



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

**Y Pwyllgor Cynaliadwyedd  
The Sustainability Committee**

**Dydd Iau, 8 Mai 2008  
Thursday, 8 May 2008**

**Cynnwys**  
**Contents**

- 3 Cyflwyniad, Ymddiheuriadau a Dirprwyon  
Introduction, Apologies and Substitutions
- 4 Ymchwiliad i Leihau Allyriadau Carbon yng Nghymru: Sesiwn Dystiolaeth ar  
Ddiwydiant a Chyrff Cyhoeddus  
Inquiry into Carbon Reduction in Wales: Evidence Session on Industry and Public  
Bodies

Cofnodir y trafodion hyn yn yr iaith y llefarwyd hwy 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
Michael German	Democratiaid Rhyddfrydol Cymru (Cadeirydd Dros Dro y Pwyllgor) Welsh Liberal Democrats (Temporary Committee Chair)
Lesley Griffiths	Llafur Labour
Brynle Williams	Ceidwadwyr Cymreig Welsh Conservatives
Leanne Wood	Plaid Cymru The Party of Wales

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

Rob Green	Ystadau Strategol, Cyngor Sir Caerdydd Strategic Estates, Cardiff County Council
Dr Andy Johnston	Pennaeth y Ganolfan Cynaliadwyedd Lleol, Uned Gwybodaeth Llywodraeth Leol Head of Centre for Local Sustainability, Local Government Information Unit
David Mundow	Yr Is-adran Rheoli Ynni, Cyngor Sir Caerdydd Energy Management Division, Cardiff County Council
Steven Phillips	Cyfarwyddwr Corfforaethol, Amgylchedd, Cyngor Sir Caerdydd Corporate Director, Environment, Cardiff County Council

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

Joanne Clinton	Dirprwy Glerc Deputy Clerk
Dr Virginia Hawkins	Clerc Clerk

*Dechreuodd y cyfarfod am 1.00 p.m.*

*The meeting began at 1.00 p.m.*

**Cyflwyniad, Ymddiheuriadau a Dirprwyon**  
**Introduction, Apologies and Substitutions**

[1] **Michael German:** Welcome to this meeting of the Sustainability Committee. I will begin by explaining how Senedd.tv works. When a committee meeting is due to start, the television coverage starts, so we are on air now. However, if we have not formally started the meeting, it will be shown as vision only, without the sound. That may be of interest to you.

[2] This is the last evidence session on the industry and public bodies section of our inquiry into carbon reduction. We have two sets of witnesses today, who may or may not come in together; I hope that they will come together, as that would be helpful.

[3] In the event of a fire alarm, you should leave the room by the fire exits and follow the instructions from the ushers and the staff. There is no fire alarm test forecasted for today, so we are all safe. If there is an alarm, it is a real one. Please ensure that all your electronic devices are switched off, as they interfere with the broadcasting equipment.

[4] The Assembly operates through the media of the Welsh and English languages. You have headphones in front of you if you wish to hear the instantaneous translation; they can also be used to amplify sound. Interpretation is on channel 1, and amplified sound is on channel 0. Please do not touch any buttons on the microphones—apparently there is a magic lantern man behind me who will switch them on without you even blinking.

1.02 p.m.

**Ymchwiliad i Leihau Allyriadau Carbon yng Nghymru: Sesiwn Dystiolaeth ar  
Ddiwydiant a Chyrff Cyhoeddus  
Inquiry into Carbon Reduction in Wales: Evidence Session on Industry and  
Public Bodies**

[5] **Michael German:** As I said earlier, this is our last evidence session on the industry and public bodies section of our inquiry into carbon reduction. The committee will be scrutinising the Deputy First Minister and Minister for the Economy and Transport on all the evidence that we have received at our next meeting on this issue, which is on 18 June.

[6] Today, we have Dr Johnston with us from the Local Government Information Unit—he is the head of the centre for local sustainability. I have asked Dr Johnston to outline his paper to us in a few minutes, before committee members ask him questions. You are very welcome, Dr Johnston.

[7] **Dr Johnston:** Thank you. I will start by introducing the Local Government Information Unit and myself, then give a quick overview of the written responses that I have given to your questions, and finally an update on where things have moved on since then.

[8] The LGIU is a membership-based organisation made up of local government across England and Wales. We are organised along four centres of excellence—service transformation, children’s services, local democracy and the one that I head up, namely local sustainability, which is a relatively new piece of work for the LGIU. I have been with LGIU for five months now, having previously been at the sustainable development charity, Forum for the Future, as its head of education and learning. The emphasis of our work is inevitably on climate change—that is where most of our activity is—but we have a broad, local sustainability brief, and we are interested in engaging in all sorts of elements, including planning, housing, transport, and so on.

[9] On the written responses that I have given to your questions, question 3 asks about the challenges that Wales faces. In response, I mentioned information, baselining, and so on, and a skills gap. I would probably add to that new dimensions to the skills gap, which are around managing risk and uncertainty, and also the finances of carbon management, which are becoming increasingly important.

[10] Question 4 was about economic development policies. The response that I gave to that question was on new ways of looking at economic development, this idea of greening growth and internalising environmental costs and recognising that the environment has economic costs and benefits that can form part of an economic regeneration strategy. I would add to that work that we have been doing in Westminster around trying to persuade Government that the adaptation agenda also has an economic development dimension to it.

There will be business opportunities coming out of adaptation to climate change and we are lobbying for people to recognise that, so that we can have some sort of positive response to the 2 degrees C rise.

[11] On the final question about the carbon reduction commitment, there has been an update on the commitment, which I am sure that you are going to ask me some questions on. Also, the carbon trading council scheme, which I mention here, has now been launched. At the end of this week, we should have our first baseline and be able to set the cap for that.

[12] On where I think that things have moved on recently and continue to move on, I have already mentioned adaptation and I think that that will become an increasingly important part of this debate. It will not just be a mitigation discussion; there has to be a bit of both. Also, what I am hearing from Westminster—I would be interested to know what the discussion has been here—is that the target of an 80 per cent reduction by 2050 is viewed as almost inevitable now. The view is that Adair Turner's committee will recommend an 80 per cent target and you can understand that that changes things dramatically in terms of the mindset that you have to bring to the challenges around this.

[13] The final point, which is a little bit out there, is that, in my view, there will be significant change as a result of what happens in the United States after November. There are three candidates, all of whom now recognise the importance of climate change and that is bound to have an effect on the global market for carbon, if nothing else.

