10 gale, the neighbours might be able to hear it. In a force-10 gale, I do not think that your neighbours would hear a little turbine going around. Such things seem to be large hurdles to their installation.

[170] **Mr Rotheray:** They do. The noise issue, which is the principal issue that governs wind turbines, is very difficult. It is extremely difficult to predict what the noise conditions will be in every situation. That has led to an extremely precautionary approach. Some rather obscure advice has been circulated that suggests that complaint rates are higher than we have found to be the case. We have submitted a freedom of information data request to find out how many micro wind turbines are the cause of complaints. Of the data that we have so far, it appears that one in around 1,000 has been the cause of a complaint. Even then, the complaint was not upheld. So, are they really causing the problems that people expect them to? The chances are that they are not.

[171] **Mick Bates:** That is interesting.

[172] **Brynle Williams:** There is a case in north Wales, which Lesley will be aware of, where the planners decided that they wanted a biodigester on an industrial estate as opposed to a farm. However, they were using the bulk of the cattle slurry and food waste to raise the calorific value of it. This has gone on and on. The farmer has gone out on his own now. It is ridiculous; you are carrying three times as much slurry as you were food, and there has been an increase in traffic movements and therefore carbon use. It is hideous things like that that are stopping the progression of these schemes.

[173] **Mr Rotheray:** The point that goes along with that is that planners and communities have to realise that, if you do not have one thing, you have to have something else. We all use the energy. People oppose power stations, because they are ugly and have great cooling towers and so forth. If you get rid of one, you will have to have something else in its place. Lots of small-scale stuff is generally much less imposing than installations such as huge, great power stations. There is also the idea that people should reduce demand, which will mean that we can all install fewer, smaller devices.

[174] **Mick Bates:** That is a good point. Thank you.

[175] **Leanne Wood:** Do you think that the Government has any chance of meeting the EU

targets of producing 15 per cent of our energy from renewable sources by 2020?

[176] **Mr Rotheray:** The targets are meetable, but the key is leadership. There needs to be clear leadership. If we have that, the industry can turn around quickly. A classic example would be the condensing boiler. Government legislated that, in the vast majority of cases, condensing boilers had to be installed when replacing a gas-fired boiler; they now account for well over 90 per cent of the market. So, the industry turned itself around within a year. So, if industry is aware of where things are going, and if that is fixed and will not change two years down the road, the money will go into it. Millions of pounds are already being put into developing these things. However, the more money that goes in, the more the supply chain will be developed, and the whole thing will ramp up, and you will end up with this step change in microgeneration that we have been calling for.

[177] So, it can happen, but I think that many things have been suggested, such as the Wales microgeneration strategy, which includes targets, but we do not know what is going on. What is being done to pursue those targets? Is there a policy framework? We are not aware of one. So, if you get those things in place, industry can follow, and probably more rapidly than is thought. The same applies with zero-carbon homes. The reason the 2011 target will probably be missed is because there has been no framework. The building industry has not moved on at the rate necessary to achieve that target, because there is no framework in place.

[178] **Leanne Wood:** That leads me on to my next question. I was going to ask what contribution Wales should make to meeting those targets, but I think that you have answered that question, mostly. Is there anything else that you want to add on that point?

[179] **Mr Rotheray:** We think that Wales can be a real trendsetter. The devolution of power over stations generating up to 50 MW should be seized. Wales exports quite a lot of its electricity, so maybe it should consider working up to generating sustainably not just the electricity that is consumed in Wales—the 15 or 20 per cent renewable target for Wales—but all that is exported as well. That is what is providing the jobs and the income here, but it is also about meeting the target. That would also make Wales a dramatic exemplar in the UK and Europe.

[180] **Mick Bates:** You mentioned the installation of microgeneration, Tim, and that the Government has set a goal of 20,000 units by 2011, I believe. If I heard you correctly, you said that it has no way of collecting the data to see how many micropower units have been installed.

[181] **Mr Rotheray:** Yes. The renewable energy route-map notes that it is not clear. We have tried to find out what is installed in Wales, but, if the data are available, we have not yet come across them. Without that, how can you identify how we are doing?

[182] **Mick Bates:** That is an interesting point. So, the Government made a target for 2012, but it has no way of collecting the numbers?

