



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

**Y Pwyllgor Cynaliadwyedd
The Sustainability Committee**

**Thursday, 21 Chwefror 2008
Thursday, 21 February 2008**

Cynnwys
Contents

- 3 Cyflwyniad, Ymddiheuriadau, Dirprwyon a Datgan Buddiannau
Introduction, Apologies, Substitutions and Declarations of Interest
- 4 Ymchwiliad i Leihau Gollyngiadau Carbon yng Nghymru: Sesiwn Dystiolaeth ar
Ddiwydiant a Chyrff Cyhoeddus
Inquiry into Carbon Reduction in Wales: Evidence Session on Industry and Public
Bodies
- 32 Cynnig Trefniadol
Procedural Motion

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

Mick Bates	Democratiaid Rhyddfrydol Cymru (Cadeirydd y Pwyllgor) Welsh Liberal Democrats (Committee Chair)
Alun Davies	Llafur Labour
Alun Ffred Jones	Plaid Cymru The Party of Wales
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
Ann Beynon	Cyfarwyddwr Cymru, British Telecom Director Wales, British Telecom
Andrew Bronnert	Pennaeth Ynni, UPM Shotton Head of Energy, UPM Shotton
Valerie Ellis	Cyfarwyddwr, PennPharm Director, PennPharm
Margaret Matthews	Chair, Confederation British Industry Wales Cadeirydd, Cydffederasiwn Diwydiant Prydain yng Nghymru
David Rosser	Director, Confederation British Industry Wales Cyfarwyddwr, Cydffederasiwn Diwydiant Prydain yng Nghymru

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 9.08 a.m.
The meeting began at 9.08 a.m.

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

[1] **Mick Bates:** Good morning, everyone, and welcome to this morning's meeting of the Sustainability Committee. I will begin with the usual housekeeping announcements.

[2] In the event of a fire alarm, you should leave the room by the marked fire exits and follow the instructions of ushers and staff. No alarm test is scheduled for today. Please ensure 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 media of the

Welsh and English languages. Headphones are provided, through which the simultaneous translation may be received. For those who are hard of hearing, headsets may also be used to amplify the sound. The interpretation feed is on channel 1 and the verbatim feed is on channel 0. Please do not touch any of the buttons on the microphones, as that can disable the system—that could be useful at times. *[Laughter.]* Please ensure that the red light is showing before you speak.

[3] We have received apologies from Lesley Griffiths and Karen Sinclair, who has another meeting this morning—one of our legislation committees. Lorraine Barrett says she may be late.

9.10 a.m.

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

[4] **Mick Bates:** I thank the witnesses for the evidence that you have provided. As you know, this committee is undertaking scrutiny of the Government's actions to meet a target in 'One Wales' to reduce carbon emissions by 3 per cent. As such, this is the third part of our inquiry and we are looking at what contribution can be made by industry and public bodies. It is a great pleasure this morning to welcome the Confederation of British Industry, British Telecom and Marks and Spencer. In a moment, I will invite you, for the purpose of the record, to state your name and position in your companies and to then give the headlines of the papers that you have submitted. We have already commented on the quality of the papers this morning, which are excellent, and I am sure that they will give rise to some discussions. Members will have specific questions to you individually, or you may join in as a panel. I invite the CBI to introduce its representatives first and present its paper, then Ann Beynon from BT, and finally Mike Barry.

[5] **Ms Matthews:** I am Margaret Matthews and I am the managing director of Dow Corning and currently the chair of the Confederation of British Industry Wales. David will present the headlines of our paper.

[6] **Mr Rosser:** Good morning. I am David Rosser, the director of Confederation of British Industry Wales. Thank you for the opportunity to present written and oral evidence to you. Climate change has risen very rapidly and very far up the agenda for companies in the UK and in Wales in recent years. It has been driven by a range of issues. Rising energy prices have given every major energy user a significant incentive to tackle energy efficiency and we have given examples in our paper of companies that have invested significant sums to dramatically improve their energy performance. This has been going on for some years. It is increasingly driven by customer demand. The environmental lobby has done a tremendous job in bringing home climate change issues to the consumer in the UK and this is driving company behaviour in a very positive manner. It is now also being driven by Government regulations that are catching up with where a number of the leading companies have already got to. Many of the largest energy users in Wales are working within the European Union emissions trading scheme, are aware of where the UK Government is trying to get to with regard to targets, such as the carbon reduction commitments that are likely to come forward shortly, and are making investments accordingly. We believe that the business community has a very positive story to tell in its achievements already in helping to reduce carbon emissions and greenhouse gas emissions. There is more to be done, and we look forward to working with Government to incentivise consumers and businesses to do more.

[7] **Ms Beynon:** Ann Beynon wyf innau, cyfarwyddwraig Cymru BT. Yn fyr, mae BT wedi bod yn edrych ar faterion amgylcheddol ers rhai blynyddoedd. Yn wir, bu inni gynhyrchu ein hadroddiad cyntaf ar yr amgylchedd yn 1992, sydd gryn amser yn ôl. Ers 1996, yr ydym wedi lleihau carbon sydd wedi ei ryddhau i'r amgylchedd o 60 y cant, sy'n swm sylweddol. Nid ydym yn fodlon ar hynny, ac yr ydym yn bwriadu cyrraedd 80 y cant erbyn 2016. Mae gennym raglen weithredol ac egniol iawn ar draws y cwmni ers peth amser. Amlygir hyn gan y ffaith ein bod yn cael ein cydnabod, nid yn unig yng Nghymru ac ar lefel Brydeinig, ond ar lefel byd eang, fel cwmni sy'n ymgeisio'n galed yn y maes hwn. Profir hyn drwy'r ffaith ein bod ni, ers saith mlynedd bellach, wedi dod yn uchaf yn ein hadran o fynegai cynaliadwyedd Dow Jones.

[8] Mae achos cryf iawn dros fod yn gyfrifol o ran yr amgylchedd, ac mae manteision penodol wedi dod i BT yn sgîl hynny. Mae'n bwysig i ni wneud hynny'n glir. Ar wahân i'r ffaith ei fod yn beth iawn i'w wneud ynddo'i hunan, mae hefyd yn beth masnachol dderbyniol a manteisiol.

[9] Cyfeiriaf at rai pethau penodol yr ydym wedi eu gwneud fel cwmni. Un o'r pethau pwysicaf yw gweithio hyblyg. O'r dros 100,000 o staff sydd gennym dros y byd, mae tua 15,000 ohonynt yn gweithio gartref. Mae 70,000 o staff yn gweithio'n hyblyg—hynny yw, maent yn gweithio cyfuniad o weithio gartref ac mewn gwahanol swyddfeydd—gallant, er enghraifft, weithio mewn Starbucks neu mewn McDonald's os ydynt eisiau, achos mae'r dechnoleg yn eu caniatáu i weithredu mewn aml i sefyllfa a safle. Mae hynny'n wedi arbed £500 miliwn i BT yn flynyddol, oherwydd lleihad yng nghostau cynnal adeiladau a chostau twymo a goleuo.

[10] Mae'n golygu ein bod fel cwmni 21 y cant yn fwy effeithiol, ac yn nhermau absenoldeb o'r gweithle, dim ond 3 y cant o staff BT sy'n absennol, lle mae'r cyfartaledd ar draws y gweithlu'n gyffredinol yn 8 y cant. Felly, mae'n lleihau ynddo'i hun nifer y bobl sy'n absennol. Ar ben hynny, mae'n lleihau'r carbon a ryddheir i'r amgylchedd.

Ms Beynon: I am Ann Beynon, director of BT in Wales. Briefly, BT has been looking at environmental issues for some years. Indeed, we produced our first report on the environment in 1992, which is some time ago. Since 1996, we have reduced carbon emissions by 60 per cent, which is a significant amount. We are not content with that, and we intend to reach 80 per cent by 2016. We have an active and energetic programme across the company that has been in place for some time. That is highlighted by the fact that we are acknowledged, not only in Wales and at a UK level, but on a global level, as a company that strives hard in this area. That is proven in the fact that we have, for seven years now, come highest in our section of the Dow Jones sustainability index.

There is a strong case to be made for being environmentally responsible, and specific benefits have come to BT as a result of that. It is important to make that clear. Apart from the fact that that it is, in itself, the right thing to do, it is also commercially advantageous and acceptable.

I will refer to some specific things that we have done as a company. One of the most important things is flexible working. Of the more than 100,000 staff working for us throughout the world, some 15,000 work from home. Some 70,000 of the staff work flexibly—that is, they work a combination of working from home and in various offices—they can, for example, work in a Starbucks or in a McDonald's if they wish, because the technology allows them to operate in various situations and locations. That has saved BT some £500 million a year, due to the reduction in building maintenance costs and heating and lighting costs.

That means that we as a company are 21 per cent more efficient, and, in terms of workplace absenteeism, only 3 per cent of BT's staff are absent, whereas the average across the workforce generally runs at 8 per cent. So, it reduces in itself the number of people who are absent. In addition to that, it reduces the carbon released into the atmosphere.

[11] Peth arall yr ydym yn ei wneud yw gweithredu dros y ffôn, fel y byddech yn ei ddisgwyl. Mae 30 y cant o gyfarfodydd BT yn cael eu cynnal bellach dros y ffôn, ac nid o angenrheidrwydd drwy ddefnyddio telegyfathrebu yn unig, ond drwy ddefnyddio'r llais. Yn syfrdanol, dim ond 2 y cant o gyfarfodydd dros y diwydiant yn gyffredinol sy'n cael eu cynnal yn y fath fodd. Drwy wneud hynny, yr ydym yn arbed 97,000 tonnell o garbon yn flynyddol, ac arbedwn £140 miliwn mewn costau teithio. Ar wahân i'r gost a arbedir, mae pobl sy'n gweithio i BT yn gallu teithio llai. Felly, cânt weithio'r oriau y byddant wedi eu treulio'n teithio, sy'n fanteisiol iddynt hwy ac inni.

Something else that we do is to work over the telephone, as you would expect. Some 30 per cent of BT's meetings are now conducted over the telephone, and not necessarily by means of telecommunications only, but by using the voice. Shockingly, only 2 per cent of meetings held in the industry generally are conducted in this way. By doing that, we save some 97,000 tonnes of carbon annually, as well as savings of £140 million in travel costs. As well as the costs saved, people who work for BT are able to travel less. Therefore, they can work the hours that they otherwise would have spent travelling, which is advantageous for them and for us alike.

[12] Yr ydym yn prynu ynni gwyrdd. Mae'n cytundeb ynni gwyrdd gyda'r mwyaf yn y byd. Yr ydym hefyd yn edrych ar ffyrdd o fod yn fwy hunangynhaliol o ran ynni gwyrdd. Mae gennym raglen ar hyn o bryd lle yr ydym yn edrych ar adeiladu ffermydd gwynt, yn bennaf ar ein tir ein hun. Mae gennym eisoes felinau gwynt ar waith yng Nghernyw a gogledd yr Alban. Yr ydym yn gobeithio cael hyd at 25 y cant o'n trydan o'r ffermydd gwynt hyn erbyn 2016. Gobeithiwn weld un yng Nghymru yn weddol fuan.