[14] **Michael German:** Thank you for that introduction. Leanne is going to start with some questions for you.

[15] **Leanne Wood:** You say in your paper that the Local Government Information Unit would argue that local authorities have a unique role to play in terms of sustainability. Can you outline the role that Welsh local authorities play in sustainability, with specific reference to carbon emissions?

[16] **Dr Johnston:** I cannot give Welsh examples, but I will generalise on local authority work. I see local authorities as being a key broker in carbon management. There is an organisational-based strategy—the carbon reduction commitment—but, of necessity, I think that there will also be a geographically based strategy and that is where local authorities become key players, showing leadership within their particular areas, bringing together different players and so on. Reverting to a point that I have made in another section, there is a massive skills gap around reducing carbon emissions and, inevitably, there will be organisations, both private and public, that will not be able to manage this agenda on their own. They will have to collaborate and the local authority would be a good place for those organisations to come together, to work together, to address the problem.

[17] **Leanne Wood:** You mentioned that local authorities face a number of key challenges and you have already mentioned measuring the baseline and developing skills. What progress has been made so far in Wales in acting on the solutions that you have identified?

[18] **Dr Johnston:** The main thrust of the work that I have been doing has been around the carbon trading side of things. On the whole, it has not been as good as I would have liked. Cardiff County Council is a member of the carbon trading council scheme, but no other Welsh authority is a member, despite being invited to join. We know that there is good stuff going on in Carmarthenshire, Ceredigion and other parts of Wales, but we are unable to engage at that strategic level. There are the usual suspects—enthusiastic individuals within local government—but it is not getting to leaders and chief executives as an agenda that they must address.

[19] **Leanne Wood:** That leads on to my final question. I was going to ask if local authorities in Wales are demonstrating the necessary leadership to tackle carbon emissions effectively.

[20] **Dr Johnston:** From where I am sitting, with the notable exception of Cardiff and a few isolated local examples, I would have to say 'no'.

[21] **Lesley Griffiths:** You mention in your paper that the existing economic development policies of the Welsh Assembly Government predate the growing sense of clarity as to the importance of these issues, and you mentioned that there should be new ways of looking at them and the environmental and economic costs and benefits. What do you think the consequences would be of continuing with our present economic development policies?

1.10 p.m.

[22] **Dr Johnston:** I think that you would inevitably begin to get skewed decisions. I am not sure whether this applies in Wales, but, in England, we now have something called the 'shadow price of carbon', which has to be factored into all policy decisions. That shadow price of carbon is not based on carbon trading, but on a projection in the Stern report, and it has a value of £25.50 per tonne. The idea is that every part of the public sector factors that cost into its decision making. That is a relatively arbitrary number and it is very early days; no-one knows how that will be applied. However, you can begin to see that a price of £25.50 a tonne should fundamentally change some decisions made by the public sector, and so the potential for changing policy is quite significant.

[23] **Lesley Griffiths:** You also mentioned that the Assembly Government must engage the contribution, expertise and experience of local authorities in that work. Do you think that it has done that enough or do you think that it needs to do more?

[24] **Dr Johnston:** It certainly needs to do more. I would not be as harsh as I have been on the general issue, because I think that everyone is on a steep learning curve in factoring environmental and energy costs into economic decision-making. We are all at the beginning of this and the local authority, particularly in the local economic development function, is probably not aware of its significance, and no-one else is either. So, there is a requirement to make people generally aware to start off with, before you give them help on factoring this into decision-making.

[25] **Brynle Williams:** How will continuous economic growth fit with environmental sustainability?

[26] **Dr Johnston:** Inevitably, it has to. You could turn the question on its head and ask whether it is possible to have an improved environment unless that is achieved hand in hand with some sort of economic development. Looking at this from the other end of the telescope, you must ask who will pay for the improvements to the environment, who will innovate the new products and services that will be required, and so on? We will not get the environmental improvements that we want unless we can channel the private sector into helping us to find solutions. So, they are inevitably locked together as a joint project.

[27] **Brynle Williams:** How will we increase environmental sustainability in light of the downward pressure on generating more food, which has become high on the agenda, particularly this last fortnight? I am curious to know, as a farmer, how we will square the circle of protecting the environment, which we all know we have to do, with generating more food. Ultimately, it will lead to the production of less food. There will be fewer oil-based fertilisers and lower stocking densities. There will be downward pressure once again on food production. So, I am curious as to how we can balance that. Do you have any views on that?

[28] **Dr Johnston:** That is a little outside my area, to be honest. I am afraid that farming is not my area.

[29] **Brynle Williams:** That is fair enough. Thank you.

[30] **Lorraine Barrett:** Before I come to my question, I have a supplementary to Leanne's question on leadership in councils. Do you get the feeling that, when local authorities consider carbon emissions and climate change, most of them adopt almost a silo mentality in each department rather than finding a champion to look at the issue overall in the authority?

[31] **Dr Johnston:** Some local authorities are showing leadership from the front, but they are definitely in the minority. For example, looking at the membership of carbon trading councils, our launch at the House of Commons was quite high-profile for such an event, but only four local authority leaders turned up, so we have some way to go. More MPs turned up than did council leaders.

[32] **Lorraine Barrett:** Perhaps they wanted to cut down on their carbon emissions by not travelling to London. [*Laughter.*]

[33] To go back to my questions, in your paper, you say that you are concerned that the constituent nations of the UK have yet to capitalise on the strengths offered by devolution and the benefits of comparing their diversity of innovation, practice and experience. In which ways are the current means of sharing information across borders insufficiently developed?

[34] **Dr Johnston:** I can speak only about the specific example of engaging with the Welsh Local Government Association. It was difficult to engage with someone in a senior position at the WLGA on this, because, by definition, it had to be to a person working on sustainability whom we spoke to. Even though there was a lot of enthusiasm—and a project was running in Wales at the time to raise awareness of the issue—you could see that there was not the strategic engagement that was required for the WLGA to reach out and to say, 'Okay, we recognise that this is an important agenda'. I had hoped that it would contact me to find out about this programme, as you have, but that has not happened.

[35] **Lorraine Barrett:** Would cross-border information sharing be useful beyond the United Kingdom?

[36] **Dr Johnston:** Absolutely. Most of the really good local examples of change are found on mainland Europe, such as the settlements in Germany or Scandinavia.

[37] **Lorraine Barrett:** Is there much of that? Is any of that going on at the moment?