[183] **Mr Rotheray:** As far as we are aware.

[184] **Mick Bates:** So it is all guesswork?

[185] **Mr Rotheray:** Yes, that is the case, as far as we are aware.

[186] **Mick Bates:** That is interesting. How might it collect the data? Let us be serious about this.

[187] **Mr Rotheray:** The data are collectable; the fact that we know that 90 per cent or so



of condensing boilers are now being installed means that those kinds of data are collectable. Installers can report, for example, and there are sales figures, and so on. Huge amounts of data are collected about retail that is sold in the UK. It is also possible to ask suppliers where they are selling their equipment. It is a question of collating that data. I think that the data exist. Suppliers probably know where their markets are and installers probably know what they are installing, but if they are not reporting it, the data are not being collated in a central place.

10.30 a.m.

[188] **Mick Bates:** That is interesting. A good recommendation will come out of that.

[189] **Brynle Williams:** In my constituency, 90 per cent of the photovoltaics cells manufactured go to Germany. We have that figure and we know where they are going, so surely we can get that information from manufacturers and planning applications. It must be easy enough to collect.

[190] **Mick Bates:** Brynle, you have a question about achieving the TAN 8 target.

[191] **Brynle Williams:** In your opinion, is it likely that there will be enough installation in operation in Wales for the Welsh Assembly Government to meet the target of 4 TWh by 2010 or 7 TWh by 2020?

[192] **Mick Bates:** Philip, perhaps you could start on that.

[193] **Mr Wolfe:** The key determinant of that will be speed at which projects go through the planning process and, to some extent, the acceptance or rejection rate that they receive in the planning process. Certainly, the capacity is there to install a renewable energy generation plant at that level. The capacity in the industry is there and the resource availability is there, but planning timescales and approval rates in Wales have not, historically, been particularly encouraging to the industry.

[194] **Mick Bates:** So, I take it from that that you are saying that the 4 TWh target is achievable by 2010.

[195] **Mr Wolfe:** Yes, provided that planning delays are not excessive and that planning rejection rates are not too high. As you are doubtless aware, planning acceptance rates in Wales have tended to lag behind those in other parts of the country.

[196] **Darren Millar:** The evidence that we have received from other sources seems to suggest that that target will not be achieved, indeed, that we will not be anywhere near it, and not just because of the planning system laws or because of the lack of availability of some of the technologies. For example, windfarm developers in my area, regardless of the planning regime, are saying that, if they put orders in now for the turbines that they want to install, the marketplace does not have the capacity to deliver them within a timeframe that would help to meet the current targets. How do you respond to that?

[197] **Mr Wolfe:** That is a valid point, except when you say 'regardless of the planning regime'. The point is that we, as a nation, are having to compete for the resources available with other countries and, at the moment, the worldwide ramp-up rate of the manufacturing of wind turbines is high. New capacity is coming online all the time in countries such as China and India, but the UK is seen as a relatively unattractive market for those manufacturers, partly because of the uncertainties inherent in the planning system here. If they commit production to projects in the UK, more often than not they find that the off-take does not happen at the time originally scheduled, and sometimes does not happen at all because the

project gets turned down. Therefore, it is more attractive for them to commit the production capacity that they have to other markets than the UK one.

[198] **Darren Millar:** However, the British Wind Energy Association and its members are saying that, even if there were no requirement for them to submit planning applications to deliver the Welsh Assembly Government's wind target, for example, it would be impossible to do so within the timeframe because of the lack of availability of the turbines.

[199] **Mr Wolfe:** Are you talking about the 2010 target?

[200] **Darren Millar:** Yes, the 2010 target particularly. That is regardless of the planning regime. I accept that there are difficulties with it, but, in relation to the availability of the turbines themselves, the outlook is pretty bleak, is it not?

[201] **Mr Wolfe:** Yes, but do you understand the point that I am making, namely that the two are connected?

[202] **Darren Millar:** Yes, I understand that point, but it is abundantly clear that demand for turbines currently exceeds the supply globally. Of course, it is the bigger consumers who will be offered the bigger deals with the manufacturers, but there is a problem in terms of supply and demand, is there not?

