

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

Y Pwyllgor Menter a Dysgu The Enterprise and Learning Committee

> Dydd Iau 14 Ionawr 2010 Thursday, 14 January 2010

# **Cynnwys Contents**

- 3 Cyflwyniad ac Ymddiheuriadau Introduction and Apologies
- 4 Creu Swyddi yn yr Economi Werdd Generating Jobs in the Green Economy
- 34 Cynnig Trefniadol Procedural Motion

Cofnodir y trafodion hyn yn yr iaith y llefarwyd hwy ynddi 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

Christine Chapman Llafur

Labour

Jeff Cuthbert Llafur

Labour

Andrew Davies Llafur

Labour

Paul Davies Ceidwadwyr Cymreig

Welsh Conservatives

Nerys Evans Plaid Cymru

The Party of Wales

Brian Gibbons Llafur

Labour

Gareth Jones Plaid Cymru (Cadeirydd y Pwyllgor)

The Party of Wales (Committee Chair)

David Melding Ceidwadwyr Cymreig

Welsh Conservatives

Jenny Randerson Democratiaid Rhyddfrydol Cymru

Welsh Liberal Democrats

#### Eraill yn bresennol Others in attendance

Peter McGuinness Rheolwr Gyfarwyddwr, Severnside Recycling

Managing Director, Severnside Recycling

Tim Price Rheolwr Masnachol Cenedlaethol, Gwerthiant a Marchnata,

Severnside Recycling

National Commercial Manager, Sales and Marketing,

Severnside Recycling

Llywelyn Rhys Pennaeth Cymru, Cymdeithas Ynni Gwynt Prydain

Head of British Wind Energy Association Wales

Darren Williams Cyfarwyddwr Masnachol, Eco2 Cyf

Commercial Director, Eco2 Ltd

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

Dan Collier Dirprwy Glerc

Deputy Clerk

Joanest Jackson Cynghorydd Cyfreithiol

Legal Adviser

Siân Phipps Clerc

Clerk

Ben Stokes Gwasanaeth Ymchwil yr Aelodau

Members' Research Service

Dechreuodd y cyfarfod am 9.29 a.m. The meeting began at 9.29 a.m.

# Cyflwyniad ac Ymddiheuriadau Introduction and Apologies

[1] Gareth Jones: Bore da. Estynnaf Gareth Jones: Good morning. I extend a

groeso cynnes i chi gyd i'r cyfarfod hwn o'r Pwyllgor Menter a Dysgu. Nid yw'n rhy hwyr imi ddymuno blwyddyn newydd dda ichi, a gobeithio y bydd hi'n flwyddyn newydd dda i'r pwyllgor hefyd. Estynnwn groeso cynnes i aelodau newydd y pwyllgor, sef Andrew Davies a Brian Gibbons. Edrychwn ymlaen at eich cyfraniad maes o law. Diolchaf hefyd i Sandy Mewies a Huw Lewis am eu cyfraniad i'r pwyllgor.

- [2] Fel y gwyddoch, mae'r cyfarfod yn cael ei gynnal yn ddwyieithog; mae clustffonau ar gael i dderbyn gwasanaeth cyfieithu ar y pryd o'r Gymraeg i'r Saesneg ar sianel 1, a gellir eu defnyddio i chwyddleisio'r sain ar sianel 0. Bydd cofnod o'r cyfan a ddywedir ar gael yn gyhoeddus.
- [3] Atgoffaf bawb i ddiffodd ffonau symudol ac unrhyw ddyfais electronig arall, a hefyd i beidio â chyffwrdd â'r meicroffonau. Nid ydym yn disgwyl ymarfer tân, felly os bydd argyfwng, bydd rhaid inni adael yr ystafell ac efallai'r adeilad dan gyfarwyddyd y tywyswyr.
- [4] Nid oes ymddiheuriadau na dirprwyon.