[38] **Dr Johnston:** The ones that spring to mind are in Halmstad in Sweden—and I am bound to have got the pronunciation wrong. I have just had a meeting with the Town and Country Planning Association, which is running a series of tours this summer to visit eco-town pilot schemes or eco-towns that can be copied. So, they are going to Freiburg—I can pronounce that—and to a couple in Sweden, and so on. So, there are examples out there that can be visited.

[39] **Michael German:** May I just piggy-back on that question about cross-border work? You are very critical in your paper, saying that the constituent nations of the UK have not yet capitalised on the real strengths of devolution. You say that we have real opportunities with devolution that we have not really taken on board. Could you explain precisely what you mean by that?

[40] **Dr Johnston:** I meant specifically in this area rather than more generally. What I do for most of my time is work on the local government/national Government axis, trying to persuade national Government to come up with the frameworks and the resources and then to let local government get on with it. The idea is that creativity and innovation will then flourish, rather than there being a dead hand of control. The point that I am making is that devolution has handed opportunities to new Governments to be really innovative and creative and to try new stuff, and I am not yet seeing evidence of that from Wales or Scotland on the climate change agenda.

[41] **Michael German:** Can you give an example of what you would view as being a success?

[42] **Dr Johnston:** Sorry?

[43] **Michael German:** What would you view as being a success for devolution in these matters? Would it be about doing things differently?

[44] **Dr Johnston:** Yes. For example, a year ago, the Scottish adopted the target of reducing carbon emissions by 80 per cent by 2050. In a sense, they set the agenda that Whitehall is now following. The Climate Change Bill will probably include that target, which means that it will be set for Wales. So, in a sense, Wales is a little bit late on that when that need not have been the case. Wales could have innovated and said, 'Right, we are going to go for a much higher and harder target to try different ways of reducing carbon emissions that really push things'. However, as I said, I am not seeing evidence of that as yet.

[45] **Michael German:** Okay. So, that is a criticism of us, and we hope that the committee will take that on board. The first challenge that you are setting us is to be innovative. The second is that we must have more people with more skills. Thirdly, we need more capacity to deal with these issues in local government. Fourthly, we need a change of mindset, or a new disposition towards carbon reduction. How can local authorities do that?

1.20 p.m.

[46] **Dr Johnston:** First and foremost, it can be done by working together. The model that seems to be emerging from the work that we have been doing is of clubs of local authorities. In Kent, for example, they have the LASER energy-buying group, which involves local authorities in that area getting together to purchase energy in a club. The idea is that that will grow, continue and perhaps become a carbon trading club of some sort, based on shared interests. No single local authority has that skillset, so there needs to be a clubbing together and collaboration. It is a big agenda, and it should be a shared agenda. That would be my starting point.

[47] Secondly, there would need to be support from the Welsh Assembly Government or the Welsh Local Government Association to develop the skills of the individuals working in local authorities.

[48] **Michael German:** That is two hits. What would your third wish be?

[49] **Dr Johnston:** I try to make it a rule never to say 'money', but there is no harm in doing so. [*Laughter.*] It will require resources. I am not sure whether adaptation is on the agenda for this particular meeting, but, in relation to climate change, it is adaptation that will hit local authorities in the face painfully in the next three or four years. That might be in the form of all sorts of nasty weather events or particular stresses on their local environment, all of which will have significant costs associated to them, and we do not have the mechanisms



to allocate resource to cover those costs.

[50] **Michael German:** Thank you for that. It is very kind of you. It has given a snapshot at what we might need to do to match the expectations of English local authorities. Are there any other questions?

[51] **Lorraine Barrett:** I have just one point. You mentioned the Welsh Local Government Association or the Welsh Assembly Government in relation to local authorities working together on a regional basis or on an all-Wales regional basis. What do you think is the problem for local authorities in really engaging with this agenda? Even if they had all the resources that they needed, does the necessary mindset exist in local authorities? Should it be the Welsh Assembly Government or the WLGA or both that is trying to change that mindset, and leading from the front? In Wales, we try to resist ring-fencing moneys or prescribing to local authorities, but there will come a point at which something will have to be done to bring them fully on board if we are to hit that target. What are your thoughts on that?

[52] **Dr Johnston:** There are what you might call the 'usual' ways of doing things, which I outlined in my answer to the Chair's question, which relate to training people, allocating resources, and so on. However, those things can take you only so far. The introduction of carbon trading will be the catalyst that will bring about the big changes that are expected. When a carbon emission turns up on the balance sheets of local authorities and of companies, it will be a significant political and managerial issue for them. We can play around for a while with allocations and the scarce resources that we have available in Wales, but things will change only when it becomes a matter of success or failure for an organisation how well it manages its carbon.

[53] **Michael German:** May I ask for some clarification on the carbon trading scheme? Is it COT?

[54] **Dr Johnston:** That is right.

[55] **Michael German:** You have made it clear that that will become mandatory for local authorities. Is it the Department for Environment, Food and Rural Affairs that will make that mandatory for local authorities in England, or do you expect DEFRA to use reserved powers, thus making it mandatory for local authorities across England, Scotland and Wales?

[56] **Dr Johnston:** I am not sure about Scotland, but I am almost certain that it would apply to local authorities and private companies in Wales. Any organisation that breaks the threshold of 6,000 MWh per annum in England and Wales will come within the carbon reduction commitment.

[57] **Michael German:** Why would it not cover Scotland? Is it because it has a different set of regulations?

[58] **Dr Johnston:** I am just not sure about Scotland; I checked, and it definitely included Wales, but I know that Scotland is exempted from the Climate Change Bill, because it is coming up with its own and it is reserving the option to join the England and Wales version or to have its own Bill. However, I know that Wales is included in the Climate Change Bill.

[59] **Michael German:** How prepared are local authorities in Wales for that, to your knowledge?

[60] **Dr Johnston:** I can give a general answer on local authorities. We have 29 local authorities in the carbon trading councils scheme, with another 10 or so looking to join at the end of June, when there is a second chance to get involved. That is 39 local authorities

acknowledging the fact that they do not know what they are in for, and so are getting involved in a training programme. By definition, that leaves the rest of the local authorities, who probably do not know that they fall under the scheme, and are not prepared at all.

[61] **Michael German:** When is the likely date of implementation? When will it be mandatory?