We purchase green energy. Our green energy contract is one of the largest of its kind in the world. We are also looking at ways of being more self-sufficient with regard to green energy. We currently have a programme whereby we are looking at building windfarms, chiefly on our own land. We already have wind turbines in operation in Cornwall and northern Scotland. We hope to source up to 25 per cent of our electricity from these windfarms by 2016. We hope to see one in Wales fairly soon.

[13] Mae gennym ganolfannau data yng Nghymru, ac yr ydym yn gweithio'n galed iawn i sicrhau ein bod yn lleihau'n defnydd o ynni yn gyffredinol. Er ein bod yn prynu ynni gwyrdd, yr ydym am ddefnyddio llai o ynni yn gyffredinol.

We have data centres in Wales, and we are working very hard to ensure that we reduce our energy consumption generally. Although we buy in green energy, we still wish to consume less energy overall.

[14] Dyna'n fras yr hyn yr ydym yn ei wneud. Yn benodol, hoffem weld y sector cyhoeddus yng Nghymru yn edrych ar weithio hyblyg fel gweithred syml ac effeithiol i arwain at fwy o arbed ynni a charbon.

That is roughly what we are doing. Specifically, we would like to see the public sector in Wales look at flexible working as a simple and effective action that will lead to increased savings in energy and carbon.

[15] **Mick Bates:** Diolch, Ann, am eich tystiolaeth.

Mick Bates: Thank you, Ann, for your evidence.

[16] I have this vision of working out of McDonald's or Starbucks, which I think will stay with me for the rest of the morning.

[17] **Mr Barry:** I am Mike Barry, and I am head of corporate responsibility at Marks and Spencer.

[18] Wales is important to M&S, as a source of business—we have 2,500 employees here

and over 0.5 million customers every week—and as a source of product from food factories, farmers and homeware suppliers. In two to three minutes of overview, the first place that I would like to start is with the M&S carbon footprint. You might think that, as a retailer, our most significant impact relates to lighting stores and running lorries up and down the roads, and that has quite a big impact, with about 500,000 tonnes of carbon dioxide equivalent a year from our 570 stores and 900 lorries across the UK, but that is dwarfed by the emissions that come from our supply chain. Some 4 million tonnes of carbon dioxide equivalent across the world, much in the UK, arise from the production of our 35,000 product lines that we sell each year.

[19] Looking in the other direction, and at our operations in terms of customer use of our products, some 16 million customers visit our UK stores every week, and they buy over 300 million items of clothing from us each year and over 2 billion items of food. That gives rise to about 1.8 million tonnes of carbon dioxide equivalent, to actually use our products, predominantly to heat the water to wash the clothing that we sell.

[20] Put in that context, the 6.3 million tonnes equivalent from our business is the equivalent of about 1 per cent of all emissions from the UK economy. So, a little shop like M&S can give rise to a pretty significant footprint.

9.20 a.m.

[21] We have to get after those emissions across our operations—we have to show leadership with regard to our stores and our lorries, and we are doing lots of work there, and we are committed to become carbon neutral and to reduce energy use by 25 per cent across our business and to buy 100 per cent green electricity over the next four or five years. However, I think that the truly interesting stuff has been happening in the value chain, and that will involve working with factories and farmers across the world to produce our raw materials and products in a more sustainable manner. We have a relatively small supply chain—there are 2,000 factories and 20,000 farmers supplying us, and about 1 million workers producing products for us, and that is relatively small in the world of retail. There will be challenges for us, civil society and Government in the future about how we coalesce change across these very big value chains.

[22] Looking towards the consumer, our market research—and remember that M&S is selling to middle Britain, which is representative of many people in Britain; it is 70 per cent of British society—shows us that there are four groups of people in the UK. Ten per cent are green crusaders, who have an absolute passion about these issues and will get stuck into climate change with us today. The other extreme is that 25 per cent are not interested; that is predominantly driven by poverty, unfortunately. If you are only scraping through each week, you will not be worried about saving kids in Africa or about climate change—you are just getting through each week. However, there is a great silent majority in the middle—two thirds—who are asking us to show some leadership. If the Assembly, Marks and Spencer and other big institutions show a lead, they will join in, but they need us to take the first steps to help them to get there.

[23] So, we commend the work that the UK Government and the National Assembly for Wales is doing. We think that Government is vital to address climate change—there are big environmental and social issues that we believe that business can get on with and solve ourselves, but, on climate change, there must be absolute partnership between Government and business. We have offered some observations in the paper about what that might be. Business likes to be set a target—tell us where you want us to get to, but let us innovate to get there. We can find some solutions that none of us around this table can imagine. Two years ago, I never would have thought that Marks and Spencer would be using farm waste to create green electricity, giving farmers a second income stream as well as giving us green electricity.

[24] So, there is much innovation to come, but Government can provide a big lead in telling us where it wants us to get to and providing support, such as bridging support for new technologies as they emerge and before they become economic. Groups such as the Carbon Trust and the Energy Savings Trust are also beginning to make a big difference.

[25] That is probably enough in terms of giving an overview and I look forward to hearing your questions.

[26] **Mick Bates:** Thank you to the three organisations for the headline issues that they have brought to us. I am sure that we look forward to hearing the responses to our questions.

[27] **Alun Ffred Jones:** Diolch i chi am eich tystiolaeth fanwl. Mae'n debyg ein bod fel pwyllgor yn chwilio am syniadau ymarferol er mwyn rhoi argymhellion gerbron y Llywodraeth. Er eich bod wedi manylu yn eich tystiolaeth ar yr hyn yr ydych yn ei wneud fel cwmnïau, y cwestiwn cyffredinol sydd gennyf i ddechrau yw pa arweiniad y gallwch fel busnesau ddangos er mwyn inni allu cyflawni'r gostyngiad mewn allyriant carbon sydd ei angen er mwyn arbed newid yn yr hinsawdd? Mae gennyf ddiddordeb mawr yn yr hyn a ddywedodd BT am weithio'n hyblyg—gwn fod Ann wedi cyfeirio ato, ond beth mae gweithio'n hyblyg yn ei olygu i chi ac ym mha ffordd y dylai gael ei fabwysiadu gan gyrff eraill?

Alun Ffred Jones: Thank you for your detailed evidence. As a committee, we are seeking practical ideas in order to make recommendations to the Government. You have detailed in your evidence the steps that you have taken as companies, but my general question to begin with is what steer you as businesses can give so that we can achieve the necessary reduction in carbon emissions to alleviate climate change? I have a great interest in what BT said about flexible working—I know that Ann referred to it, but what does flexible working mean to you and in what way should it be adopted by other organisations?

[28] **Ms Beynon:** Yn fras, yr ydym wedi rhoi'r hawl i unrhyw un sy'n gweithio i BT ofyn am gael gweithio'n hyblyg. Gwn fod deddfwriaeth hefyd sy'n galluogi gweithwyr yn gyffredinol i ofyn am hynny, ond yr ydym yn mynd yn bellach na'r ddeddfwriaeth. Mae gweithio'n hyblyg yn gallu bod yn llawer o bethau gwahanol; mae'n gallu cynnwys peirianwyr sy'n mynd allan i drwsio cyfarpar mewn swyddfeydd a chartrefi, lle maent yn gallu eistedd yn eu fan a chael gafael drwy gyfrifiadur â chysylltiad di-wifr ar yr wybodaeth y maent ei angen i wneud y gwaith o'r fan. Felly, nid ydynt yn gorfod gyrru yn ôl ac ymlaen i ddepo bob dydd—maent yn gallu gweithredu'n fwy effeithiol ac felly yn gallu gwneud y gwaith yn gynt. Mae hynny yn elfen o weithio'n hyblyg.

Ms Beynon: Basically, we have given any BT employee the right to request flexible working. I know that there is also legislation that allows workers to ask for that, but we go further than the legislation. Flexible working can mean many different things; it can include engineers who go out to repair equipment in offices and homes, whereby they are able to sit in their van and through their computer with wireless connection are able to obtain the information that they require to do the work from the van. So, they do not have to drive back and forth to the depot every day—they can operate more effectively and can therefore carry out the work more quickly. That is one element of flexible working.

[29] Mae hefyd yn golygu os byddwch yn eistedd ar y trên yn teithio i lle bynnag fod gennych gyfarpar addas megis BlackBerry i'ch galluogi i weithio ar y trên, neu hyd yn oed *laptop* sy'n gallu cael ei gysylltu yn ddi-wifr. Felly, lle bynnag yr ydych yn ystod eich

It also means that if you are sitting on the train travelling to wherever that you have the appropriate equipment such as a BlackBerry to enable you to work on the train, or even a laptop that can be connected by wireless means. So, wherever you are during your

diwrnod gwaith, mae gennych y gallu i weithio yn y fan honno. Felly, mae technoleg yn bwysig.

working day, you have the ability to work there. So, technology is important.

[30] Fodd bynnag, yn bwysicach o lawer na thechnoleg yw tyfu ymddiriedaeth rhwng y cyflogwr a'r cyflogedig, gan fod rhaid ymddiried yn y bobl i wneud eu gwaith a mesur cyfraniad y gweithlu yn ôl yr hyn y maent yn ei wneud a'i gyflawni, nid a ydynt wedi cyrraedd y swyddfa am 9 a.m. a gadael am 5 p.m.

However, much more important than technology is to grow trust between the employer and the employee, because you must trust people to do their work and measure the contribution of the workforce according to what has been done and achieved, rather than whether staff arrive at the office by 9 a.m. and leave by 5 p.m..

[31] Felly, mae'n troi'r holl berthynas rhwng y gweithiwr a'r cyflogwr, ac mae'n bwysig deall hynny. Byddwn yn argymhell bod yn rhaid i unrhyw un sydd am ymgymryd â gweithio hyblyg gael strategaeth ar gyfer sut maent yn gweithio a bod yn rhaid mesur perfformiad, fel ei bod yn hollol glir y gall ymddiriedaeth dyfu. Felly, mae'n ymwneud â phobl, ond mae'n rhaid i chi gael technoleg sy'n effeithiol ac sy'n galluogi pobl i wneud y dewis maent eisiau ei wneud.

So, it transforms the relationship between the worker and the employer, and it is important to understand that. I would recommend that anyone who wishes to adopt flexible working should have a strategy for the way in which they work and that performance must be measured, so that it is completely clear that trust can develop. So, it is about people, but you must have effective technology to enable those people to make the choices that they wish to make.

[32] **Alun Ffred Jones:** A ydych yn honni bod eich gweithwyr chi yn fwy effeithiol, eich bod yn gwneud gwell defnydd ohonynt neu'n cael mwy o bres ohonynt—mae'n dibynnu sut yr ydych yn edrych arno—oherwydd y dull hwnnw o weithio?

Alun Ffred Jones: Are you claiming that your workers are more effective, that you make better use of them or get more money out of them—it depends how you look at it—because of that way of working?

[33] **Ms Beynon:** Yn bendant. Credwn fod ein gweithwyr yn 21 y cant yn fwy effeithiol. Er enghraifft, pan mae merched yn gadael BT am gyfnod mamolaeth, mae bron pob un yn dod yn ôl, ac mae hynny'n arbed tua £5 miliwn yn flynyddol ar hyfforddiant. Ar gyfartaledd, rhyw 45 y cant o ferched sy'n mynd yn ôl i'r gwaith, ond yr ydym yn sicrhau bod bron i 95 y cant yn dychwelyd. Mae hynny oherwydd eu bod yn gallu gweithio'n hyblyg. Os ydynt eisiau gweithio o gartref rhwng chwech a saith y bore, cyn i'w plant ddeffro, gallant wneud hynny. Os ydynt eisiau gweithio gyda'r nos, gallant wneud hynny. Felly, mae'r oriau y maent yn eu gweithio yn hollol hyblyg. Nid yw'n angenrheidiol iddynt fod ar gael. Mewn ambell swydd, mae'n rhaid iddynt fod ar gael ar adegau arbennig, wrth gwrs, felly mae'n fwy hyblyg.