[203] **Mick Bates:** I found your assertion interesting that countries such as America, despite their Governments' stated view that they do not accept climate change as being the force that we see it as, are installing a lot of renewable energy systems. How big is that market?

[204] **Mr Wolfe:** In orders of magnitude, it is greater than ours, and the penetration of renewables into total energy in the States is also an order of magnitude greater than that in the UK. A useful indicator—and this relates to the earlier question—can be found in the fact that Ernst & Young produces what it calls a country attractiveness index, which shows how attractive different markets around the world are for renewable energy. This is one of the things that will influence supply chain issues. A couple of years ago, the UK was at the top of that index, but we are now down in sixth or seventh position, and the United States is the top country, despite the fact that, at the federal level, there is almost no support for renewables. Many of the states, particularly California, now have very proactive policies.

[205] On the question: 'Can we meet the target?', I have to say, it is a very British question. I was at a conference a few months ago, speaking alongside the regulator from the Californian market. She was saying that they had a target of 20 per cent contribution of renewables to electricity by 2020. The new governor—as he was at the time—said that that was not quick enough; he wanted that target brought forward to 2012. She then talked about how they were going to do it. I spoke to her afterwards and I asked, 'But is that achievable?', and she thought it a very strange question. She thought the question should be, 'How are you going to achieve it?', and that is the question that they had addressed. I would therefore encourage the Government to forget its 'Can we make it?' approach. We are about to have a binding target imposed, so let us now focus on how to achieve it at the lowest cost and as quickly and as safely as possible.

[206] **Brynle Williams:** We have spent some minutes on the issue of wind turbines and the fact that demand is outstripping production, but are we looking at enough of a mix in Wales or at other alternatives? If we cannot get the turbines, we will have to look for an alternative to meet the target date of 2020.

[207] **Mr Wolfe:** We would certainly encourage you to diversify your technology

portfolios very broadly in any case, irrespective of the wind turbine issue. It is better for energy security and for policy security to have a more diverse approach to technologies. Yes, wind is certainly the fastest-growing bulk renewable energy technology at the moment, and it is likely to be so for the next decade or so, but you do not want to be missing opportunities in solar energy in particular, in which Wales has quite a strong manufacturing base, which would mean a double benefit. You do not want to be missing opportunities in thermal technologies such as heat pumps and solar heating, and nor do you want to be missing opportunities in hydro, where there is quite a lot of additional small-scale capacity still available, although not very much large-scale hydro capacity is available. Obviously, there is a whole range of biomass and bioenergy technologies. I would therefore encourage you to adopt as broad a portfolio of technologies as you can.

[208] **Brynle Williams:** It is interesting that Portugal has just opened a wave farm, given that the technology exists here in the UK, in Scotland.

[209] **Mr Wolfe:** Exactly so. In the early days of the wind industry, the UK was the top nation. We had the most advanced wind devices and what have you. Once the market started to take off, we did not adopt the right policies to encourage commercialisation of that technology, and we lost our wind industry. There is a real danger that we will lose our wave and tidal industry in the same way if we do not adopt more commercialisation-friendly policies.

[210] **Darren Millar:** Exploring the issue of the renewable energy mix, I agree that it needs to be as broad as possible and that we need to look at all the technologies out there.

10.40 a.m.

[211] The renewable energy route map that was produced by the Welsh Assembly Government identifies the sort of mix that it would like to see, with some clear targets across the range of technologies. Do you think that it is an appropriate mix or do you think that it is over-reliant on certain technologies? Would you like to see it changed in any way, shape or form? Perhaps Philip and then Tim could respond to that.

[212] **Mr Wolfe:** I suspect that my response on this may differ from Tim's. Although we think that it is useful to have a view on how the mix might develop, we would not encourage you to be particularly prescriptive and to set sub-targets for each technology. We think that that is likely to be too inflexible, bearing in mind that some technologies are relatively mature and others are at a much earlier stage and that there will be new developments emerging that your route map will not have envisaged.

[213] On the balance of the existing route map, my earlier answer may have covered it. We would like to see a more aggressively diverse portfolio and not purely a focus on the more obvious and dominant technologies. We would like to see a broader range of bio-energy technologies being considered—we would like to think that hydro will not be forgotten and so on. We would like an approach that considers a wide range of possible contributors, but does not get too prescriptive about how much each should deliver, and tries to set a framework within which they are all encouraged. Some will not make it, some will fail to deliver at an economic price to the right timescale, but others will surprise you by doing far more than you expected. If you have the right sort of encouragement for each of the technologies, they can then prove themselves, or fail to do so, on their own merits.