[62] **Dr Johnston:** The scheme starts on 1 January 2010—or possibly 1 April, I cannot quite remember. Whether or not you are in the scheme depends upon your current electricity consumption, and next year's electricity consumption forms the baseline. In that sense, it has already started—what is happening on the ground in local government and in companies in Wales is already part of the scheme. The trading starts in 2010.

[63] **Michael German:** I see that there are no further questions from colleagues. Thank you, Dr Johnston; you are welcome to stay while we swap personnel, and the people that we have been pointing fingers at will tell us what they have done for the city of Cardiff. In the meantime, I am sorry that I did not mention that I have received apologies from Alun Davies, Alun Ffred Jones, Darren Millar and Karen Sinclair, and there are no substitutes today.

[64] Our new witness is not Andy Johnston, so perhaps we should change your name plate so that those who are watching can see who you are. I welcome Steven Phillips, the corporate director of environment at Cardiff council, Rob Green, who is the strategic estates manager, and David Mundow, from the energy management division. Steven, would you like to introduce your paper, and perhaps say a few words about what Cardiff has been up to?

[65] **Mr Phillips:** I will not go through the detail of the responses that we have given—they are in front of you. I would like to pick up two or three themes, and then give you the opportunity to quiz us as you see fit. In Cardiff, we have made a conscious decision, driven by a couple of important factors, to grip this agenda. We have embedded it in our corporate plan, and we have a carbon management strategy, which details how we will reach the 60 per cent reduction target by 2018. You can see that in response to the first question. I believe that we are essentially doing that for two reasons. The first is that local authorities—and we are the largest local authority in Wales, and the capital city—have a responsibility to grip that agenda. Secondly, it makes financial sense for us to do so. We are projecting that, by 2018, if we reach our target, we can realise significant savings of around £4.8 million. In the current financial climate, that is clearly something that we wish to strive for.

[66] This is not all about strategies, however. It needs to be about delivery as well, so that in moving to the next phase, we are working at two levels. I would describe one as the macro level, to pick up on the point that Lorraine Barrett was making during Dr Johnston's session. We are working in collaboration with other local authorities in Wales on certain projects: on waste management, for example, Cardiff is engaged on a project with Caerphilly, Monmouthshire, Newport and the Vale of Glamorgan, and we are deep in discussion with Welsh Assembly Government officials about how that project can be taken forward. At the micro level, we are looking at a number of initiatives within the council, such as introducing automated meter readings for leisure centres, particularly swimming pools, which are significant contributors to our carbon footprint.

1.30 p.m.

[67] We have done a lot of base work, establishing our baseline, and I think that the figure that we established was 45,000 tonnes per year. We know from where that footprint emanates. Roughly speaking, 40 per cent comes from schools, 20 per cent from street lighting, 10 per cent from our fleet and most of the rest from the various buildings and estates that the council operates. So, we are clear on the baseline and the strategy, and we are starting to move ahead

with some practical steps at both the macro and micro levels. I am not claiming that we have cracked it all, we certainly have not, and we have a long way to go. However, we are trying to fit and develop those strategies around the guidance and frameworks that the Welsh Assembly Government produces, the international frameworks with which we are all familiar, and the sort of thing that Dr Johnston was talking about in terms of the various schemes. That is a brief overview of our position, and we will be happy to elaborate on our answers in the paper or go wherever you will take us, Chair.

[68] **Michael German:** I hope that that will not be too far.

[69] **Lorraine Barrett:** You said that businesses in Wales are generally making good progress in reducing emissions, not least because it makes sound financial and business sense, and that public bodies are also moving the same direction. Do you think that public bodies are moving fast enough to reduce carbon emissions and how do they compare with businesses?

[70] **Mr Phillips:** I will ask David to comment as he is closer to some of those issues than I am, but my impression is that we can never move quickly enough in one sense, given the magnitude of the agenda that is ahead of us. However, we have to be realistic and balance various considerations in driving that agenda forward. In the previous session, you talked about sustainability and how it interfaces with economic development and so on. I do not think that the Welsh Assembly Government or any local authority has an interest in making its area less economically competitive. These objectives and targets of reducing the carbon footprint and making businesses more sustainable activities will take time. However, progress is being made; it may be slower and patchier than we would like, but the agenda as a whole is starting to gain a toehold—no, it is more than that, it is starting to gain a foothold.

[71] Like the council, many businesses that I talk to concede that it makes commercial and financial sense to adopt this agenda and drive it forward. One example of that in your constituency is G24 Innovations operating out of Wentloog, which is a solid and growing business that has come to Cardiff in the last 18 months. It is fully behind this agenda and it is making money out of it. There are some good drivers there. Do you want to add anything, David?

[72] **Mr Mundow:** The issue for the public sector compared with the private sector is that, once a company makes the decision to go ahead on this agenda, it can react more quickly, possibly, than a local authority, where the decision-making process can take longer. With the amount of information that we have on our baselines, it is difficult to compare at the moment. I am not sure that we have enough information to make a comparison between the two at the moment.

[73] **Lorraine Barrett:** You mentioned G24I, and I am thinking of other businesses like Paramount Office Interiors Ltd, which uses amazing, state-of-the-art technology and has a really green building. What sort of support or encouragement are you or the Government able to give or should be able to give to new businesses when they are setting out to build green buildings rather than having to use old buildings that are more difficult to refurbish and change?

[74] **Mr Phillips:** I would refer you, at least in part, to the answer that we gave to question 5 in our paper regarding the Building Research Establishment environmental assessment method standards. Again, from the council's perspective, we are trying to balance the number of competing priorities: economic development, sustainability, jobs, training and skills, and so on. So, it is not always easy to take these issues in complete isolation. However, courtesy of BREEAM and other initiatives, we have an agenda around sustainable buildings, around which I think Welsh business and Welsh public bodies are starting to coalesce. Again, there is more to be done. However, the framework is being put in place. As far as I am aware, we do

not offer any specific grants or a particular type of green building, whatever that means, as opposed to another building, but we disseminate best practice where we can, encouraging companies such as Paramount Office Interiors Ltd. All of these developments go through the planning process, which is an opportunity for the council, through its extant development framework, its new local development plan—where we will be out on deposit this year, hopefully—and, through supplementary planning guidance, to influence the shape and the content of these buildings. Would you like to add anything to that, Rob?

[75] **Mr Green:** I would like to pick up on your point about new sustainable buildings. There is a lot of focus on new development. One of the points that we have brought out is that most of our emissions come from our existing buildings. It is difficult to undertake measures to those buildings. Perhaps more emphasis should be placed on that. It is certainly something that we are trying to address in Cardiff as well as adopting new design standards, which Steven talked about: influencing new development through developments plans. We are trying to do more and to exceed the requirements of the building regulations through the adoption of new design standards.