Ms Beynon: Definitely. We believe that our workers are 21 per cent more effective. For example, when women leave BT on maternity leave, nearly all of them return, and that saves around £5 million annually on training. On average, around 45 per cent of women return to work, but we ensure that nearly 95 per cent return. That is because they can work flexible hours. If they want to work from home between 6 a.m. and 7 a.m., before their children wake up, they can do so. If they want to work in the evenings, they can do so. The hours that they work is completely flexible. It is not necessary for them to be available. In some jobs, they must be available at certain times, of course, so it is more flexible.

[34] Mae'r dull hwn hefyd yn golygu y gallwn gynorthwyo pobl anabl i weithio, fel y

This way of working also means that we can help disabled people work, so that they can

gallant gyfrannu at y gwaith, a bod gennym bobl sy'n gweithio'n rhan amser, sy'n arbennig o berthnasol i famau sy'n dod i'r gwaith, oherwydd gallant ddewis dod yn ôl am ddau, dri neu bedwar diwrnod yr wythnos; mae gweithio'n hyblyg yn gwneud hynny'n haws. Nid oes gennym amheuaeth ei fod yn creu amgylchedd lle mae'r oriau yn hyblyg ac mae mwy o ymddiriedaeth yn y staff. Mae'r staff felly yn fwy parod i weithio. Os oes problem, mae'n ymwneud ag atal pobl rhag gweithio. Yr ydym wedi gwneud ymchwil ar hyn, ac mae'n broblem gan ei bod mor hawdd i bobl weithio unrhyw amser o'r dydd a'r nos. Y sialens i ni yw dweud, 'Peidiwch â gweithio gymaint; gweithiwch lai'. Mae hynny'n hollol wir.

contribute to the workplace, and that we have part-time workers, which is particularly relevant to working mothers, because they can choose to come back for two, three or four days a week; flexible working makes that easier. We have no doubt that it creates an environment within which the hours are flexible and there is more trust in the staff, which makes them more willing to work. If there is a problem, it is stopping people from working. We have carried out research on this, and it is problem because it is so easy for people to work at any time, day or night. The challenge for us is to say, 'Please do not work so much; work less'. That is completely true.

[35] **Ms Matthews:** I work for a manufacturing company, so it has more of a factory base, and we do some things around flexible working as well. I work my 80 hours in what we class as a nine-day fortnight. So, every other Friday, I do not go into work, so that is one less journey back and forth to work. Many of our day workers are doing that. Similarly, in terms of some of the things that Ann was talking about, we have women who work during term time, so, when their children are off on school holidays, they do not come in. We work 24 hours a day, so we have shift workers, and this type of working can be used in the factory environment as well as in the type of organisation that Ann is running. Again, I would highlight the same types of benefits in terms of staff loyalty and the wellbeing of employees, which make a difference.

[36] **Mr Barry:** The first thing for any organisation or business in the public sector to understand is the footprint. It made an enormous difference to Marks and Spencer to understand that, although the operational footprint is important, the supply chain and customer use are far more important. That not only helped us to manage the footprint but galvanised change in the business, as we understood what we had to go after. I know that money is always tight in terms of what support you can provide, but if there is one thing that you could do, it would be to help organisations to understand what their footprint is.

[37] On pilots, we now have three pilot green stores that are typical of the Marks and Spencer estate—there is a big, out-of-town store, a high-street store and a Simply Food store. We have pilot green factories in north Wales and on the other side of the world.

9.30 a.m.

[38] We also now have pilot farms where we are testing anaerobic digestion to create greener electricity from waste. Practical examples help people to learn. We have just taken 27 farmers to Germany to look at anaerobic digestion out there. They are hugely advanced in Germany and we are very backward in Britain on this. It was hugely helpful to the farmers to actually meet a German farmer and be able to ask, 'Honestly, mate, what worked and what did not?'. They really trust another farmer to tell them what is going on, which is hugely helpful.

[39] The third thing that I would offer is that we set up something called the plan A supplier exchange at Marks and Spencer that taught these 2,000 factories and 20,000 farmers to share best practice. All these pilot studies are giving us examples of what works and what does not and we are then sharing that on a global basis. Again, you could imagine that, in

terms of the National Assembly, you have a supply chain and a procurement arm for public procurement, and you could create a supplier exchange for your suppliers, sharing best practice with them.

[40] The next thing that I would offer relates to the consumer. Climate change is huge: we work on it full time and are barely able to keep up with it. To the average punter in the street, it is very difficult. We have given consumers simple solutions, such as starting to wash clothes at 30 degrees C rather than 40 degrees C—everybody understands that that is just a case of turning a dial on a washing machine. We offered two more examples in the paper, which are not to do with carbon necessarily, but are to do with waste. The first is charging 5p a carrier bag, which concentrates the mind and makes people think. We have seen a reduction of 70 per cent in carrier bag usage, because people have paused before spending 5p. We have also given them something back, because we have taken the profits from that and ploughed them back into environmental initiatives in their communities via the charity Groundwork. The second is an initiative that we have just done with Oxfam, to drive clothing recycling. We are encouraging people back into Oxfam stores to recycle clothing by giving them an incentive to do so—a £5 voucher for the next time that they shop at Marks and Spencer. So, it is about small, practical things that people can do to get involved.

[41] The final thing that I would offer is something that has made a huge difference to Marks and Spencer. The other speakers have, so far, talked about the theme of human beings. It is too easy to imagine that climate change is all about big technology solutions, but it is actually about human behaviour. Like BT, and I am sure Dow Corning and other companies, we have started to create a network of plan A champions across our 570 stores to galvanise change, and that has driven down electricity use in our stores by 5 per cent this year. Again, it is about getting human beings to help people to understand that simple things can make a difference. Those were just a few practical examples of what we are doing.

[42] **Mr Rosser:** I would endorse all the examples that I have heard so far, which are about persuading and encouraging people to change their behaviour. I think that there are a few structural things that the Government could do to make it easier for individuals and companies to change their behaviour. The first is around the planning system. I think that the biggest impediment, certainly in terms of the speed of implementation for the introduction of new renewable-energy technologies, is the planning system and the delays that are built in to that process. There are some tough decisions that the Government could take and, frankly, needs to take, if we are to start implementing new technologies at the rate that we need to, to achieve the targets that have been set for the country.

[43] I also think that there is a range of decisions that Government could take, either at a UK level or at the Wales level, around the fiscal system. How do we incentivise both companies and individuals to introduce new, greener ways of living new technologies? The payback on some of these is actually quite poor, so what about looking at council tax and business rates? You have an opportunity, in two or three years' time, to review the business rates system in Wales. What about rewarding companies that operate energy efficient buildings? Do it in a revenue-neutral way so that companies that choose not to make that investment will pay slightly more in terms of business rates. These are quite tough decisions involving structural changes, but they will improve the payback for individuals and businesses that want to introduce new greener technologies.

[44] **Mick Bates:** Those were very interesting comments. Could you just expand a little on your first comment on the planning system, David? You said that the planning system can be a barrier to implementation. Could you give us an example or examples of what you mean specifically by 'barriers' in that sense?

[45] **Mr Rosser:** I think that it is the delays that are built in. Wind power is probably the

most effective renewable-energy technology that is available to us at the moment in terms of where the technology has got to. I have met companies that have suffered two or three-year delays when trying to put up one or two turbines on their industrial sites and have found it very frustrating. That is equally true of windfarm operators: the controversy surrounding the introduction of windfarms, whether they are onshore or offshore, is well known and well rehearsed in the papers. The grid system can cope with hooking up windfarms, so that is not actually the blockage; the blockage is persuading local authorities to provide planning permission, persuading the Assembly to approve them if they get called in or not to call them in if they get approved. If we are serious about climate change, some decisions will be taken that some people are not going to like. The question is whether we are serious about climate change.

[46] **Mick Bates:** Energy production will be our next investigation, so I would rather that we do not pursue the windfarm issue at this time. However, that point was well made.

[47] **Brynle Williams:** Mr Barry, my particular interest is in agriculture. You said that your company needs to be commended in terms of what it is doing with biodigesters and so on, but is the food retail industry not pushing the problem out of sight? There seems to be an awful lot of importation of out-of-season food. Companies like yours are using British produce, which have to be produced according to a certain protocol, and where you have control over the product's carbon footprint, but when a product is imported from another country, there is no such control. That is what I mean by pushing it out of sight. We need greater commitment from the retail industry, especially the big six, to home-produced or, if possible, locally produced products. Your industry has a major role to play in this, which is something that the farming industry has been calling for for a long time. We are told that this is what the customer wants, but, with all due respect, the public relations departments of the major companies tell the housewife what she really wants. I take my hat off to the market research departments.

[48] **Mick Bates:** You had a point there, Brynle; we will rely on Mike to find it.

[49] **Mr Barry:** I will make some observations about that. I will begin with an emotive response. Marks and Spencer is clear that it needs to support not just British agriculture, but Welsh, Scottish, Irish and English agriculture. On a regional basis, we are talking about support for Welsh lamb, beef and milk, which is very important to us. To balance that—I can only speak for Marks and Spencer—in terms of the carbon footprint, whether meat is produced in the UK or overseas, the dominant factor is the meat production. Whether it has come 6,000 miles on a boat or 100 miles on a truck from Wales, there is little difference in the carbon footprint. That is because for meat and dairy production, the predominant factor—forgive my terminology—is cows farting in a field. Whether they fart in a field in New Zealand or in Wales, it is still the same emission.

[50] **Mick Bates:** Or in Argentina.

[51] **Mr Barry:** I agree that, beyond climate change, in terms of social issues, support for British and Welsh communities is what Marks and Spencer will do; that is what our customers want—I want to be clear about that. However, in terms of carbon benefit, there are two extremes to the debate. As soon as you fly food in, that becomes the dominant factor in its footprint. You do not fly meat in, but you do tend to fly in fruit, vegetables and so on. However, as soon as we start bringing food in by air, that becomes a very important factor, and it is the only time that transportation is a really important factor in the total carbon footprint of food. The other extreme is local food—food produced within 30 miles of where it is sold—but, because the dominant issue of the cow farting in the field is the same all over the world, it makes very little difference to the carbon intensity of the food where it is produced. You can argue that buying in regional networks—Welsh lamb sold in Welsh stores rather

than being trucked to Scotland—makes a bit of a difference, which we believe that it does, but it does not make a huge difference in terms of carbon. In terms of social connection between the consumer and the producer, that is a different debate and could be very important. Marks and Spencer is committed to supporting Welsh, Scottish, English and Irish farming on a regional basis, but I wanted to be clear about the importance of bringing food in by air, when it occurs—that is why we have labelled any food that we fly in—and the potential risk of getting too carried away about local, 30-mile food.