9.31 a.m.

warm welcome to you all to this meeting of the Enterprise and Learning Committee. It is not too late to wish you a happy new year, and I hope that it will be a happy new year for the committee as well. We extend a warm welcome to the committee's new members, Andrew Davies and Brian Gibbons. We look forward to your contributions a little later. I also thank Sandy Mewies and Huw Lewis for their contribution to the committee.

As you know, the meeting will be held bilingually; headsets are available to receive simultaneous translation from Welsh into English on channel 1, and amplification is available on channel 0. A record of everything that is said will be made publicly available.

I remind everyone to switch off mobile phones and all other electronic devices, and not to touch the microphones. We are not expecting a fire drill, so if there is an emergency we will have to leave the room, and perhaps the building, following the instructions of the ushers.

There are no apologies or substitutions.

## Creu Swyddi yn yr Economi Werdd Generating Jobs in the Green Economy

- Gareth Jones: Dyma drydedd [5] sesiwn ein hymchwiliad i greu swyddi yn yr economi werdd. Mae'n bleser gennyf estyn croeso cynnes ar ran y pwyllgor i Llywelyn Rhys, sy'n cynrychioli Cymdeithas Ynni Gwynt Prydain. Diolch ichi am ymuno â ni ac am y dystiolaeth ysgrifenedig; yr ydym eisoes wedi cael cyfle i'w darllen. Yn unol â'r drefn arferol, hoffwn eich gwahodd i wneud cyflwyniad byr o ryw bum munud, ac wedyn cawn gyfle, fel Aelodau, i ofyn cwestiynau. Drosodd ichi, felly.
- [6] **Mr Rhys:** Diolch i'r pwyllgor am fy ngwahodd i ddod yma heddiw. Hoffwn ddechrau drwy gyflwyno'r sefydliad yr wyf yn ei gynrychioli, sef Cymdeithas Ynni Gwynt Prydain—neu'r BWEA fel yr ydym yn galw ein hunain y dyddiau hyn. Efallai fod

Gareth Jones: This is the third session of our inquiry into generating jobs in the green economy. It is my pleasure to extend a warm welcome on behalf of the committee to Llywelyn Rhys, who is representing the British Wind Energy Association. Thank you for joining us and for the written evidence, which we have had an opportunity to read. In accordance with the usual procedure, I invite you to give a short introduction of around five minutes, and then Members will have an opportunity to ask questions. It is now over to you.

Mr Rhys: I thank the committee for inviting me here today. I would like to start by introducing the organisation that I represent, namely the British Wind Energy Association—or the BWEA as we now call ourselves. The title is perhaps a little

y teitl ychydig yn gamarweiniol, oherwydd mae'r gymdeithas bellach wedi esblygu ac yn cynnwys ystod ehangach o dechnolegau nag ynni gwynt yn unig. Yr ydym yn cynrychioli ynni gwynt ar y tir, sef y datblygiadau hynny y byddai rhywun yn meddwl amdanynt wrth ystyried ynni gwynt yng Nghymru. Yr ydym yn cynrychioli ynni gwynt ar y môr, ynni gwynt bach ac ynni gwynt micro—mae ychydig o wahaniaeth rhwng y ddau olaf. Yr ydym hefyd yn cynrychioli technolegau ynni llanw a thonnau, ac efallai y bydd ein cylch gwaith yn ehangu ymhellach.