[76] **Lorraine Barrett:** I will take the opportunity, as you are here, to raise a point about old buildings. The renewal area comes under the Vale of Glamorgan, with grant moneys provided by the Welsh Assembly Government to complement the authority's own money. Some of us feel that there may be a lost opportunity with what used to be called 'enveloping schemes', where you upgrade a group of terraced houses, in not using photovoltaic tiles and so on. Have you done any work on that? When grants are given to renew or renovate an area, perhaps these sustainable practices could be brought in rather than just putting in new doors or windows, although that does help. That money could be used in other ways to provide more sustainable houses.

[77] **Mr Phillips:** We are doing a fair amount of work in that area, mainly in the context of the Welsh quality housing standard and the drive towards achieving that by 2012. Again, it is a question of balancing priorities. The council has engaged in what I would describe as—cutting edge is the wrong phrase, but certainly sustainable models of construction, for example, in Angelina Street in Butetown. There is more that we could do, but we are trying to balance the priorities that we have in terms of reaching the Welsh quality housing standard by 2012 against the expenditure that is needed, particularly in relation to kitchens and bathrooms, to get us there. There are issues around whether or not we are following best practice, but the position is improving. I visited one of our schemes in Bryncelyn in Pentwyn not long ago. This is an example of the best practice that you are talking about, but it is expensive. Again, it is a question of balancing finite resources against policy priorities.

[78] **Mr Green:** I would like to pick up on a point that was made earlier. David knows that I will hand this over to him, because it is a favourite of his. You mentioned solar panels, which is everyone's favourite. They are very visible. However, there are far more efficient measures that we can take that are less visible and which we are focusing on in Cardiff at the moment. David can provide the detail.

1.40 p.m.

[79] **Mr Mundow:** Question 6 mentions the cost of saving 1 tonne of carbon dioxide. We have calculated that it costs about £3,000 to save 1 tonne of carbon dioxide with photovoltaic cells, but that it costs only £470 per tonne with cavity wall insulation. We have a limited amount of money to spend, so we will spend it on cavity wall insulation in schools rather than on photovoltaic cells because we can save more tonnes of carbon dioxide. You cannot see the cavity wall insulation and it is not an interesting measure, but it is much more effective. The current focus of our attention is those measures that give us the most tonnes of carbon dioxide per pound.

[80] **Brynle Williams:** That brings me exactly to question 6, which is on non-domestic carbon savings. Are there any figures to show what we are losing through light industrial units and so on? I would have thought that many of these older units on industrial estates up and down the country—not just in Cardiff—could benefit from cavity insulation. It is a shame that it appears that we do not have any grant aid for industrial units. Is there a significant saving and, if not, could there be a significant saving there, or is it solely for domestic use, for schools, hospitals, and so on?

[81] **Mr Mundow:** There would certainly be a significant saving, but, unfortunately, I cannot tell you what it would be because our figures are for the council's non-domestic estate. We do not have very many light industrial buildings in our estate although we lease a few out. From speaking to colleagues at the Carbon Trust, I know that those buildings are built without a huge amount of thought to energy efficiency standards and they are often built with no heating installed because they are usually perceived to be unheated buildings. However, once they get leased out they tend to have heating installed. These buildings are often constructed as shells that are then fitted out by whoever leases them, so that is a tricky area to tackle. They are inefficient once you start to heat them. However, if you are not heating them and you are just using them as a store they are fine. The issue is the use that they end up with after they have been leased out.

[82] **Brynle Williams:** It is a shame because there is a substantial area there for carbon saving and, with pump-priming with public money or some sort of grant, it could be endless. Thank you for your answer.

[83] **Leanne Wood:** I want to focus on the 2018 target of a 60 per cent reduction. You talked a lot about the strategies that you are putting in place. Can you tell us what procedures the council has put in place to ensure delivery against those targets and whether different directorates in the council have their own targets?

[84] **Mr Phillips:** To answer the first part of your question, we made a conscious decision not to set up too many committees because—although we are in a committee today—I am sure that you would agree that too many committees usually means many meetings and no work going on between the meetings. We have a sustainable development panel, which has been established in the council, which has, perhaps unusually, been driven by the executive members, who are part of that panel. There has been a significant interest in the number of scrutiny committees in this area—which were cross-party in the outgoing council before last week's election—for example, for obvious reasons, the environmental scrutiny committee, the economic scrutiny committee and, most interestingly, the policy review and performance scrutiny committee, which looks at the budget. So, there is purchase there. As an officer, you are quizzed—as I have been—on this sort of subject, so you know that the interest is genuine from members across the political spectrum. So we have those overarching committees or structures. I do not think that we have come up with individual service area targets, but we have a corporate target—

[85] **Mr Mundow:** We are starting to.

[86] **Mr Phillips:** Yes, but we do not have one at the moment in all service areas.

[87] **Mr Green:** In the first three months of this year, David and I approached the main property-owning service areas and talked about embedding carbon management in their business plans. It is referred to as the energy management division in the agenda. We have a division consisting of three people who were supposed to deliver this for the council, but they cannot do it all themselves. The point about approaching service areas in different departments is to try to embed carbon management in their individual business plans with

specific targets that will help achieve the overall target.

[88] **Leanne Wood:** Who is responsible for achieving the target within the council?

[89] **Mr Phillips:** We are corporately. I am a corporate director and the chief executive has signed off on the carbon management strategy. He also attends the sustainable development panel that I was talking about. The trick that we are trying to pull is to ensure that this does not get siloed, and, as Rob said, everyone has a role to play. However, the danger if you have a sustainability unit somewhere is that it is seen as that unit's job to drive this agenda forward, and an agenda of this breadth and magnitude simply would not work in that way. So the agenda requires the leadership of senior officers such as me to get into service areas and to get the fundamental message across to those who report to me, and to others—neither of these two guys report to me—that it is in everyone's interest, from a policy and financial perspective, to grasp this agenda.

[90] I would not disguise the fact that sometimes when we go into service areas, particularly in the process of trying to define targets, we end up talking to the usual suspects if we are not careful. However, as I said earlier, it is starting to gain purchase across the organisation as a whole, otherwise we would not have been in a position to credibly set the targets that we have in the carbon management strategy.