[52] **Mick Bates:** That sounds counterintuitive, does it not, in terms of producing and processing something 30 miles from the store, compared with bringing something in from the other side of the world, whether it is by ship or by plane? We have had evidence that says that shipping and aviation are both major contributors to carbon in the atmosphere. On what are you basing this claim? What evidence do you have to show me that there is hardly any difference between 30 miles and 1,000 miles?

9.40 a.m.

[53] **Mr Barry:** We have undertaken two studies. One was with the University of Surrey, which was a four-year PhD from 2002 to 2006 on the sustainability of food sourcing. That looked at how you balance environmental and social issues through sourcing. If you are flying in from Africa, there is a big carbon impact from the plane, but there is a big positive impact in terms of the potential jobs created. So, you must consider that.

[54] We have supported a big piece of work with the Carbon Trust to establish the detailed food carbon footprints of our business. In addition to that, there is Department for Environment, Food and Rural Affairs research to show that, on a local scale, it is difficult to demonstrate a carbon benefit to the 30-mile rule. I want to be clear that a social benefit connecting consumer and producer might be fantastic, but I do not want to muddle the two debates. The carbon, 30-mile issue is debatable.

[55] **Mick Bates:** Is it possible for that evidence to be sent to us?

[56] **Mr Barry:** Yes. We can share with you what we do with universities, which is on public record. The DEFRA work is on public record, and that can be tracked through DEFRA. I am sure that we could share with you the Carbon Trust's work—some of it is commercially sensitive, but if you are willing to provide us with some sort of commercial cover, then I am sure that we could give that to you as background.

[57] **Mick Bates:** Thank you. Brynle, you wanted to come in.

[58] **Brynle Williams:** Are businesses in Wales ready to take action on the 80 per cent reduction that is expected when the committee for climate change makes its recommendations to the UK Government on 1 December? What additional powers do you think the Welsh Assembly Government needs in order to show true leadership in reducing emissions from industry and the public sector?

[59] **Mr Rosser:** I hope that our written evidence has shown that business in Wales has already taken many positive actions to reduce its carbon footprint and will continue to do so. Targets are difficult—if you do not measure something, it does not get done, so I support Mike Barry's comments that it is useful to have targets. It is also helpful if they are set out clearly over a long term in advance so that there is some predictability and certainty to enable businesses to make investment decisions that have a long payback, so that we know where we are going to reach and that it is consistent.

[60] There comes a point when you could spend all your time talking about targets—about

which is the right target and at what level it should be—when you actually need to start taking some actions. I think that we are probably there, and regardless of whether it is 60 per cent or 80 per cent in 2050, or whether or not it is an extra 3 per cent in Wales, we need to start taking action now. The business community at the large end is doing that for the reasons that I have given. The European Union emissions trading scheme is in place and the big energy users are working within it. That will be expanded, and the Confederation of British Industry is actively encouraging the UK Government to get out there and get binding commitments across a wider area for the next phase of the EU ETS. Carbon reduction commitments will be introduced shortly, so business is taking, and will continue to take, action.

[61] It is important that the trend is consistently downwards in terms of carbon emissions, so, rather than sitting here for another two years wondering whether it should be 60 per cent or 80 per cent in 2050, the important thing is that we introduce a culture and commitment across society to reduce carbon. The business community is probably leading on this and doing more than most public sector organisations and most consumers, but not all, because there are leaders in all sectors, but, generally, we are doing this.

[62] **Ms Matthews:** We also have to be careful about where we set those targets because many organisations work on a global basis and we must look at that global picture. For example, my business is part of a multinational company and we make many of these decisions globally, so we will look at a chart and identify where we have the biggest issue or where we can get the biggest benefit from spending our capital. That may be in the US, India or China, but, as it happens, the business that we have in Wales is one of the most energy efficient that we have. We were in discussion earlier this week with some other CBI members. The company, for example, may have a plant in England that is less energy efficient than one in Wales and it may decide to close that one down and build a new one in Wales. Having a better overall carbon footprint is better for the world, but, taking the target as being on a Wales-only basis means that it has just increased the emissions for Wales. So, we must be careful, because we sometimes end up driving perverse results depending on how we set those targets.

[63] **Leanne Wood:** Thank you for that. This committee, I am sure, would like to influence things that go on in other parts of the world, but we only have responsibility for what happens in Wales. I want to look at the ‘One Wales’ commitment to reduce carbon emissions by 3 per cent. A number of commentators have raised questions about the definition of areas of devolved competence within that commitment. Do you think that there will be benefits to business as a result of having an early definition of areas of devolved competence?

[64] **Mr Rosser:** I am urgently seeking clarity on what that commitment in the ‘One Wales’ document means in practice for companies on the ground in Wales. We have talked a little about targets and perverse consequences. I think it is perfectly acceptable and laudable for the Assembly to set targets for itself on reducing Wales’s carbon footprint, but it depends on how those are implemented. If you require business to go further in Wales than it does in England, we will have the consequences of decisions, as Margaret has just explained. We do not understand what that means for business in Wales at the moment. It is urgent that we understand that as soon as possible in order to provide clarity. Businesses are now planning investments for two, three, four or five years’ time and we need to know the framework within which we are making those investment decisions.

[65] **Mr Barry:** I will just make the additional comment that one of the paramount things that business looks for is certainty—tell us where we have to get to over the long term and we will operate within that framework. We might challenge the actual target at the beginning, but we would like negotiations to be over as quickly as possible so that we can start working towards where we need to get to. Anything that spreads confusion is holding back the debate.

The big businesses of the world that are going to get behind climate change—the BTs of this world—have made the commitment and are getting on with it. That is probably 5 per cent of business. There is another 50 per cent or 60 per cent out there just wondering whether to get engaged, but they do not have the drivers or the reputations that Marks and Spencer or BT have. So, they are just waiting, and until they get this clarity about the framework or the price of carbon for example, they will remain on the sidelines. We are dealing with a very complicated issue, but haste would help.

[66] **Ms Beynon:** I support that, but I would also say that it is about action on the ground and a tangible example of activities that demonstrate the will, whatever the target may be, to achieve that target. That is the key thing. I will give two specific examples that I consider useful. In terms of hosting data across Wales, it should be hosted in an environmentally supported manner. A lot of data is hosted in a very haphazard way, which uses huge energy. You should therefore be looking at all data hosting being done in an environmentally sustainable way. The other example relates to suppliers. It should be incumbent upon public and private sector companies to look at ways in which we can ask our supply chain—going back to Mike’s point—to also be concerned with the environment. Last June, we gathered 200 of our top suppliers together in one room and said, ‘We will be asking you to commit on paper to reducing your carbon emissions otherwise you will not be a supplier of BT’. So, that is action on the ground and that is what is important.

[67] **Leanne Wood:** Can you tell us some more about data hosting?

9.50 a.m.

[68] **Ms Beynon:** Yes. Any computing requires the digital data that is created to be stored in an electronic box. The data centre is basically a building with lots of those boxes sitting in it, but because it is managed in a controlled environment, we are able to use the cheapest possible servers to manage the cooling—which is a huge cost—very cost effectively and to ensure that all the security is looked after. What currently happens is that people have servers in a cupboard under the stairs, under desks or in special rooms that are not properly air conditioned, and they could be run at too high a level, or there could be no investment in the most modern servers to reduce energy consumption. So, unless they are in a controlled environment in which energy saving is a priority, you will have all these servers sitting all over the place, churning up and using far more carbon and electricity than necessary.

[69] **Leanne Wood:** What business opportunities could arise from having a compulsory element to the 3 per cent carbon reduction?

[70] **Mick Bates:** Everyone is looking blank. David, would you like to start with that? Are there any business advantages? [*Laughter.*]

[71] **Ms Matthews:** I think that there are advantages for some businesses, such as companies that sell insulation and such. They definitely have an opportunity to benefit from that, and, if we put the effort into research and development, there could be opportunities for new businesses to expand and grow as a result of this particular issue that we are dealing with.

[72] **Mr Barry:** You can draw an example from Germany, as the German Government has made some quite brave economic decisions to drive the market in the short term with feed-in tariffs for example. On paper, they are not economic, but they are making a fundamental difference not just to the uptake of renewables, but in creating a global renewables business in Germany as well, which is to the country’s long-term benefit. As the representative of an individual business, I would hesitate to call for legislation that would impact on all businesses, but as I said earlier, business likes certainty, and you could argue

that compulsion tells you where you need to get to and what you have to do, and you have to just crack on and respond to that.

[73] The other thing that I would offer is the fact that new kinds of network are beginning to form. There are traditional silos in government and in business that say, 'We're the food business'. We are now seeing that our food business people—the guys who run the farms—are talking to our stores people about buying the electricity. That has never been done before—you have started to break down those barriers.

[74] Finally, compulsion is coming anyway in the form of carbon reduction commitments for many of the big and semi-big businesses and organisations beyond business. Most of the people that I have met in business have accepted the importance of the carbon reduction commitment and the fact that it has to be done. There have been quibbles about the detail—there always are—but there is a general consensus that the carbon reduction commitment is required, and support will be given to its implementation.

[75] **Ms Beynon:** One of the practical and important things is that, at the moment, when you buy green energy, you get what is called a renewables obligation certificate to demonstrate that fact. The intention is that production of that energy will be where the ROC fits, so if you are Npower or British Gas and you produce green energy, you get the certificate. As a buyer of that green energy, we have been able to take advantage of that certification in the past. It now looks as though that will change, and that is a huge issue for us because although we are still buying green energy, it no longer counts. We would therefore like to see some kind of system in which companies can be benchmarked, very much like when you buy a washing machine and you have energy-efficiency categories from A to G. We would like to see businesses having to do the same kind of thing, so that you know whether you are an A, a B or a C category business in terms of your carbon reduction targets. That could be made compulsory.

[76] **Mick Bates:** It is the data sets needed in order to provide that categorisation that is critical to such a process.

[77] **Mr Rosser:** I would add just one rider. There are business opportunities from compulsory carbon reduction targets in Wales—you just need to be aware of the potential for economic leakage from that. It is a job for Government to measure and balance those two factors in deciding whether targets in Wales that go beyond UK targets, which themselves go beyond European targets, are a sensible thing to do.

[78] **Leanne Wood:** What are the problems?

[79] **Mr Rosser:** Clearly, there are issues of competitiveness, and they will be more significant for some sectors of industry than for others. If you are providing a product that is traded globally, and your operating costs are increased in one environment as compared with another, you will take investment decisions accordingly. It will be more significant for some sectors than others, particularly for energy-intensive sectors. That is not a comment about Armageddon and businesses shutting up shop wholesale, but you are changing the operating environment and the costs of operating in a location, and those aspects affect investment decisions. So, there is likely to be some economic leakage. Government should be aware of that and sensitive to it, and, ideally, it should try to do some modelling around that.

[80] **Ms Matthews:** We also need to be careful that we do not end up penalising the early adopters. Some companies have been spending money on, and investing in, improving their energy efficiency for a long time, and you get to the point at which the laws of thermodynamics start to kick in. In my business, unless we can end up with some brand-new technology, which does not exist today, you get to a point at which you start to level off. So,

we need to be careful. We have done the right thing over a number of years.

[81] **Mick Bates:** In the second part of our evidence session, we have two companies that will provide us with detailed evidence of how effective that investment can be for their bottom line.