[214] **Mr Rotheray:** On the overall mix, the question is slightly outside the Micropower Council's remit. The advantage of micropower is that you can choose the right technology for the right environment. If you have a building with a north-facing roof, do not put a photovoltaic panel on it, especially if there is a load of wind as well. We say that the most

important thing is to use the right technology for the right location. At the same time, different technologies have different capital costs and so on, so you cannot be prescriptive about everything and say, for example, 'Microgeneration technologies get two ROCs.' That is fine, but a micro-wind turbine costs a lot less than a PV solar panel, so there has to be some degree of awareness of the differences and the different contributions that they can make. A diverse energy source is also important for contributing to the security of supply, as well as a principle of using the best technology in the best place.

[215] The other thing that I would say is that, in the route map, renewables account for a very small percentage of the total 33 TWh grand-scale prediction. However, within that, it is very important to notice that if you successfully engage the public so that they realise that it takes a certain number of hours of their wind turbine operating to boil a kettle or to run whatever it may be, that engagement will logically lead to a reduction in demand and so the terawatt hour requirement will fall. Therefore, the overall contribution of microgeneration actually grows as a percentage of what you need. I think that there is a real potential there.

[216] **Darren Millar:** Are you happy or dissatisfied with the current emphasis or lack of emphasis on microgeneration in the renewable energy route map?

[217] **Mr Rotheray:** Microgeneration is one of the best areas where Wales has devolved power. I think that an increase in commitment to microgeneration would be welcome, because viewing it purely in electrical terms, compared with some other things, might underplay its potential value. So, we would welcome an increased commitment.

[218] **Darren Millar:** I will explore the issue of targets a little more, particularly with Philip in terms of the broad range of targets that have been set. Tim referred earlier to the need for legally binding targets, which I support, but how should those targets apply? You mentioned the fact that technologies develop and that some may come on-stream much more quickly than others, and that therefore you should perhaps be more flexible in terms of the types of technology that can be used. However, as a committee, we have explored sectoral targets across transport, domestic carbon reduction and some other areas. Is it useful to have targets in those areas, or is it too prescriptive? Should you jump on every opportunity going to secure an increased take-up of renewable energy?

[219] We discussed earlier local objections to renewable technologies through the planning system; would it be better to give local authorities a specific target to produce a certain amount of renewable energy, and it would be up to them locally in their communities to decide how they would achieve that target, which technology they might take up and what is best suited to their needs?

[220] **Mr Wolfe:** Those are two relatively complex questions. I am delighted to hear that when you think of drilling down to lower level targets, you are looking at the prospect of doing it by sector. If one were to do it, that would be far and away the best way to do so, and I hope that you can persuade your equivalents in Westminster to take that type of approach. Part of our submission about the broader policy portfolio is about the need to address sectors that have historically not been brought into the energy mix, the built environment sector being an obvious example.

[221] The word 'microgeneration' is sometimes unhelpful in this respect. If one looks at decentralised energy—in other words, applications that are not bulk energy production for the purposes of selling it but are energy produced primarily for own use but with the prospect of selling some—that obviously includes microgeneration as we understand it for consumers, but it also includes many other applications, such as commercial applications, energy in supermarkets, on farms and so on. An enlightened approach to that may lead to target-setting

within such sectors, which would be constructive.

[222] I would not encourage that to be done on a technology-by-technology basis, but suggesting that x per cent of energy in non-residential commercial buildings should come from renewables would enable Marks and Spencer—with whom you have just spoken—to engage positively with that, as it is already doing. It is also interested in renewables for biodigestion on farms through its supply sources, so it is interested in shipping its waste back to its farming suppliers for them to reprocess through anaerobic digestion on the farm. They could perhaps use the output energy for heating if they operate a dairy, for example, or they could use the heat locally. Failing that, the biomethane could even be fed back into the gas grid and used elsewhere for renewable heat or renewable CHP generation, or it could be compressed and used for transport fuel.