[91] **Leanne Wood:** There is a danger, is there not, that if everyone is responsible, no-one is responsible? Would you be better off having one person, a head of department, in charge of ensuring that those targets are being met, with particular sanctions to those people if they are not met? Are there any other sanctions that are in place or envisaged to be put in place if these targets are not met?

[92] **Mr Phillips:** The prospects of having a rough time in front of members in committees such as this or having to explain your feeble excuses to the chief executive are usually reasonable incentives. However, I take your point. I am the director of environmental services, so you could say that I am responsible, you could say that it is chief executive because he has taken ownership of the document, or you could say that the members should be in charge.

[93] I agree that the dangers that you outlined exist, but it is very much a corporate agenda. I have seen so many initiatives fail because they have been put in some box or other and have been forgotten. We came to a conscious decision that that was not going to happen here and, as Rob said, there are some service areas within the council that have far more property than others and there are other service areas, such as highways and waste management, that are at the front end of tackling our carbon footprint, with the waste project that I mentioned, street lighting and so on. An education and awareness job needs to be done in other service areas because they have a contribution to make to the overall strategy, but that may not be obvious to them. For example, schools, which operate at arm's length from the council, account for 40 per cent of our carbon emissions, so we need to get the message across to headteachers and boards of governors.

[94] **Leanne Wood:** What about introducing sanctions for headteachers if they do not reduce their emissions?

1.50 p.m.

[95] **Mr Phillips:** I would pass on that, but I know where you are coming from. We need to capture hearts and minds before we introduce sanctions. It may be the case that if we clearly identify a council area where the agenda is not being driven forward and not contributing to carbon reduction or the financial savings that we believe can be wrung out of

the strategy, as far as I am concerned—

[96] **Leanne Wood:** Name and shame them.

[97] **Mr Phillips:** We will go after them, yes. We will demand explanations. I might have to demand explanations of myself. For example, we are embarking on a review of the efficiency of our fleet. As part of that, I will want to know how we can make it more effective and efficient but also how we can reduce the carbon footprint from all the council vehicles that you see trundling around this part of the city and elsewhere.

[98] **Leanne Wood:** Do you think that Cardiff County Council would be in favour of having mandatory targets for all Welsh local authorities?

[99] **Mr Phillips:** I would have to ask my members; it would be their decision. Do you want to elaborate, David?

[100] **Mr Mundow:** Well, I know my opinion.

[101] **Michael German:** My pen is ready; keep going.

[102] **Mr Phillips:** There are pros and cons. We may get to the point where some sort of statutory targets will be required. Going back to the waste model, the Minister has issued a future directions policy, which prescribes recycling and composting targets. It may be that it is appropriate for councils to be given other targets or an overarching target of the sort that we have identified in our strategy. Going back to the hearts-and-minds approach, I have seen an awful lot of strategies with a sort of upfront punitive element not produce the goods or not focus on what needs to be done. It is very easy to be driven by meeting the targets rather than doing what you need to do, if you see what I mean. The members would make the decision but, in my view, it would be premature.

[103] **Leanne Wood:** Do you have separate targets in place for transport emissions?

[104] **Mr Phillips:** No, but that is part of the exercise that you are working on, David, is it not?

[105] **Mr Mundow:** Yes.

[106] **Michael German:** I would like to translate to you a little of what I asked in the previous session about the carbon trading scheme, which local authorities will now, presumably, be mandated to take part in from 2010, as we understand it from the previous contributor. Is that, in its own way, a form of stick that you would welcome?

[107] **Mr Mundow:** To clarify, that relates only to local authorities that trip the 6,000 MWh threshold, and it covers any large, non-intensive user, so it includes supermarkets and hotel chains. It certainly catches Cardiff council, but smaller authorities will not have to take part. However, for the authorities that meet that criterion, it is a mandatory scheme and we will have to report on our emissions and pay for them, so it is a big stick that will drive this on.

[108] **Michael German:** It is a sanction in its own right if you have not paid attention to it. Have you done any analysis of what the costs are? Was it £22.40 a tonne?

[109] **Mr Mundow:** I refer you to the answer to question 10. We are still not clear what the cost per tonne is going to be. At the time that we answered this, we thought that it would be between £300,000 and £600,000 a year.

[110] **Michael German:** Well, there has been a massive inflation, as you have just heard. It has now gone up to £20 per tonne or more.

[111] **Mr Mundow:** The other issue is that we calculated this on tonnes of carbon dioxide, but I think that those figures might relate to tonnes of carbon, which is different. Carbon dioxide is heavier, so we have a recalculation to do there. The important thing is that, although it is in the realms of hundreds of thousands of pounds, compared with our annual energy spend, it is a few per cent. So, in cost terms, it will have some impact, but it will not be huge. The very fact that you have to collect the information and report it using a method that can be shown, when we are audited, to be accurate will be a big driver. Having to collect and report the information will have as much of an impact—a big impact—as the cost. As we say, paying for those tonnes of carbon dioxide will have to be factored in to future projects. So, if we are putting up a new school, it will not just be about what we pay for the electricity and the gas; it will also be about those tonnes of carbon.

[112] **Brynle Williams:** ‘Wales: A Vibrant Economy’ is clear in its recognition of the need to develop a low-carbon economy. Is the Welsh Assembly Government’s recognition of carbon issues manifested appropriately in its actions?

[113] **Mr Phillips:** I would go back to my earlier point about striking a balance. Welsh Assembly Government Ministers are no different to council cabinets or executives in that they have to balance priorities. The latest economic development strategy does say what you mentioned about a low-carbon economy; it remains more of an aspiration, as do many of the initiatives that we have described on the council’s behalf this afternoon. However, I believe that the direction of travel is right. There will be difficult decisions ahead in areas related to economic development—transport is the obvious one; I have already mentioned waste, which, in a sense, is a supporter of the economy. However, that strategy is a step in the right direction; a lot more can be done, but it is about balancing these priorities of sustainability, and increasing and sustaining Wales’s economic competitiveness in an increasingly harsh economic and financial climate.

[114] **Brynle Williams:** Yes, it is very harsh. As you mention in your paper, Cardiff County Council has successfully calculated its carbon dioxide baseline, which was not previously known, and that has proved highly useful. How important has this baseline information been in enabling carbon reductions to be made?

[115] **Mr Phillips:** I will ask David to answer the question in full. However, I believe that it is vital; unless you have a baseline or a benchmark against which you can measure, you are, to an extent, waffling in the abstract. Can you add to that, David?