[82] **Darren Millar:** Going back to the concept of agile working, Ann, which has delivered huge benefits to BT, much of that is done on the back of technology, particularly if people are working remotely, from home. How big an impact will the broadband not spots in Wales have on the ability of some people to tap into the opportunities that that might present?

[83] **Ms Beynon:** The positive thing is that more people have broadband than have gas, so I think that we are ahead of the game there. [*Laughter.*] We will soon get to the point at which certain remote parts of Wales will find it almost impossible to get broadband—unless there is new technology on the horizon. Who knows? I do not think that we are talking about massive numbers of people, but those who cannot get it will be pretty upset and unhappy, and we are aware of that. I do not think that it is a big enough problem to deter us from adopting an agile working policy by any means; we should go ahead and do that. For those people who cannot get it, there are ways in which you can create local hubs or create drop-in centres with broadband availability. That is done anyway in some places, purely because it is useful for businesses to have people who are travelling around call at a drop-in centre to write their e-mail on the move, as it were. So, one way of getting around that for businesses could be to look at drop-in centres in close proximity, where you could go to use the services.

[84] **Darren Millar:** Okay, thank you. Turning back to the clarity issue, you suggest that you need some firming up of the ‘One Wales’ commitment to know what the implications for business will be. Is there enough clarity around the implications for your businesses of the Climate Change Bill that is currently going through the UK Parliament?

[85] **Mr Barry:** As a businessperson, I would offer the observation that the Climate Change Bill is well put together. You can always find bits and pieces around the edge that could be done better, but, overall, we think that it finds a good balance. There is much debate about setting a 60 per cent or an 80 per cent target but, as a pragmatist, I think that you should get the 60 per cent target enacted in law and get people working towards it. The new committee on climate change is reviewing the science over the next three to five years, and it may tighten the target, based on the science as it comes on. That will not stop businesses from at least starting to move towards the 60 per cent target, as a stepping stone to that 80 per cent in the future. So, for me, the Bill is well put together. The only question that I would have at this stage is about its implementation: are we setting up the institutions nationally to ensure that what are very good words in statute make a difference on the ground? That will be the next challenge.

[86] **Darren Millar:** What do you think, David?

[87] **Mr Rosser:** The CBI is generally well engaged on the Climate Change Bill, and understands most of the implications for business. There are some Wales-only provisions proposed within the Bill, which look as though they will transfer some quite significant powers to the Assembly, over establishing carbon-trading schemes, for example. It is unclear how the Assembly Government might choose to implement some of the powers that the Bill might give it. A dialogue and some clarity from the Assembly Government around how that environment will be different for companies in Wales would be useful at an early stage.

10.00 a.m.

[88] **Darren Millar:** So, you are telling me that the Assembly Government has not yet

engaged about how it might use the powers that will be devolved through the Climate Change Bill to encourage businesses to reduce their carbon-dioxide emissions. Has that started yet or not?

[89] **Mr Rosser:** We have a dialogue with the Assembly Minister for environment and her officials in the Department for Environment, Sustainability and Housing. I think it fair to say that we are still calling for clarity. We are starting to hear some warmer noises, but we do not have what I would regard to be clarity at the moment.

[90] **Darren Millar:** We have heard lots of examples of some very good practice from BT, Marks and Spencer and from Margaret's business as well, but how do you think the Welsh Assembly Government can encourage that best practice to be shared among businesses? Is there a network that people can tap into to share these sorts of ideas? If not, do you think that it would be good to have that sort of network? You mentioned the fact that you are, in effect, early adopters; you are taking action to reduce your carbon-dioxide emissions and to be environmentally responsible when it is not compulsory to do so. However, smaller businesses and perhaps some of the medium-sized businesses may not be able to do that, because they are not sure of the way forward. How can we roll out this best practice across other businesses in Wales?

[91] **Mr Barry:** There are a couple of opportunities for you. Business in the Community has put together a May Day summit on 1 May, which will be run from a national hub, but will have regional breakouts. Ann may be able to say a few words on that, but that is definitely an opportunity for you. The Climate Group, which is a not-for-profit organisation, has started to get together some interesting networks of businesses to share best practice. I offered the observation that a supplier exchange had been hugely helpful for Marks and Spencer to communicate with a supply chain of 2,000 suppliers, and I would hope that the Assembly could look at ways in which at least its procurement arm could be engaged to do that as well. I think that people at the Energy Saving Trust and the Carbon Trust are starting to create some of those networks that you require, and so I would hope that you are having a conversation about what they are doing specifically in Wales to bring in national policies and to ground them here as well. So, there is a lot going on out there, but it is a little bit like the wild west at the moment, with dozens of things happening. However, you have the opportunity to give some shape and direction to two or three big winners, and then the others will fall by the wayside.

[92] **Ms Beynon:** I chair Business in the Community in Wales, and I sit on the UK board. We had a May Day summit in Wales and Scotland, but in November, which was quite amusing. The reason we did not have it on May Day itself was because of the Assembly elections, as you well remember. So, the England summit happened in May, but Wales and Scotland went for November. Actually, it worked very well. We had a videolink between Edinburgh, St Asaph and Cardiff, so it was good. We will be doing that again this year, which will probably be hosted by BT, and part of that is to create a May Day network. Through that network process, you now have May Day companies that are committed to specific things, which they will do. The task that we now have in BITC is to record those. I think that we had a huge burst of goodwill and good intentions, and now we need to register all those and note them, so that people can learn from each other. That is definitely the task that BITC is facing. I think that the difficulty, in a way, is that the space is becoming quite crowded; there are a lot of people around who are very interested in this issue. It has a very high profile and individual consumers and schools are becoming increasingly concerned about it. It is about making sense of what is becoming an increasingly complicated world, and I think that choosing two or three beacon projects or activities could demonstrate quick wins.

[93] **Mr Barry:** You will know that Stuart Rose, our chief executive, is now the chairman of BITC and I think that he is very ambitious for May Day. There are definitely opportunities

for the Assembly Government to be working with BT on a regional basis. Marks and Spencer will be encouraging its Welsh suppliers to take part in that. That is another opportunity to work with some of the big companies in Wales—and not just retailers, because there are many other big organisations here—to drive change through their supply chains. It will not get to absolutely every business, but it will start to drive some significant change by acting through these hubs. Supply chains respond to the steer that they get from the top and I think that that can be hugely helpful to you.

[94] **Ms Beynon:** The First Minister was at the May Day summit in Cardiff in November, and His Royal Highness the Prince of Wales also attended. He is very committed personally to this whole agenda, and is very keen to put his support behind anything in this area.

[95] **Alun Davies:** Mr Rosser, do you agree with the statement that a business has a moral duty to reduce its harmful effect on the environment?

[96] **Mr Rosser:** I am not really sure. Business has a duty to balance the three pillars of sustainability: environmental impact; social impact; and the economic consequences of its actions. There can be some tensions in that but, increasingly, businesses are getting better and more aware of the need to do more than just look to the financial bottom line, although the bottom line has to be paramount or the business does not exist. As I said in my introductory remarks, the issue of wider social responsibility for climate change is far higher up the agenda of businesses, certainly large businesses, than it would have been 10 or 20 years ago. We are moving in the same direction as Government on this.

[97] **Alun Davies:** I asked the question, because the most striking part of the introduction to BT's written evidence is that it establishes a different place for this debate. As I read through the written evidence that you provided, one thing that concerned me was the language—the tone and tenor of it. It appeared as though you were being dragged in the direction of recognising that climate change is a real issue. In your introduction this morning, you mentioned that you were being driven by customer demand and Government regulations; you did not seem to see this as anything more than an irritant. I was reading through the evidence, and I saw the following.

[98] 'Business considers annual targets to be rigid and unworkable.'

[99] 'The CBI would welcome clarification', and it also states that that business is concerned about uncertainty.

[100] There was no sense there that you are engaged with any of this at all; the sense is that it is an interruption or an irritant that you have to deal with.

[101] **Mr Rosser:** I am sorry if I gave that impression, but I do not think that that is fair. Businesses do not regard customer demand and customer drivers as irritants, trust me. Last year, the CBI chose work on climate change as its key piece of work for the year. We had a climate change taskforce comprising 18 chief executives and chairmen of the largest businesses in the UK, employing about 1 million people between them. It was chaired by Ben Verwaayen, the chief executive of BT. The report of that taskforce has been well received. It looked at how the UK, as a society, will reach its targets by 2050. It was a thoughtful and rigorous piece of work that showed some easy wins, and also showed more challenging aspects of what we need to do as a society. The taskforce members, who were from some of the CBI's largest businesses, made personal commitments on behalf of their companies to take actions to go further, and to act as exemplars for the wider business community.

[102] I am perfectly genuine in my statement that this issue is up there at the top of the corporate agenda, certainly for larger companies. There is an issue about how we get smaller

companies to take a similar position, and the key to that is the role of the consumer. We estimate that the British consumer impacts directly on about 60 per cent of carbon emissions in the UK, and one thing that companies do is react to what their customers want.

[103] To address your comments about the targets in Wales—and we have talked a little about targets already—Mike expressed it clearly when he said that business welcomes certainty. The UK Government is setting out five-year carbon budgets three budgets in advance, which gives business at any time 15 years-worth of clarity around where the UK is trying to get to and what it has to do. That provides the kind of timeframe in which our largest energy users, those with the largest carbon footprint, can take meaningful investment decisions. It is extremely difficult for a company such as Dow Corning or Corus to reduce its carbon footprint in a nice, smooth, year-on-year curve.

10.10 a.m.

[104] You tend to have to make substantial investments to achieve step changes, which is why five-year carbon budgets, rolled out 15 years in advance, let businesses know and help them to plan their investments and they can then deliver against climate change targets in a way that has the minimum impact on competitiveness. I do not think that we are arguing about where we want to get to. Business is perfectly genuine in understanding the issue of climate change and in wanting to deal with it, but we may well be arguing with you over the detail and the best way of getting there. We do not think that annual targets are terribly sensible. We understand that the Welsh Assembly Government may want Wales to be an exemplar and I do not think that we have any problem with that, but there are the issues that we talked about earlier. If RWE Npower invests in Aberthaw and makes it an extremely clean power station and closes down Didcot, which might be a relatively dirty power station, it has done a great job for UK climate change and for the planet's carbon emissions, but it has increased Wales's emissions. So, we need to be practical about the targets that we set ourselves. Some things will work well for the business community and other things less well, and we are happy to have a discussion and engagement with the Assembly on those practical details, but I genuinely believe that we are looking to get to the same place.

[105] **Alun Davies:** The difference in language between the three of you here is very striking, nevertheless. Talking about the 3 per cent targets, I think I am right in saying that you are saying that they are inflexible, unworkable and would reduce jobs in manufacturing, would not make a contribution to reduced global carbon emissions and that the impact upon jobs in Wales would be irretrievably damaging, whereas M&S is saying that it applauds the proactive and ambitious position that the Assembly is taking on climate change. BT believes that the 'One Wales' target is wholly realistic and achievable and welcomes the setting of such a target. There are fundamental differences there between the people running the businesses and those who represent them. I am interested as to why that is.