[223] So many of these types of ancillary decentralised applications have been ignored by previous policy. The sector-based approach that you are talking about could be an incentive and it could bring quite a large benefit that no-one has focused on in the past. If you are going to break down targets regionally, it can get to the law of diminishing returns. I have heard of instances where local authorities have turned down planning applications because they have already met their target. If it gets to that stage, it is counter-productive.

10.50 a.m.

[224] Each local authority should give serious consideration to, and have a plan for, how much they would expect to happen in their region. By encapsulating it as a fixed or binding target, there is a real danger of moving into the area of being counter-productive rather than productive.

[225] **Darren Millar:** What if there is an incentive, in some way shape or form, for a local authority not just to meet its target but to exceed it?

[226] **Mr Wolfe:** Some tradability between local authorities could overcome it.

[227] **Darren Millar:** So, you would have some local authorities steaming ahead and perhaps trading with other local authorities because of that. Tim, you mentioned legally binding targets earlier; why do you favour legally binding targets and how do you think that they could be enforced?

[228] **Mr Rotheray:** Legally binding targets mean two things. They mean that you must have a reporting mechanism, so that you know what you are doing. In addition, there is the way that they are enforced. As we saw with the UK Government's child poverty targets, where the UK Government was taken to court over failing to meet them, which was highly embarrassing, it was then up to the court to assess the best thing to be done. The principal advantage of legally binding targets is the fact that they make things happen. Without legally binding targets, you end up with what are described as aspirational targets, ways are found to reduce them, and, all of a sudden, what looked like a fantastic headline yields very little 10 years down the road, so you do not make progress.

[229] **Darren Millar:** How do you think that they should be enforced? What sort of penalties should there be?

[230] **Mr Rotheray:** If you have legally binding targets that are enforced by law, you will inevitably get a prosecution for failure to meet those targets, and then it is up to the court to decide the best way to enforce that. It is for the court to decide what is appropriate, as happens with other corporate failures and so on.

[231] **Mick Bates:** We have three more issues to be raised.

[232] **Leanne Wood:** What particular strengths do you think that we have in Wales that could be exploited further, and how can we take advantage of those strengths?

[233] **Mr Rotheray:** As I have already said, the powers on small-scale generation can be exploited and should be exploited by Wales. Wales's advantage is that it can respond more rapidly than a cumbersome Westminster Government and make quick changes. The Welsh Assembly Government has control over planning, so we suggested, for example, implementing a Merton-style rule of 20 per cent of renewables. That is the kind of target that does not end up with slightly odd balances, Wales can decide how it will do it, but that is how it is done, or Wales can go for a certain code level on all new homes if the 2011 target will be missed. Those are the kinds of things that can be done by taking what powers are available and using them. A classic example is what happened with the former London mayor. When he was elected, people did not realise how much could be done. The powers that he used surprised people, who were surprised at how much could be done within that position. Wales has the same opportunity; it is a question of strong leadership and setting out how things will go forward.

[234] **Mr Wolfe:** I agree with Tim on issues such as the Merton rule, and I would further advise that, if you are going to set a Merton rule, you should signal the progress that is needed for the future. Do not just say that it will be 20 per cent forever after, but that it will rise to 25 per cent, 30 per cent and so on to a visible timescale, so that property developers can get themselves prepared for that.

[235] There are a few other technology areas where Wales has a particular potential. I mention, for example, solar energy where you have quite a strong manufacturing base and some of the leading companies in the sector. Therefore, you could help to develop those. There is quite a lot of potential for tidal power, in particular, either through barrages or lagoons, around the Welsh coast and more exploitable potential for small and medium scale hydro.

[236] **Lorraine Barrett:** I am looking at the payback time for renewable technologies and I think that it is fair to say that it is perceived by many people as unviable in economic terms, particularly with microgeneration. What can be done to change that perception that it will take so long to get something back from it, and to encourage more use of renewables?

[237] **Mr Rotheray:** The 'Element Energy' report, which was commissioned by the Department for Business, Enterprise and Regulatory Reform and published earlier this year, highlighted the capital cost issue and so forth. The report noted a very important difference between the way in which big utility companies and individuals think about investment. Therefore, the concept of payback time is possibly inappropriate. If you are building a big, centralised power system the company thinks in terms of payback times and it can also leverage the capital in order to start it, but individuals cannot do that, and they think, 'This electricity, heat or whatever is cheaper now than investing even if, in the long term, I will save money'. I think that the whole payback concept is a problem, because of the fundamentally different ways in which these two groups think about things.