[116] **Michael German:** While he continues to waffle in the abstract, it is your turn, David. *[Laughter.]*

[117] **Mr Mundow:** Calculating the baseline showed clearly that most of our emissions come from our buildings estate. When the issue was raised in the past, we had thought about improving the efficiency of the vehicle fleet, which is important, but the baseline shows that 40 per cent of our emissions come from the schools estate. So, reducing emissions from schools is a key area of our achieving our target. Therefore, the baseline ensures that we are directing our efforts at the right areas, but also shows that 40 per cent of our emissions come from schools. Schools are much more autonomous than leisure centres, for example, so it will be more difficult, but it is a big area that we have to tackle. We cannot decide just to focus on our own buildings; we have to tackle the difficult issue of addressing emissions from schools as well.



[118] **Mr Green:** I will add a point, if I may, which goes back to the debate between hearts and minds and sanctions. Our baseline showed where we should be directing our efforts. Last year, David was responsible, and is still responsible, for a programme of cavity wall and loft insulation, because that is where we feel that the efficient spend is in schools. We want to demonstrate to schools that that is beneficial. If one headteacher tells another that emissions and costs go down as a result of insulation, we hope that that message spreads.

[119] **Michael German:** On that tricky issue of schools, have you engaged with children, through their curriculum, in support of carbon reduction and carbon emissions in schools? That is a direct way of getting support for what you are doing.

2.00 p.m.

[120] **Mr Phillips:** Yes, we have. We find that children, across a range of activities, are the best ambassadors for this agenda. If my kids are anything to go by, they almost embarrass you into action. For example, we had a target on the waste side, which we exceeded, of creating 200 bring sites across the city. The overwhelming majority of them are in schools. We have had various initiatives through the schools service in terms of promoting sustainability and awareness of carbon issues. A lot of it is by no means unique to Cardiff; these initiatives are going on across the country and elsewhere, but we are now getting to the point where awareness among children and young people is such that I believe that it will impact on our performance in recycling and carbon efficiency and these sorts of agendas; you will have the next generation actually wanting to do it and being enthused about doing it, rather than being like the likes of my age group, who have to be persuaded to do it. That is the most important thing. We have a number of initiatives going on in Cardiff schools: some of them are generated centrally by the council and others are the initiatives of individual schools or groups of schools. They are probably too numerous to mention here, but there is a lot going on.

[121] **Leanne Wood:** What scope is there for awareness raising continuing to make substantial carbon savings? You have talked about children in school, but what about awareness raising more widely across the general population?

[122] **Mr Phillips:** David may be better placed to describe some of the details of awareness-raising initiatives that are going on. Depending on the sector that you are talking about, there are quite a few. Organisations have been set up with either Welsh Assembly Government or local authority funding. Waste is high on my agenda at the moment. Waste Awareness Wales is a good example of that. The Carbon Trust is perhaps not a good example of a client organisation of local government or the Assembly, but it is publicly funded and supported and has been of great assistance to us in putting together the strategy. We have worked very closely with the Carbon Trust and it does awareness activities. Do you want to add any local colour, David?

[123] **Mr Mindow:** I would just like to say that awareness raising is a never-ending task; it is never finished. As a small example, only last week a colleague told me that it was not worth switching off a fluorescent light in a room because it would cost more to switch it back on. There are still people out there who believe these myths that it is cheaper to leave things running. It is a never-ending task and on a very prosaic, simple level, it is a job that is never done. It is difficult to quantify its impact.

[124] **Brynle Williams:** On that point, did I hear you say earlier that street lighting accounted for 23 per cent?

[125] **Mr Phillips:** It accounts for about 20 per cent.

[126] **Michael German:** This suite of questions came out of the question about how important it was to have a baseline. What we did not ask you was how difficult it was to get that baseline. What were the challenges in getting there?

[127] **Mr Mundow:** It was very difficult. To be honest, two chunks—street lighting and the vehicle fleet—were quite straightforward, because there is only one street lighting bill for the council, so that was very simple, and for the vehicle fleet, there are good records of fuel consumption. However, the buildings are very difficult, because it basically means collecting all the energy data for 400-odd buildings. To be honest, there are still buildings that we do not have information on, so we have had to use benchmarks and things like that. It is a very difficult and continuous task, because we have to collect that information every month, from every building, to keep monitoring our performance. That is why we are looking at things like automatic metering. At the moment, we are still relying on hundreds of people around the council to physically read meters every month. As you can imagine, you have to keep persuading them to do that and staff change and so on. So, it is very difficult.

[128] However, technology like automatic metering is going to help. That is the kind of thing that the carbon reduction commitment is going to drive. There is a huge surge of interest in automatic meter reading, because organisations are starting to become aware that you cannot continue relying on physical readings. Invoice data is very poor and a lot of it is estimated, so the automatic metering technology is going to take off in the next few years, because we must have reliable information quickly to hand.

[129] **Michael German:** So, is it smart meters for the council?

[130] **Mr Mundow:** Yes.

[131] **Brynle Williams:** Interestingly, we were over as a group in Austria three weeks ago, and were told that they had seen a 20 per cent reduction in their street lighting bill after revamping the lights. That is quite significant—I think that it was in Friburg. There were quite a few avenues there. It bugs me to see that much energy being burnt off through street lighting in areas where we do not particularly need it. I am aware that in certain areas we do, but I live in a rural area and I am certain that we do not need half of it. It contributes massively to our carbon footprint.

[132] **Michael German:** I will take that as a comment rather than asking you to answer for Brynle's local community.

[133] **Mr Phillips:** It is a comment that I agree with.

[134] **Lorraine Barrett:** I touched on my next question earlier, in regard to focusing on improving the existing building stock. Do you have anything to say about ways in which the Welsh Assembly Government could focus more on the existing building stock?

[135] **Mr Green:** It is a case of encouraging local authorities to develop design standards for their existing building stock. When a refurbishment or a change to a building takes place, they would have to meet certain targets. The building regulations already require certain standards to be met, but what we are looking for is something above that. I think that building regulations is a UK Government function and that there is a link—

[136] **Michael German:** Are you tempting us to answer that question? [*Laughter.*]

[137] **Lorraine Barrett:** Are you saying that there is a need for more regulation from the Welsh Assembly Government?

[138] **Mr Green:** There is a need for more encouragement, perhaps.