[106] **Mr Barry:** Let me offer an observation. Whenever an individual business presents its evidence, we are speaking as one business. I cannot, like CBI, represent all businesses. However, to be fair to CBI, two or three points need to be made here. The CBI report on climate change has begun to make a real difference to that core of 95 per cent of British businesses that are not doing what BT is doing at the moment. That is vital. We cannot just assume that because M&S and BT are here today, we are representative of everyone: we are not. Also, as much as we applaud the leadership that you are providing, we might challenge you on some of the detail. Having an annual target is very different from having a five-year target. Let me explain why. Many of the investment decisions and technology changes that we make do not happen within a neat 12-month period. It has taken two hard years just to get three or four farmers taking up anaerobic digestion, and to make that breakthrough. Hopefully, that will lead to 20 or 30 other guys following them, but it has taken two years. That might have prevented M&S meeting an interim one-year target, so there has to be a very

practical, detailed discussion here about how we achieve things.

[107] However, I will leave it on a positive note and say that M&S is very clear that we must tackle climate change. The reasons that we are driving it is partly do to with morality; a lot of it is about profit—we want to reduce our electricity bill and sell more products to consumers to be seen as tackling these issues. It is also partly about people—75,000 people care passionately about how we do business, and it is about meeting customer expectation. Seventy five per cent of the Marks and Spencer customer base is now saying, ‘We are interested in this issue.’ The vast majority is saying, ‘Please, will you take the lead? For the next four, five or six years, do all the hard things behind the facade of your business and then start asking me to start making significant changes to my life as well.’ Your challenge to us as business leaders is absolutely legitimate, but the CBI is making a difference in what it is doing and you must question the difference between a one-year, a three-year and a five-year target. It is a very legitimate debate to have.

[108] **Ms Beynon:** I agree. As far as we are concerned, we are on the road to achieving this in any case, so it is easier for us than for other businesses, particularly small and medium-sized enterprises. It was quite striking at the May Day summit that we held, which was predominantly aimed at the SMEs at the top end of the market, that some of those companies were starting from scratch. Some had done quite a lot, but some were just starting on that journey. So, we have to take everyone into account.

[109] I would also emphasise that there is huge pressure coming from the consumer end of the market. I have a copy of *Ethical Consumer* that mentions BT specifically and states that people are increasingly making decisions about purchasing even their phones on ethical grounds. We would be very foolish, as businesses, not to be aware of that. Again, I think that it is important for Government, in terms of alignment with the citizen and being seen as a beacon for the citizens of Wales, to be seen to have that ethical dimension. That is a driver of business as much as a moral driver.

[110] **Ms Matthews:** Let me give you another example. Mike talked about the work that his company has been doing with farmers and how long it had taken. In my own business, we are trying to run the process for three years between the times that we shut down. When we shut down, we do capital expenditure, so we are only doing that every three years. We may invest some capital that would give us a 10 per cent improvement, which averages out at 3 per cent a year, but we only do it every three years because the process is running the rest of the time.

[111] Like Ann and Mike, we have been doing research with existing customers and prospective customers on what is driving their decisions around sustainability, in which climate change is a key issue. A lot of it is coming from the marketplace, from the customer end—around 37 per cent of businesses that we talked to said that customers were driving it. In addition to that, around 10 per cent of it is being driven by suppliers, doing some of the things that Ann and Mike have talked about. So, the marketplace is driving that. One thing that business does is to look at what the customers and suppliers are telling it about and try to put that into plans.

[112] **Mick Bates:** Alun, do you have any further questions?

[113] **Alun Davies:** No, I am content with that.

[114] **Mick Bates:** Do Members wish to ask any more questions to the panel?

[115] **Brynle Williams:** You referred several times to farmers, Mike, and how you are taking the lead in helping them with anaerobic digesters. I am very sorry, but I am a farmer,

and I know that farmers have been starved by the retail side over the last 10 years. There has not been sufficient money to invest. Had we been paid a fair price for our produce, that investment would come. The dairy industry is recovering now and starting to look at anaerobic digesters—I am involved with several projects in north Wales at the moment. I would like that to be put on record, because you are implying that you are taking the lead. The industry would respond if the profit line was there, but it has not been there. I am sorry, but I feel quite strongly about that.

[116] **Mr Barry:** I will respond very briefly on behalf of Marks and Spencer. I think that Marks and Spencer has done a lot over the years to support farmers. You can always challenge us to do more, and that will always be a part of supply chain management—there will always be that tension between wanting more and wanting less. However, the retail sector generally seems to be pretty clear now that it needs to invest in and support British farming. I would never be so arrogant as to believe that Marks and Spencer is the only one driving this; we have very good farmers and suppliers that have been pushing for change on their own. We are meeting them in the middle, and there is a pull from the marketplace in the ideas that they are pushing. Within that sphere, there will be individual farmers working in individual supply chains who are not being treated as well as they could be. However, I want to be very clear with you: I hear your argument loud and clear, and we are very clear as a business that we need to working with and investing with our farmers in change.

[117] **Mick Bates:** I wish to thank the panel for the papers and evidence. You will be sent a copy of the transcript of today's proceedings. If there is any further information that you consider would be useful to us—I draw members' attention to the CBI paper, 'Climate Change: Everyone's Business', for example, which is an excellent paper—or anything about the evidence on carbon footprinting, which I look forward to reading, please pass it on to us. On behalf of the committee, I thank you very much for your evidence and attendance this morning.

*Gohiriwyd y cyfarfod rhwng 10.19 a.m. a 10.25 a.m.
The meeting adjourned between 10.19 a.m. and 10.25 a.m.*

[118] **Mick Bates:** I welcome back Members and our next two companies to give evidence in our inquiry into carbon emissions reduction. It is a great pleasure to welcome Valerie Ellis of PennPharm and Andrew Bronnert, head of energy for UPM Shotton. I will invite you in a moment to give your names and positions for the record, and, briefly, the headlines of the papers that you have presented to us. Thank you for those papers, which seem to highlight your achievements over the last few years. I invite Valerie to introduce herself.

[119] **Ms Ellis:** Good morning. Thank you for inviting me; I am pleased to be here. I am participating in what I consider to be a crucial element of doing business, not only in Wales, but internationally. I am a director and shareholder of Penn Pharmaceutical Services. My responsibilities cover human resources, health and safety and environmental issues—we have some joined-up thinking in our approach.

[120] We started in 2002, utilising arena network funding to employ a student to undertake research into the environmental impact of our business. We had mountains of information but no system. Prior to this work, I utilised the Green Dragon levels 1 to 5 with a Japanese company, on a start-up site, which I found to be a good approach to putting a system in place and to managing the development of the programme.

[121] We have been working on this since 2002 and you can see from a succinct summary of results over the last four years that we have had an increasing amount of success. However, the crucial underlying factor here is that our business has grown, year on year, by 29 per cent, 7 per cent, 16.5 per cent and 24 per cent. Business has grown from £4.5 million to £23 million

since 2001 and our target is to generate £35 million in three years' time.

[122] We are engaged in drug development. For those of you who are not familiar with the process, we undertake the development of drugs to human use, right through to clinical trial manufacturing. We provide clinical trial supplies on a global basis through 28 distribution sites worldwide. We also undertake contract manufacturing for small volumes, so that we do the difficult science.

[123] The impact of what we do includes things like managing clean rooms and an effluent treatment plant, which means that the stuff that we put down the drains has to be carefully monitored. We are keen to be proactive in being a positive part of our local community and we do a huge amount of work, as you can see from our paper, on engaging with the local community.

[124] I do a vast amount of work for free for people like Inside Welsh Industry, which is a benchmark organisation—we recently did a one-day session for the Welsh Assembly Government. I have also done sessions for careers services and with local schools, customers and suppliers. It puts some pressure on my time, but it is a crucial part of spreading the message. I am also a member of the steering committee of SEMTA—the sector skills council for science, engineering and manufacturing technologies—developing work-based qualifications for science laboratories and manufacturing. I am also a member of the steering committee for Inside Welsh Industry's programme for benchmarking best practice. As I said, we are one of the organisations managing change, growth and Investors in People. So, I am something of a missionary in terms of wanting to spread the word, and I work hard to do that.

[125] However, I sometimes feel that I am filling in gaps that do not exist, or gaps that people are not aware exist, in terms of education and on guidance on where to start. My experience is that some businesses do not know what they do not know and there is no route-map to take them from A to B and C to D. A huge amount of funding and support is available and I am a funding queen; I manage to tap into most of it, largely due to my experience with greenfield site start-ups, Team Wales, with DEINS, formerly MSC—I have lived through all of those changes—and with the Department for Education, Lifelong Learning and Skills. I used to be a committee member of Education and Learning Wales, so I know the route. However, for organisations that do not know, it is a bit complicated and perhaps a route-map would help—something like Business Eye for environmental issues might be useful. As you can see from the papers—and I do not want to go on, because I could go on all day—we are doing a huge amount of work and we are clearly an example of best practice.

10.30 a.m.

[126] It is not an industry-specific requirement, but 70 per cent of our work is for overseas clients—Japanese, American and so on. We currently have two key projects on the go; one is related to package and design, supported by Envirowise, and we are working towards standardising our packaging, to offer environmentally friendly packaging as a unique selling point. The other project is on remote utility monitoring, which is a spin-out from the University of Glamorgan; we will reduce our energy costs significantly through this process. Those are our key projects at the moment.

[127] **Mick Bates:** Thank you for those headline issues. We admire evangelical zeal, and it seems that you have plenty of that. I say to Brynle, who usually manages to bring farming in, that we are not concerned with leaks down the drains of Pirbright today. Andrew, will you now give us your headline issues and introduce your paper?

[128] **Mr Bronnert:** Bore da, I am Andrew Bronnert from United Paper Mills, Shotton. UPM Kymmene UK Ltd is part of the UPM Kymmene group and operates in the UK with the

largest newsprint mill at Shotton in Flintshire—it is often called Shotton Paper. UPM is a global manufacturer of forest products and has its head office in Helsinki, Finland. Recently, Shotton paper mill converted its operation to recycle 650,000 tonnes per year of waste paper—making our product 100 per cent recycled, as raw material. It also combusts its waste products, together with biomass, on site. UPM employs 400 people in the mill at Shotton, and a further 2,000 indirect jobs are sustained in the community. UPM's associated businesses in the UK include the Caledonian Paper Mill in Scotland and UPM Tilhill, which is the UK's largest private forestry company. We are also interested in offices and buildings. The mill's customers include all UK national newspaper titles that you can imagine, together with many local titles, and many Welsh titles.

[129] Shotton paper mill started in 1985 and has subsequently invested in a second paper machine, three recycled fibre plants and the renewable energy power station on site. The mill has achieved a 70 per cent reduction in specific power consumption in its 22-year history. This has been achieved through inward investment and grant-aid support, together with improvements in efficiency. We also ran an employee suggestion scheme on energy, called Kill-a-Watt, which we stole from Monsanto in south Wales; we do not mind where we steal from.

[130] **Mick Bates:** Do you want to strike that from the record? [*Laughter.*]

[131] **Mr Bronnert:** As mentioned, we combust 200,000 tonnes per year of the site-derived waste material—paper sludge—which is therefore diverted from the alternative of land spreading. The sludge is burnt, together with 300,000 tonnes of forestry waste, in the renewable energy combined heat and power station boiler. This latest £25 million investment provides all of the mill's needs for steam—from the CHP plant—and a quarter of its electrical needs. As it is 100 per cent biomass, it is eligible for renewable obligation certificates, which were mentioned previously. Through investment, and improvements in efficiency, the mill has consistently operated ahead of all climate change targets. The mill has climate change levy exemption, as it operates within the paper sector agreement, and, again, it has led this sector's performance.