[238] In terms of combating the actual issue that people obviously have to pay—even the cheapest micro, gas or combined heat and power systems are still more expensive than the equivalent boiler—we have identified the need, as did the 'Element Energy' report, for front-loading of any kind of incentive, such as a feed-in tariff. Therefore, the payback time for the consumer needs to happen within three to five years. If they get payback within three to five years, they will do it. On that basis, by 2020, the United Kingdom as a whole could have between 2 million and 3 million microgeneration installations. However, that capital barrier is

an issue.

[239] As Philip has already mentioned, the actual cost of current electricity generation is not included; you do not include carbon. A huge amount of public funding went into things like building the grid, but then you are asking the consumer to install and completely pay for the whole thing. So, in that sense, they are not particularly comparable.

[240] **Mr Wolfe:** As Tim says, that is actually not how most consumers work but, for those who are doing the calculation, the numbers are improving all of the time. I run my house on renewables, as I suppose you would expect, and when I had the system installed late last year and early this year, I reckoned that the payback time looked like around 15 years. As energy prices have gone up, it is now down to below 10 years and moving the right way all the time. I am feeling very smug about it.

[241] I have another suggestion—we might send you a paper on this—on overcoming the upfront capital costs, which is the fundamental issue, based on an approach that is now being adopted in Kirklees Metropolitan Council where the council is offering what equates to a green mortgage effectively. It is offered by the council to the person who is installing the system, to cover the upfront capital cost, for which the council takes a charge on the property that it expects to be paid back when the property is sold on. In that way, the user is not actually facing upfront capital costs; he is probably getting a benefit, because there is anecdotal evidence to suggest that installing this equipment in your house increases its value, so he will probably get it back when he sells the house.

11.00 a.m.

[242] Just by providing this capital funding on a rotating basis, Kirklees has incentivised several hundred systems. That is potentially a model that could be rolled out in Wales. It is the kind of model that the European Investment Bank, for example, is interested in providing funding to support, if there is the right kind of local support for it. So, there may be opportunities for a Welsh approach on that basis, which would overcome the initial capital funding issue.

[243] **Mick Bates:** The point about the green mortgage and the European bank is interesting. Do you have any further work on that or an example of where the European bank is working in an area to put forward funds for green mortgages?

[244] **Mr Wolfe:** There is a paper that we could send you on that.

[245] **Mick Bates:** Thank you; that would be useful.

[246] **Lorraine Barrett:** Do you consider that the Energy Saving Trust would be the most appropriate body for providing consumers with independent advice about microgeneration?

[247] **Mr Rotheray:** Yes, we think so, because it is a well-known brand and that is helpful. It receives no funding currently for that; it is funded entirely by the Department for Environment, Food and Rural Affairs, so it has a bent towards energy saving and demand reduction. That is good, but we think that there should be additional funding for microgeneration, which can be seen as a logical step in that progression.

[248] **Mick Bates:** Does the Micropower Council undertake any publicity to encourage people to install micropower?

[249] **Mr Rotheray:** No, we do not undertake any publicity. We are working between the industry and Government in getting information out there. We are doing things, such as

campaigning on micropower development, and so forth, and permitted development for microgeneration, but we do not have a direct consumer interface.

[250] **Mr Wolfe:** We have a consumer interface; we operate, or, at least, we set up, something called the renewable energy assurance scheme, which is a code of conduct for installers of microgeneration equipment of all types. That scheme gives the consumer the comfort that he is dealing with a reputable company and the scheme is intended to squeeze the cowboys out of the market, to ensure that this relatively young industry grows up with a fairly solid foundation of good and reliable installers and products. That scheme has had a very rapid take-up and was accredited by the Office of Fair Trading last autumn; since then, we have had more than 300 installers accredited under that scheme, including a large number of installers who cover the Welsh market.