[139] **Mr Mundow:** Building on what Rob has said, there is possibly a lack of awareness about how much the current building regulations impact on refurbishment work. Rather than having new building regulations, there is possibly a need for greater enforcement of the existing regulations, so that when significant refurbishment takes place, people meet those requirements—for instance, when your heating plant goes in, you ensure that you insulate the building. There is not a great awareness of it.

[140] **Lorraine Barrett:** Would there be ways of doing this outside the building regulations, either by special grant or otherwise? We talked earlier about renewal areas, regeneration and the housing standards. Should the Government focus more on that? Would that mean more resources for local authorities, or would it mean looking at existing buildings in a different way?

[141] **Mr Phillips:** I would make a plea for realism in some policy announcements. Some ambitious programmes have been brought forward in relation to building maintenance and repair, but, in my view, they did not reflect reality on the ground. The Welsh Assembly Government, certainly in its focus on asset management plans in recent years, has done us a service, because local government has not had a good track record in maintaining accurate records of its asset base. That has improved immeasurably, but if the Assembly and local authorities were to give the impression that there are going to be carbon neutral buildings all over the place—be it schools, libraries, leisure centres—we would be doing ourselves a disservice. We cannot deliver these sunlit uplands overnight. The bill has a lot of zeros on the end. You must add that to other requirements that we have to comply with. For instance, there is the Disability Discrimination Act 2005, on which we are making some progress but not enough—again, it is a resource issue. There are also competing demands on public buildings in cities and in rural areas, where they perform different functions. You get to a point where you have to have a bit more of a realistic assessment and balance of priorities.

2.10 p.m.

[142] **Michael German:** Leanne, do you have a question?

[143] **Leanne Wood:** My question has already been answered.

[144] **Michael German:** Okay. I have just one question, which is a bit outside the loop. It is about heat distribution networks. Parts of Cardiff were linked to a heat distribution network, which was pulled out some decades ago, and now these networks are becoming much more the flavour of the month again. Do you think that we are doing enough in this area, or is it just too complex for the public sector to be able to manage in any way whatsoever?

[145] **Mr Phillips:** Getting back to waste, we are looking at facilities that involve combined heat and power. We were discussing this in the office before we came here, and my view is that it very much depends on where you are talking about, because some sites are suitable for this sort of activity and for the sort of infrastructure that you described, while other parts of the city are not suitable, and such a thing would not be economically viable and would be unsustainable. We do not have a particularly firm view on it. It is something that we are prepared to look at, but perhaps in the context of a bigger picture, such as waste management, rather than in isolation. However, I am not aware that we have done any in-depth analysis on this yet.

[146] **Michael German:** Do you think that you need more pushing? That is the point that I am making. Does there need to be a strategic sense from the Welsh Assembly Government

that more emphasis needs to be placed on this area?

[147] **Mr Phillips:** I would welcome the debate. Whether I would welcome being pushed is another matter. [*Laughter.*] As you have probably guessed by now, I am not an expert in this area. If there are best practice examples that the Welsh Assembly Government can point to, we would certainly look at them with an open mind. We are looking at the principles that you outlined in the context of the waste agenda and elsewhere. I do not think that, with this agenda, we can afford to rule anything out, certainly not at this stage.

[148] **Mr Green:** There are one or two small examples that we have looked at, and David will expand on the detail. It is a difficult area. He could, perhaps, explain connective energy at Lamby Way. We have had some interesting discussions with the university about the development of a biomass boiler for Cathays park.

[149] **Michael German:** The whole of Cathays park?

[150] **Mr Green:** For the public buildings at Cathays park. It has perhaps stalled because of a lack of funding for the feasibility study. It was a great idea, but practicalities are something else.

[151] Our experience of connective energy—we call it a project—is interesting. David, perhaps you could explain.

[152] **Mr Mundow:** Connective energy is a Carbon Trust initiative to link producers of waste heat with potential customers. Cardiff council is a producer of waste heat at Lamby Way. We also thought that there are other potential producers of waste heat that we could link to. However, we could not find a match between where the waste heat was generated and where the demand was. It is very expensive to put the infrastructure in. Where connective energy has worked, there may be two factories next to each other, one of which may need the heat and the other of which is producing it, and it is a very straightforward matter of laying a pipeline between the two. Ours tended to be one big source of waste heat and we had perhaps 12 schools in a radius of 3 km, but the infrastructure costs were just too high to implement. It has not been practical so far, but on a small scale, we are looking at combined heat and power at Lamby Way to generate electricity and to provide process heat for processes at Lamby Way. We are looking at feasibility for that, but it is all within the council.

[153] **Brynle Williams:** Going back to our visit to upper Austria, we saw fascinating localised heating plants and so on. We saw an example of three rather large villages, about three or four miles apart, all working off one wood-fired heating plant. The other thing was that it is more socially accepted over in Freiburg, where you can see small boilers heating community centres and housing in the middle of the development. When our report comes out, it will, hopefully, highlight many of these issues. That must also be the way forward over here. I appreciate that it is very expensive to install in the city and that it is a lot simpler in rural areas, where you do not have to dig up roads and so on, but it is something that we must look at very seriously.

[154] **Michael German:** I will take that as another comment to be included in the note of the meeting. I will conclude by asking a question about the future; it is almost a magic wand question. If you had one message to the policy-makers—the Welsh Assembly Government and public bodies—about what they could do in terms of carbon reduction, what would that be?

[155] **Mr Phillips:** You get the choice, David.

[156] **Mr Mundow:** I am struggling to think of a single message. I am not sure whether it

is a snappy message, but the message would be to put the focus on the buildings that we have now rather than new build. The emphasis must be on improving what we have now, because that is where the emissions are coming from. Prestige green buildings can help to raise awareness, but the big focus must be on what we have in place now and improving that.

[157] **Michael German:** I am going to ask the boys whether they want to change that message.

[158] **Mr Phillips:** No—splendid answer. [*Laughter.*]

[159] **Michael German:** On that basis, I thank Rob, Steven and David for a very useful session and for helping us to take our information forward. This report will eventually be published and laid before the Assembly. There will be a debate in the Assembly on it and the Minister will respond. We will then have another debate on the Government's response to the recommendations that we make. Thank you for your attendance this afternoon; we are most grateful.

[160] I also thank colleagues for their attendance. The next meeting will take place next week in Llanwrddin. I am sorry—we will visit Llanwrddin and the meeting is near Machynlleth.

*Daeth y cyfarfod i ben am 2.17 p.m.*  
*The meeting ended at 2.17 p.m.*