[132] The mill operates within the European Union emission trading scheme and trades a surplus allowance. The mill generates 125 GWh of energy within the renewable obligation each year. The total performance of the mill has improved by 600,000 tonnes of carbon dioxide per year, which also includes, as is the case with Marks and Spencer, purchased power, or secondary emissions. The mill works closely with the community and with certain partners, including the Confederation of British Industry, the Welsh Assembly Government, through the In-all programme, the Federation of Paper Industries, the Waste and Resources Action Programme, the Carbon Trust, the Energy Saving Trust, the Major Energy Users' Council, Arena Network and the National Industrial Symbiosis Programme. We also have a partnership with the Centre for Alternative Technology at Machynlleth.

[133] The real thrust of my evidence this morning is that the UPM Shotton mill in Flintshire has attracted more than £0.5 billion in inward investment from its parent company in Finland. The investments have led not only to increases in production and employment, but also a reduction of 600,000 tonnes of carbon dioxide a year. Although this benchmark manufacturing facility is committed to environmentally sustainable operation, there will be few operations for further reduction in carbon dioxide emissions. The measures are mostly in place.

[134] The warning is that UPM values its position in Wales, but it needs a favourable business climate to remain competitive throughout Europe and beyond. The question for the committee is: does UPM increase its carbon dioxide emissions by building another factory, or does it reduce them by means of cutbacks?

[135] **Mick Bates:** That was an interesting question. Brynle, I think that you wanted to come in.

[136] **Brynle Williams:** Thank you, both, for coming in this morning. I feel privileged to have in my constituency a company such as Shotton paper.

[137] How can large organisations share good practice in changing staff and customer behaviour? Also, what lessons can be passed on—this is of particular interest to me—with regard to the process of installing and running or purchasing CHP?

[138] **Mr Bronnert:** On changing employee behaviours and habits, we found the employee suggestion scheme to be really good. That has been a quick-win scheme—we give away Marks and Spencer vouchers, almost literally from my pocket, to employees who prepare a suggestion. There is a lot of detail around that, and they get additional vouchers if it is a good quality submission that is well thought through and costed, while if it is just a basic idea, it gets fewer. That is an example of a scheme run there.

[139] I commend the Energy Saving Trust, with which we have worked closely. For example, recently, representatives from Energy Saving Trust Wales came to our site and, free of charge, gave energy-saving light bulbs to all employees, as well as power-down monitors to encourage people to shut down their personal home computers, their DVD players and so on, to take them off standby. That service was provided at no cost to UPM. It was very good.

[140] Our customers are absolutely interested in all matters to do with climate change. They are media people, so we host briefing sessions in our paper mill for them. However, we need to see real action, because, ultimately, they can choose who to buy their paper from—they can buy it from China, from elsewhere in Europe, or from Wales.

[141] **Ms Ellis:** In terms of staff behaviours, I would follow a dripping-tap syndrome in terms of a multi-pronged approach and a constant reminder. We do things such as the wallpaper on all our PCs. You log on in the morning and it will give you some factual information such as the fact that using paper clips instead of staples will save x amount of steel, and that turning off the PC at night will save the business x amount of money per annum. We change that frequently, and include positive information as well. We organise suggestion fortnights, and we have a May Day questionnaire that is based on global information, with a kind of right or wrong answer; the prize is to have your house kitted out with energy-efficiency lighting. We have done other things, too, involving travel to work, for which the winners get bottles of champagne. So, there are incentives.

[142] There is education, which has to be ongoing and over a long period. There is implementation monitoring, because unless you are monitoring and auditing your information, you do not know whether it is reaching where it needs to go. You need to take away the barriers and difficulties. For example, we do a huge amount of recycling, and if you make access to your recycling skips difficult, your staff will not recycle, so you have to remove the obstacles to that and make it as easy as possible. We need to do that for householders as well as businesses, because if you put obstacles to doing something in people's way, they will find a reason not to do it. I know that it sounds simple, but it is back to basics.

10.40 a.m.

[143] We ask questions such as, 'How much do you think our electricity bill is per annum as a business?', and people will come up with all kinds of weird and wonderful numbers but they do not really know. So, it is the tangibles that they can relate to that makes people

remember and think about what they are doing, and it is about behaviours as much as anything else. So, it is about education, training, information and monitoring that, and the fact that you must keep going with it.

[144] **Mick Bates:** Can you address the issue of CHP, Andrew?

[145] **Mr Bronnert:** Yes. We have a relationship with a commercial CHP station next door to us, namely Gaz de France, but that is a purely commercial gas-fired power station that has waste steam. We take waste steam from it—we have a free-and-easy open contractual arrangement, because it only wants to make steam when it wants to sell electricity, and not according to the needs of a paper mill. So, we have a good relationship there, but, in terms of building our own, we were able to attract grant aid through the waste resources action plan. Although the process was rather tortuous because it had to go through state aid clearance and through arguments and discussions in Europe, and many legal measures, we were eventually successful. So, we have received grant aid. The payback on such a CHP station is not only in electricity you do not have to buy, but through the renewable obligation certificate scheme.

[146] **Alun Ffred Jones:** I wish to pursue that aspect. How big must a plant be for a CHP plant to make sense? Do you have a sense of scale on this, because it seems to be an obvious win-win situation but we do not seem to have many examples of it? I think that you also referred to CHP in your submission, Ms Ellis. Is it used in your plant?

[147] **Ms Ellis:** No, it is not, but we opt for cleaner energy via the supply that is available to us. Again, we are a single site, so the opportunities for us are not as great.

[148] **Alun Ffred Jones:** Do you need to be a fairly big plant to do this?

[149] **Mr Bronnert:** You do, as there are economies of scales; the boilers seem to come in small, medium or large sizes. It is a large investment. We invested £52 million for ours, which is a medium-sized facility. There is CHP and there is biomass CHP, and the trick is the fuel source; if you are just putting in a gas-fired CHP station to assist your factory, it is a much more efficient way of producing energy, because you get steam into your factory. However, the payback is rather poor when compared with a biomass CHP, and that is because of the renewable obligation certificates. So, 100 per cent biomass is the way to go.

[150] **Alun Ffred Jones:** Do you have a biomass plant?

[151] **Mr Bronnert:** Yes, it is 100 per cent biomass CHP.

[152] **Alun Ffred Jones:** Do you use wood shavings?

[153] **Mr Bronnert:** Yes, wood that is forestry waste, debris—

[154] **Alun Ffred Jones:** And the sludge from the process?

[155] **Mr Bronnert:** Yes, the sludge is basically biomass because it is paper fibres and some inert materials, so the calorific value is provided from paper fibres, which are wood based. So, it is 100 per cent biomass.

[156] **Alun Ffred Jones:** Perhaps I am straying a bit from the script, but in terms of paper, and this may be an urban myth, but I have heard that the process of recycling paper uses more energy than if you used ordinary wood pulp, and if you add the chemicals that you must use to recycle, it is almost counter productive and that it would be better if you just used wood from the forest.

[157] **Mr Bronnert:** No. Basically, there is about a two-thirds reduction in primary energy. A tree is usually 50 per cent water and 50 per cent wood, because that is how trees are. If you were to bring a tree into a factory and turn it into pulp, it might use 3 MWh per tonne of pulp, but if you took recycled fibre, which is 90 per cent fibre and 10 per cent other materials, the yield is very high. To turn that into pulp would use about 0.9 MWh, so there is a two-thirds reduction, which is a large part of the mill's total reduction in its carbon footprint. There are many arguments about recycling. For example, some chemicals used can be hazardous to produce, and the lorry miles associated with waste paper generally come from urban areas whereas the forests are in remote areas; it is local pollution versus global pollution. We could go into many arguments about recycling.

[158] **Mick Bates:** There are issues, for example, with an articulated lorry bringing waste paper to you from Essex or London. Does that happen?

[159] **Mr Bronnert:** It does happen. Predominantly, our waste paper comes from local areas, but we do take waste paper from a third of all households in the UK, so clearly some of it comes from Essex, Hampshire and Northumberland.

[160] **Mick Bates:** Have you, as a company, looked at a carbon footprint in relation to where you get your paper from?

[161] **Mr Bronnert:** No. It is a very difficult and complex subject. It lacks clarity. When you talk about carbon footprinting standards, there are no real, agreed standards for it.

[162] **Alun Davies:** Thank you very much for the evidence this morning. I have enjoyed the conversation. In terms of the Shotton paper mill, the 70 per cent reduction in power consumption and the investments made are certainly very impressive. However, one of the statements in your written evidence that left some doubt in my mind, if you like, was that there are few opportunities for further reductions in carbon dioxide emissions because you have already put in place different measures. That is quite a statement to make and not one that we have heard previously. Is it because you believe that—because everyone assumes that their processes are clean, lean and the rest of it—you have put in all the different technological mechanisms that are available to us today, or that the process itself would not allow any greater finessing, if you like?

[163] **Mr Bronnert:** It is a mixture of both. First, the paper mill in Shotton is the benchmark for energy efficiency in the UPM group. We do not have that data from other competitors, but UPM is a really efficient company and Shotton is the most efficient. So, there is nothing big to be done. It is full of variable speed drives and it has renewable energy, and so on. Improvements could still be made in relation to secondary emissions. We still buy two thirds to three quarters of our electricity off the grid, so if that could be produced in a more sustainable way, it would reduce secondary carbon dioxide emissions. However, in most of the measures that this committee is talking about, we are talking about primary emissions on the factory site, not secondary ones. So, our total carbon dioxide emissions, in the context of the European Union emissions trading scheme, mean that we are classed as a small emitter—we produce less than 25,000 tonnes of carbon dioxide, using renewable sources. There is very little left to give.

[164] **Brynle Williams:** Am I right in assuming that paper can be recycled two, three, possibly four times? Is this included in your calculations on reducing your carbon emissions? In addition, are you using all your sludge, and, if not, is there potential there for reducing your carbon footprint? I believe that some gets spread on the land.

[165] **Mr Bronnert:** Not from UPM Shotton. Other paper mills in north Wales land spread, but Shotton does not. There is potential capacity to burn other materials, but, as I said in

referring to state aid clearance and grant aid previously, the contract is quite restrictive at the moment. Those things need to be worked through. Sorry, what was the other question?

[166] **Brynle Williams:** It was on the number of times that paper can be recycled.

[167] **Mr Bronnert:** It is quite theoretical. Laboratories have tried to recycle fibres numerous times, but after about five or six times, the fibre is useless. However, 40 per cent of recycled paper in the UK comes from magazines, and they are predominantly wood based and not recycled. UPM would advocate that as a good thing to do in the production of magazines. That is quite sustainable in itself.

10.50 a.m.

[168] **Alun Davies:** The written evidence from Penn Pharmaceutical Services talks about how, in some ways, 3 per cent is not enough. Intellectually, I might well agree with you. In our previous session with the CBI and others, the CBI seemed to be saying that annual targets will never work and that we have to plan these things over a long timescale, which, to some extent, is like saying, 'Let's kick it into the long grass and something will happen in the meantime that will mean that we don't have to do anything at all', although I accept that that might be an unfair summary of that approach. If you say that we need to go further than 3 per cent, which has a lot of attractions, how far should we be going? You also mentioned a lack of joined-up thinking in your written evidence; you talked about the way that you work on the industrial estate. What did you have in mind in saying that?