[251] **Mick Bates:** We have two final issues. I have always been fond of any process that offers incentives to people, for example, to install micropower, and here we have renewables obligation certificates. However, in many parts of the world, there are feed-in tariffs. What are your views on feed-in tariffs? Are they a better way of incentivising the installation of micropower? I am looking at Tim to answer first and then, possibly, Philip.

[252] **Mr Rotheray:** Energy markets in different countries are extremely different; for example, France's is a state-owned system and the UK's is competitive. So, differences between the markets mean that feed-in tariff systems, or whatever system, need to work with the system that is in place. For example, the German system was designed to make Germany a leader in photovoltaic technology and that was the reason behind its feed-in tariff.

[253] The most important thing in how a feed-in tariff should work is that it must be adequate and cover the cost, which is the biggest concern in the UK. Another concern that we have highlighted is that the running of whatever scheme that is in place, and the way that it is executed, must not eat up the money that the consumer would eventually receive. The consumer must get the money that is allocated for that scheme. We would also advocate one simple scheme for consumers—for example, if they are putting in photovoltaic technology—because there might be different schemes for different technologies, in terms of the way that they are executed, but, if possible, there should be one simple interface for heat and electricity, because heat is also important to sustainable low-carbon or zero-carbon energy.

[254] **Mick Bates:** Would a feed-in tariff in Britain encourage more micropower as opposed to ROCs?

[255] **Mr Rotheray:** Renewables obligation certificates do not currently encourage micropower, and a feed-in tariff could, if it was adequate. This needs to be backed up with a policy framework, and, as the Element Energy report states, microgeneration targets should be set for things such as the number of installations. If the industry knows how many installations are to be done, that will release the funding for this to accelerate. The level of support required can decline over time because, as the industry grows, the cost will fall. So, yes, a feed-in tariff could encourage more micropower, provided it is adequate—that is the key. This upfront, three to five-year payback is absolutely vital.

[256] **Mick Bates:** Have you anything to add to that?

[257] **Mr Wolfe:** Yes, we are great supporters of a feed-in tariff, although not to replace ROCs. The ROC mechanism was designed for bulk centralised electricity, and that is the market that incentivises. It is now being bent to try to make it suit micropower, and, fundamentally, it does not—it is far too complicated, and the transaction costs are far too high. To install a tariff mechanism alongside the renewables obligation is entirely possible, we think, and we have helped Members of Parliament and Members of the House of Lords in



drafting an amendment to the current Energy Bill to implement a tariff that would do exactly that, as well as encouraging heat production, as Tim rightly says. Strictly speaking, it would not therefore be a feed-in tariff, because of course you do not feed in heat; it would be a production tariff, so that every kWh of electricity or heat produced would receive the tariff. That amendment is due to be debated in the House of Lords next month, and although it was rejected in the House of Commons last time around, it was rejected by a relatively small majority, and with a lot of rebels on the Labour side. The indications are that it is likely to go through in the House of Lords, so there is a reasonably strong chance that DBERR will eventually decide to embrace it and implement the enabling powers for a tariff.

[258] **Mick Bates:** So, it is called a production tariff?

[259] **Mr Wolfe:** We just call it a renewable energy tariff. 'Feed-in tariff' is a helpful term, because people understand what they think that means.

[260] **Mick Bates:** Thank you. Brynle has the final question on transmission.

[261] **Brynle Williams:** Gentlemen, 7.5 per cent of electricity was lost through transmission last year. I see that that is almost the exact amount accounted for by hydro-pumping, so we are, effectively, losing one power station. How can we ensure that energy loss is minimised, given that transmission and distribution would still be required? How can the Government ensure that issues associated with the grid infrastructure can be overcome, particularly for new installations that want to connect to it?

[262] **Mr Wolfe:** The simple answer that both of us will give to your first question, on how to minimise losses, is that you increase the level of decentralised generation. That does not avoid the grid; it just means that there is less power flowing around it on the whole and there is a more sophisticated, more intelligent use of power flows within the system, so the grid stops being a largely passive cobweb that distributes power from centralised generation to users at the end of the line. It would be far more interactive, because there would be generation at far more points on the grid. However, the overall energy flows through the grid would be lower, and therefore the losses would be lower.