- [7] Mae aelodau'r gymdeithas wedi pleidleisio i newid ei henw, a bydd yn cael ei galw yn 'Renewable UK' yn y dyfodol; nid wyf yn siŵr pryd y bydd yr enw hwnnw'n cael ei lansio. Y rheswm am hynny yw er mwyn ei gwneud yn glir ein bod yn cynrychioli mwy nag ynni gwynt yn unig. Wedi dweud hynny, ynni gwynt yw prif ffynhonnell ynni adnewyddadwy o hyd, a dyma sy'n rhoi'r prif fomentwm i ynni o'r fath ym Mhrydain. Cafwyd trafodaethau mawr ynghylch ynni gwynt ar y tir dros y blynyddoedd, ac mae'n siŵr bod nifer ohonoch yn ymwybodol o hynny. Yr wyf yn siŵr eich bod hefyd yn ymwybodol o'r datganiadau a wnaed yr wythnos diwethaf am ynni gwynt alltraeth, sef ynni gwynt ar y môr, a photensial economaidd hynny.
- [8] Yn yr adroddiad, yr wyf wedi ceisio ateb y cwestiynau o ran eu perthnasedd i ni fel cymdeithas. Nid wyf wedi eu hateb i gyd, gan nad oedd rhai mor berthnasol i ni.
- [9] Yr wyf yn barod, Gadeirydd, ichi ofyn cwestiynau imi am yr adroddiad. Os oes unrhyw gwestiynau na allaf eu hateb yn llawn heddiw, mae tîm o arbenigwyr yn ein prif swyddfa yn Llundain, ac yr wyf yn hollol fodlon anfon y cwestiynau atynt a dod yn ôl at y clerc gydag atebion ysgrifenedig.
- [10] **Gareth Jones:** Yr ydym yn ddiolchgar ichi am hynny; diolch ichi am osod y cefndir ac am y cynnig i roi rhagor o wybodaeth. Y drefn, yn unol â dymuniadau'r Aelodau, yw y byddant yn awr yn gofyn y cwestiynau. Trown yn gyntaf at Paul Davies.

misleading, as the organisation has evolved and now includes a wider range of technologies than that of wind energy. We represent wind energy on land, namely those developments that people have in mind when thinking about wind energy in Wales. We represent offshore wind energy, as well as small-scale and micro wind energy—there is a little bit of a difference between the latter two. We also represent tidal and wave energy technologies, and our remit will perhaps expand further.

The association's members have voted to change its name, and in future it will be known as 'Renewable UK'; I am not sure when that name will be launched. That is being done in order to make it clear that we represent more than just wind energy. Having said that, wind energy continues to be the main source of renewable energy, and is the main source of momentum for renewable energy in Britain. There has been a great deal of debate over the years in relation to onshore wind energy, of which I am sure many of you are aware. I am sure that you are also aware of the statements that were made last week on offshore wind energy, and its economic potential.

In the report, I have tried to answer the questions in a way that takes account of their relevance to our organisation. I have not answered them all, as some are not so relevant to us.

I am ready, Chair, for you to ask questions about the report. If there are any questions that I am unable to answer in full today, there is a team of experts at our main office in London; I am more than happy to send them the questions and to provide the clerk with written answers.

Gareth Jones: We are grateful to you for that; thank you for providing the background and for the offer of further information. The usual procedure, in accordance with Members' wishes, is for us now to move to questions. We shall turn, first of all, to Paul Davies.

[11] **Paul Davies:** Yn eich papur dywedwch fod y sector ynni adnewyddadwy yn yr Alban yn ffynnu. A ydych yn credu bod yr Alban yn gwneud rhywbeth penodol sy'n wahanol i'r hyn a wneir yng Nghymru, sy'n golygu ei bod yn fwy llwyddiannus yn hynny o beth? Hefyd, beth yw eich barn am strategaeth swyddi gwyrdd Llywodraeth y Cynulliad?

[12] Yn ail, yn eich papur yr ydych hefyd yn feirniadol o'r gyfundrefn gynllunio—credaf eich bod yn dweud ei bod yn araf ac yn ddrud i ddatblygwyr. Pa newidiadau yr hoffech weld Llywodraeth y Cynulliad yn eu gwneud yn y maes hwn?

[13] Yn olaf, fel y gwyddoch, sefydlwyd y Comisiwn Cynllunio Seilwaith a fydd yn edrych ar y ceisiadau o fis Ebrill ymlaen. Pa fath o effaith a gaiff y comisiwn hwn, yn eich tyb chi, i wella'r gyfundrefn gynllunio?

[14] **Mr Rhys:** Yn gyntaf, gofynasoch ynglŷn â'r Almaen a pham mae'r diwydiant wedi sefydlu yno—

[15] **Paul Davies:** Yn yr Alban.