[169] **Ms Ellis:** It is an interesting point, because, depending on how sophisticated your system for managing these things is as a business, you can be short-termist and successful, managing it year on year. However, you must have a longer-term view at some point, whether that means a three-year or a 10-year plan, or whatever that might be, broken down. So, a long-term view is critical, because we then know where we are going. From my point of view, 3 per cent seems a bit low. We are in a 1980s-built tin shed on the side of a mountain in Tredegar, which we have expanded and joined together, and we are still expanding. It is not pretty from the outside, but it is state of the art on the inside, and we do some groundbreaking drug development—we do the difficult science. If we can do it, with all the disadvantages that we face, then, for me, the target of 3 per cent is a bit soft. Even if we grow our business by 24 per cent in real terms and our carbon emissions are increased by only 5 per cent, we are doing a relatively good job. We may not have reduced our emissions in absolute terms, and we can do all sorts of things with measurements and figures, but we choose to measure ours year on year. We may look at other ways of reporting. We do not report everything that we do that has an impact. That is another issue, and some businesses struggle with how to report their achievements, because it is not very clear sometimes, and they may need some help with that.

[170] Joined-up thinking has always been a bugbear of mine, and I have been working in industry for 20 years. There are lots of good things going on, and, as you can see from the paper, we work with the vast majority of support networks that are available. However, coming back to my earlier point, businesses sometimes do not know what they do not know, and making a start is difficult, particularly when we remember that with 200-odd employees, the vast population of small and medium-sized enterprises in Wales are at the lower end of the numbers, not the higher end. Also, their time is more limited and they have less internal knowledge, perhaps. So, some kind of route-map and step-by-step, centralised information pool would be useful. The more experience you have, the more you know. However, it takes time to find out. There is not enough co-ordination between what the councils and the Welsh Assembly Government can do together. Looking at an industrial estate as a whole is a great opportunity that is missed. Unless there is someone like me who will spend their time trying to engage the rest of the businesses on an industrial estate—which, frankly, I do not have the time to do—then it will not necessarily happen. We had some good examples in Blaenau

Gwent, for example, where we wanted to recycle plastics. If you are a relatively small business, volume counts a lot. We managed to do some joined-up thinking on plastic recycling, because as a business on our own, we did not generate enough to make it worth while. Sometimes, we struggle with other things, and engaging more businesses to work together, irrespective of the industry, would be good. The pharmaceutical industry in Wales is not a massive industry, but it is big enough to be missing an opportunity, particularly as we are a highly regulated industry.

[171] If you regulate something or give people who work in the pharmaceutical industry a standard operating procedure, they will follow it to the letter, almost to the death, because that is their mindset about regulation from the FDA. We have to follow it. So, I think that we are missing some tricks.

[172] **Mick Bates:** Are you happy with that, Alun? I see that you are. Valerie, I was waiting for you to repeat what you said earlier about knowing where there are huge amounts of money. I think that you should send us a note on that. [*Laughter.*]

[173] **Darren Millar:** First, I find it remarkable that we have been talking about sludge and farts this morning; I think that it is quite amusing. [*Laughter.*] Andrew, in your submission, you say,

[174] ‘CO2 emissions have been successfully reduced due to European and UK measures. The previous role of the Welsh Assembly Government is little understood’.

[175] What do you mean by that?

[176] **Mr Bronnert:** We—that is, me, personally, and UPM as a whole—do not understand where the Welsh Assembly Government and the National Assembly for Wales have acted in those areas. We are aware only of UK and European measures, so that is just a communication and knowledge issue.

[177] **Darren Millar:** Is that because the Welsh Assembly Government does not communicate enough with businesses and industry, or is it because you are not proactive enough in seeking the support of the Welsh Assembly Government? You said that you had received significant assistance to establish your combined heat and power plant. Was that support given to you by Welsh Assembly Government departments?

[178] **Mr Bronnert:** No, it came from the UK Government in London, through agencies like WRAP, the waste and resources action programme. We are great supporters of the Assembly, and we are one of two companies involved in the In-all programme. We come down here and people come to us—

[179] **Darren Millar:** I am coming to you in May for a few days.

[180] **Mr Bronnert:** Excellent. You will be with me. We get involved and that is why it is great to be here, but just for our own knowledge, we are not aware of what we are not aware of, as it were. Until recently, we have not really understood where Wales has a part to play in these predominantly energy-related matters in our business, or how many aspects of energy are devolved to Wales.

[181] **Darren Millar:** So, in effect, the Welsh Assembly Government has been of little use to you in reducing your carbon emissions. You mention in your paper that the Carbon Trust has been helpful to you, so that has clearly had some impact, but that is almost help through the back door rather than the front door of the Welsh Assembly Government supporting you in reducing your carbon-dioxide emissions, as a business in Wales.

[182] **Mr Bronnert:** I think that that is true. We certainly work with NIPS, the National Industrial Symbiosis Programme, and ARENA Network and I think that the Welsh Assembly Government is involved somehow, and it has been helpful; however, I think that that is a true statement.

[183] **Darren Millar:** Valerie, I was interested to hear your comments and to see your references to the production of some sort of route-map. A lot of the evidence that we have received so far seems to indicate that the bigger businesses are taking action, particularly the multinationals, as are the big national companies, such as Marks and Spencer and BT that we heard from earlier, but smaller and medium-sized businesses really do not know where to go for support or advice. Even though there are lots of networks out there, they do not know where or how to tap in to them. Actually, we have had some conflicting information today about local food, for example, and local procurement compared with procurement over a long distance. I am sure that different networks will have different views on the first, second and third steps to take towards reducing carbon-dioxide emissions. Do you think that a central national route-map, produced by the Welsh Assembly Government rather than individual networks, would be useful for businesses, or are you suggesting that the route-map needs to be more localised to fit in? You mentioned your local industrial estate, for example. Does it need to be tailored to the industrial estate, or do you think that a national route-map to reduce carbon-dioxide emissions for small and medium-sized businesses would be a good thing?

[184] **Ms Ellis:** I think that having a national route-map is critical, to be honest. It is almost as though there are too many data but not enough information, if you like. There is a vast amount of support available, and I do not know how much of the individual budgets get spent every year, but I expect that not all of them do.

11.00 a.m.

[185] I think that a single national website would be useful, so that you can get to it wherever you are. It is important to understand what the target areas are, because the multinationals are preaching to the converted to a large extent, and they generally have more resources and more experienced internal knowledge to be able to manage what they need to do, and to tap into the various support networks. However, for the very small businesses, it is almost like a grey mist. I know that from personal experience, because I have supported some of these companies, and I was a business consultant for two years, working for myself. I know that it would be of huge assistance to small businesses on a national level, to tap into it at whatever stage. If you want to develop a system, where do you go for help to do that? You have to write a policy and identify your assets and impacts, which are all the basic things that have to be done, but who do you go to for what? So, that would be useful.

[186] **Mick Bates:** We have heard evidence from the Carbon Trust and the Energy Saving Trust on their work, so are you saying that they do not contact enough businesses and that they do not provide this advice?

[187] **Ms Ellis:** If you are a May Day organisation, such as Business in the Community, there are links all over the place, but I would come back again to the fact that we are the people in there doing this stuff. If you are outside, you do not know what you do not know, or where to begin. So, while I think that much good work is done on communications, your organisation has to have a certain level of sophistication at the environmental root to benefit. Individual organisations do a good job, but the broader picture is missing.

[188] **Darren Millar:** You mentioned that it is difficult to measure the carbon footprint of a business, because where do you draw the line? Do you look at the energy that has been produced and consumed and at the carbon footprint of your customers and your supply chain?

How do you measure it, or should you just measure your consumption as a business? Do you think that there needs to be a standard against which businesses can measure themselves to get an accurate picture of their carbon footprint, or do you think that people just use the measurement that suits them best?

[189] **Mr Bronnert:** Absolutely. There needs to be a standard and this is a hot topic at the moment. Many consultants are set up and are publicising their own personal standard, and are generating huge incomes on the back of that. Customers may latch on to a particular standard and demand that all their suppliers meet that standard, but it is clearly ludicrous.

[190] You touched on some of the issues in retailing before supermarket chains, and it depends on how you define it. So, there needs to be clarity. The different schemes in existence operate to different standards: from the EU emissions trading system to climate change, to the renewables obligation. I prepare data monthly for all of these submissions, and I prepare them all differently. I do not mean fiddling the figures, but they all require numbers to be manipulated in a certain way, whether that is carbon emission factors or calorific values. That is across Europe, so there is little chance of an absolute standard, but, yes, we want one.

[191] **Mick Bates:** That was an interesting use of the word ‘manipulation’ there, rather than ‘steal’, which you used earlier. However, on that clarity issue and the need for a benchmark, could you recommend something that would be the best process for benchmarking, if industry were to reduce carbon emissions?

[192] **Mr Bronnert:** I am not the best qualified person to comment on that, but I would welcome an overall approach that is as wide-ranging as possible. You have heard me talk several times about secondary emissions through purchased electricity, but it is not acceptable to ignore your purchase power or, in my view, to buy green energy off the grid. If you are in a position to pass that on to the customer, you can pay a little extra for green energy, buy it off the grid, and claim yourself to be carbon neutral without any effort, thought or technology required. Unfortunately, we cannot pass anything on to our customers.

[193] **Darren Millar:** I know that you have done some work with organisations such as the Carbon Trust, and you have praised the work that you have done with it, but, given that such organisations are there to deliver on-target, do you think that there is an element of over-egging the pudding, or overestimating the carbon reductions being achieved? How do they monitor your implementation of their recommendations? We have been told that there is rigorous monitoring and auditing of every single recommendation put forward, to ensure that each one is being delivered and is achieving the forecast carbon reduction impact. Is that the case?

[194] **Mr Bronnert:** I would say so, but it may be because we pride ourselves on being ethical, and we report openly to the trust. We are proactive in reporting, but I am not sure whether if we withheld a report or did not bother to report what they would ask for. The problem with the Carbon Trust and the Energy Saving Trust is that, for a company such as ours, they are working on the margins, dealing with—with no disrespect—light bulbs and things like that. They are not dealing in renewable energy plants, so it is clear that they will not give any support on that scale to a business such as ours. They are working on the margins.

[195] **Mick Bates:** Thank you. Do Members have any other questions? I see that they do not, in which case, I thank both our presenters for their written evidence, their answers, and particularly for their evangelical zeal, as well as for the concept of advice through a route-map for all companies, particularly those that are not as engaged as your companies are. Congratulations to your respective companies on the efforts that they are making. A transcript of proceedings will be sent for you to look at soon.

11.07 a.m.

Cynnig Trefniadol
Procedural Motion

[196] **Mick Bates:** Under this item, it is proposed that we exclude the public from the meeting so that we can discuss items 5 and 6 on the agenda, to allow the committee to deliberate on the content and recommendations of the draft reports on residential carbon reduction and carbon reduction by transport as part of its inquiry. I propose that

the committee resolves to exclude the public from the remainder of the meeting in accordance with Standing Order No. 10.37(vi).

[197] I see that the committee is in agreement.

Derbyniwyd y cynnig.
Motion carried.

Daeth rhan gyhoeddus y cyfarfod i ben am 11.07 a.m.
The public part of the meeting ended at 11.07 a.m.