[263] On the issue of how to stop the grid becoming a barrier to connecting new capacity, I must say that, under the present regulatory regime, that is difficult. It is difficult for the network companies to take a strategic approach to installing the grid where they know that it will be needed in the future. The regulatory and compensation regime under which they operate means that they can increase their infrastructure only when there is a proven need, so they cannot take a strategic view on what they need to install in the future. Again, there is a huge contrast with California, where, having established the renewable energy target, people there looked at a map of California and identified where there would be, for example, windfarms and solar power sources, and extended the grid to those places so that it was ready for the new projects to connect. It is inconceivable that that could happen under the UK's regulatory model. We need to change the regulatory approach to enable the network companies to take a far more strategic and futuristic approach to the location of their grids and the way in which they manage them.

11.10 a.m.

[264] **Brynle Williams:** I would like to ask a simple question on that. It may be a ridiculous question. When we are developing the new power stations that we will have to build, is there merit in building them closer to centres of population to cut down on transmission losses, or is it the case that we would have to transmit from London across to Wylfa or Dinorwig, for example?

[265] **Mick Bates:** You should ask EDF.

[266] **Mr Wolfe:** There is great benefit in taking a more enlightened approach. In particular, if you have large-scale thermal power generation out in the middle of the countryside—and you talked about the 7 per cent that is lost in transmission—you will lose 60 per cent up the cooling towers in waste heat. There is, therefore, a huge benefit to saying that, rather than having a few large, remote power stations, there should be a smaller number of combined heat and power stations closer to centres of population, where you can use the heat and reduce transmission losses. Capital costs may be marginally higher in that case, because a very big station is cheaper pro rata than two or three smaller ones, but the benefits in terms of energy efficiency will be monumental.

[267] **Mick Bates:** Tim, would you like to respond to that?

[268] **Mr Rotheray:** We would agree absolutely. In terms of decentralised energy and microgeneration, that is the absolute key. The other thing is to facilitate microgeneration connection. Barriers such as having to contact many different organisations, and its being a slow process, are a problem.

[269] **Mick Bates:** That draws this part of the agenda to a close. I thank you both for your interesting views and I look forward to receiving the papers about the investment that you mentioned, Philip. It has given us a good strategic background for the large-scale stuff and also for the micro scale, both of which need to play an increasing role in the development of energy policy in Wales. So, thank you both very much. Copies of the transcript will be sent to you.

11.12 a.m.

### **Papurau i'w Nodi Papers to Note**

[270] **Mick Bates:** I will run through the papers to note, because it is important that all Members are aware of them. The report on the Dublin visit is extremely important for Members to note, as is the important letter from Welsh Power regarding biomass, which is about categorisation and how assistance can be given to companies that would pick up more renewables obligation certificates. The letter contains an important chart, which explains how the categorisation is very important where co-firing is taking place. Another excellent paper—if Members get the time to look at it—is the WWF paper on carbon capture and storage.

[271] **Darren Millar:** It is difficult to read it in black and white.

[272] **Mick Bates:** It is. There are many charts, but the keys are not that bad.

[273] Then, there is the Association of Electricity Producers' supplementary submission on carbon reduction. Finally, I want to draw your attention to the Minister's response to the report on fuel poverty.

[274] **Darren Millar:** It is a little disappointing.

[275] **Mick Bates:** It is, in a way. I will respond to the Minister; if anyone has any comments, please send them to me. Are there any points that people want to make on the recommendations?

[276] **Darren Millar:** I was particularly disappointed with the response to recommendation

8, which was to reject bringing forward the review of the home energy efficiency scheme. The Assembly Government has committed itself to looking at this as part of the bigger picture by the end of March next year, to implement from April onwards, but that will not offer any assistance to those in fuel poverty this winter.

[277] **Mick Bates:** I accept that point.

[278] **Darren Millar:** I think that we need to press the point that we are dissatisfied with this response.

[279] **Mick Bates:** That can be done in the debate that I will be asking for on this report. I would also like to write again to the energy companies to invite them back for further scrutiny.

[280] **Darren Millar:** Absolutely.

[281] **Mick Bates:** Many things have happened since they were here, so we need an update. Are Members willing for that to take place? I see that you are.

[282] The next meeting will be held at 9 a.m. on Thursday, 9 October. Thank you for your attendance.

*Daeth y cyfarfod i ben am 11.15 a.m.  
The meeting ended at 11.15 a.m.*