Mr Rhys: Mae'n ddrwg gennyf. Cafwyd twf ehangach a chyflymach yn yr Alban am fod yr adnoddau naturiol yn well yno. Mae llawer mwy o dir addas ar gael, sydd yn wastad ond yn uchel, felly mae'r adnoddau'n well yno o ran gwynt, er enghraifft. Hefyd, ceir gwell adnoddau o ran tonnau, yn arbennig. Ymddengys hefyd fod yr Alban wedi manteisio mwy ar hynny a bod mwy o fwriad yno oherwydd y gallu a'r cyfle o ran adnoddau. Mae'r Albanwyr wedi bod yn fwy pendant i fwrw ymlaen ac i wneud yr Alban yn rhyw fath o ganolfan cynhyrchu ynni adnewyddadwy i'r Deyrnas Gyfunol. Maent wedi manteisio ar hynny i geisio arwain y ffordd. Mae'r Alban ar y blaen yn y Deyrnas Gyfunol yn gyffredinol—mae ar y i Gymru, Lloegr a Gogledd Iwerddon—ac mae'n bwriadu parhau i arwain. Mae rhai cwmnïau gweithgynhyrchu wedi buddsoddi'n helaeth eisoes yn yr Alban. Nid ydym yn siŵr a yw hynny'n ganlyniad strategaeth swyddi gwyrdd yr Alban, neu a fyddai wedi digwydd beth bynnag. Mae'n

**Paul Davies:** In your paper you say that the renewable energy sector in Scotland is vibrant. Do you believe that Scotland is doing something in particular that is different from what Wales is doing, which results in its being more successful in that respect? Also, what is your view of the Assembly Government's green jobs strategy?

Secondly, in your paper you are also critical of the planning system—I believe that you say that it is slow and expensive for developers. What changes would you like to see the Assembly Government making in this area?

Finally, as you will be aware, the Infrastructure Planning Commission has been established and will be looking at applications from April onwards. What kind of impact do you foresee that this commission will have to improve the planning system?

**Mr Rhys:** First, you asked about Germany and why the industry is established there—

Paul Davies: In Scotland.

Mr Rhys: I apologise. There has been a greater and more rapid growth in Scotland because there are greater natural resources. There is more suitable land available, which is flat but on higher ground, therefore wind resources are greater, for example. Also, wave energy, in particular, is more prevalent there. It also appears that Scotland has taken greater advantage of this and has more intent due to the ability and opportunities available given its resources. The Scottish have been more determined to make progress and to Scotland a kind of renewable make generation hub for the United Kingdom. They have taken advantage of that to try to lead the way. Scotland is ahead of the game in the United Kingdom—it is ahead of Wales, England and Northern Ireland—and it intends to continue to lead. Some manufacturing companies have already made substantial investments in Scotland. We are not sure whether that is a consequence of Scotland's green jobs strategy, or whether it would have happened anyway. It is a simple economic

gwestiwn economaidd syml o fuddsoddi lle mae'r diwydiant fwyaf llewyrchus, a chreu llinell gynhyrchu yno. Ymddengys mai hynny sydd wedi digwydd. Mae'n bwysig felly, os yw'n uchelgais gan Gymru i fod ar y blaen, yn enwedig o ran technolegau morol, ei bod yn edrych ar sut y mae'r Alban eisoes wedi buddsoddi, ac yn ceisio datblygu'r technolegau hynny hefyd. Felly, mae gan Gymru le i ddal i fyny eisoes, ac mae'n bwysig gwneud hynny'n syth.

question of investing where the industry is most prosperous, and of creating a production line there. It appears that that is what has happened. It is important, therefore, if Wales has an ambition to take the lead, especially on marine technologies, that it looks to Scotland to see how it has invested to date. and attempts to develop those technologies. Wales already has some catching up to do, and it is important to do so immediately.

[17] O ran swyddi gwyrdd Llywodraeth On the Welsh Government's green jobs— Cymru—

- **Gareth Jones:** Did you have a follow-up point to make, Andrew? [18]
- [19] Andrew Davies: I will follow up later.
- Mr Rhys: Yr ydym yn croesawu unrhyw strategaeth ar gyfer creu swyddi a chreu economi carbon isel. Teimlwn fod hynny'n gam pwysig. Fodd bynnag, teimlwn fod angen mwy o fanylder yn yr ymgynghoriad, gan wneud strategaeth ynni gwyrdd—ynni adnewyddadwy—yn ganolog i strategaeth economaidd Cymru yn y dyfodol.
- Yr ydym wedi bod yn feirniadol iawn [21] o'r system gynllunio, neu efallai'r ffordd y mae'n cael ei defnyddio, i fod yn fwy pawb penodol. Gŵyr gwneir penderfyniadau am unrhyw ddatblygiadau ynni o dan 50 MW gan lywodraeth leol yn gyntaf, ac os ydynt yn fwy na hynny, penderfynir arnynt gan yr Adran Ynni a Newid yn yr Hinsawdd, a chan y Comisiwn Cynllunio Seilwaith yn y dyfodol.
- Profwyd mai'r system gynllunio yng Nghymru yw'r peth mwyaf sy'n arafu prosiectau a'r peth mwyaf sy'n atal y Llywodraeth rhag cyrraedd ei thargedau. Bu'n eithriadol o rwystredig—ac y mae'n parhau felly. Gan ei fod yn rhwystredig, mae'n gostus iawn i ddatblygwyr. Caiff y cynnydd yn y gost fwy o effaith pan fydd dirwasgiad a diffyg arian. Fel y nodwyd gennyf yn yr adroddiad, oherwydd y dirwasgiad mae diffyg arian gan y banciau, fel y gŵyr pawb. Golyga hynny fod y cwmnïau mwyaf yn parhau i allu defnyddio eu cronfa i ariannu prosiectau, ond caiff fwy o effaith ar ddatblygwyr annibynnol a bychain cynhenid Cymreig. Mae gan y rheini

Mr Rhys: We welcome any strategy for creating jobs and creating a low-carbon economy. We see this as an important step. However, we feel that there should be more detail in the consultation, and that the green energy strategy—renewable energy—should be central to Wales's economic strategy for the future.

We have been very critical of the planning system, or perhaps how that system is used, to be more specific. Everyone knows that decisions on any energy developments below 50 MW are initially made by local government, but any developments above that are decided upon by Department of Energy and Climate Change, and by the Infrastructure Planning Commission future.

The planning system in Wales has proved to be the most significant factor that slows projects and prevents the Government from reaching its targets. It has been extremely frustrating—and continues to be so. Because of that, it is also costly for developers. The increase in cost has a greater impact during a recession when there is a lack of funds. As I have noted in the report, due to the recession banks do not have enough funds, as everyone knows. This means that the largest companies can continue to use their reserves to fund these projects, but there is more of an impact on small and independent developers that are based in Wales. They have a greater mountain to climb because they cannot

fwy o fynydd i'w ddringo oherwydd na allant access the funding that they need. gael y cyllid sydd ei angen arnynt.

9.40 a.m.

Wrth gwrs, mae'r gost yn cynyddu [23] gyda'r amser y mae'n ei gymryd i'r prosiect fynd drwy'r system gynllunio, sy'n golygu bod rhai yn gorfod ailystyried a ydynt eisiau parhau gyda phrosiect. Er enghraifft, os yw prosiect yn cael ei wrthod ar y cychwyn gan vr awdurdod lleol, maent vn gorfod vstyried a ydynt yn mynd i wneud apêl i'r Arolygiaeth Gynllunio ac yn y blaen. Mae'n cael effaith andwyol.

Of course, the cost increases as the time that it takes for the project to go through the planning system increases, which means that some have to reconsider whether they want to continue with a project. For example, if a project is initially rejected by the local authority, they have to consider whether to make an appeal to the Planning Inspectorate and so forth. It has a detrimental effect.

Gofynnwyd cwestiwn gennych am yr [24] IPC a beth fydd ei effaith. Fel cymdeithas. ceisiom ymgynghori â'r Llywodraeth ar lefel oeddem Brydeinig. Yr yn cefnogi'r ddeddfwriaeth ar gynllunio a wnaed rhwng 2007 a 2008. Fodd bynnag, yr oeddem ychydig yn feirniadol o'r ddeddfwriaeth am nad oedd yn ymwneud â phrosiectau ynni adnewyddadwy. Yr oedd ei phrif ffocws ar ystyriaethau eraill, a hwyrach bod ychydig o wyrddgalchu i geisio ein cael i'w chefnogi. gwybod anodd Mae'n beth fydd goblygiadau'r IPC. Yr oeddwn yn gwylio cyfarfod y Pwyllgor Cynaliadwyedd ar y wefan nos Lun, lle yr oedd y Gweinidog, Jane Davidson, yn siarad am y datganiad polisi cenedlaethol v bydd yr IPC yn ei ddilyn, a sut y bydd hyn yn gweithio o ran awdurdod a dyletswyddau'r Cynulliad a dyletswyddau cynllunio llywodraeth leol. Bydd yn gymhleth, a bydd yn wahanol yng Nghymru o gymharu â Lloegr, gyda llywodraeth leol yn parhau i fod â'r grym i benderfynu ar rai agweddau ychwanegol ar brosiectau ynni adnewyddadwy. I roi enghraifft benodol ichi, pe bai grid newydd vn cael ei adeiladu, fel sydd ei angen yng Nghymru, yr IPC fyddai'n penderfynu ar gais cynllunio'r Grid Cenedlaethol ar lwybr y grid, ond yng Nghymru bydd yr awdurdod lleol yn parhau i benderfynu ar leoliad yr isbwerdy sy'n angenrheidiol ar gyfer grid newydd. Byddai'n rhaid cael dealltwriaeth rhwng y ddau awdurdod a byddai'n rhaid iddynt gydweithio er mwyn i hynny fod yn llwyddiannus.

You asked a question about the IPC and its impact. As an association, we tried to consult with the Government on a UK level. We supported the legislation on planning made between 2007 and 2008. However, we were slightly critical of the legislation because it did not relate to renewable energy projects. Its main focus was on other considerations, and there may have been some greenwashing involved to try to get us to support it. It is difficult to know what the implications of the IPC will be. I watched the Sustainability Committee meeting on the website on Monday night, at which the Minister, Jane Davidson, mentioned the national policy statement that the IPC will follow, and how that would work in relation to the authority and responsibilities of the Assembly and local government planning responsibilities. It will be complex, and it will be different in Wales compared to England, as local government will retain the power to make decisions on additional aspects of renewable energy projects. To give you a specific example, if a new grid were built, as is needed in Wales, it would be the IPC that determine the National Grid's would planning application for the route of the grid, but in Wales, the local authority would continue to determine the location of the substation that is essential for a new grid. There would have to be an understanding between the two authorities and they would have to work in tandem for that to be successful.

[25] **Gareth Jones:** Andrew, did have a specific follow-up point to that?

- [26] **Andrew Davies:** When you were asked a question by Paul Davies about the difference between Wales and Scotland you said—and I hope that I do not misrepresent—that, essentially, it was down to the fact that the renewable energy resources in Scotland had a greater critical mass. Even with greater powers conferred upon the Assembly, I do not think that the Assembly Government can change that situation.
- [27] **Jeff Cuthbert:** Or the wind.
- [28] Andrew Davies: Exactly. You seem to be saying that that is why there is greater potential and, therefore, there is nothing that the Government can do to alter that fact. I often hear organisations such as the BWEA saying that the Government should be doing more, but in a case where we have an energy industry that is essentially driven by the private sector, I throw back to you John Kennedy's famous expression
- 'ask not what your country can do for you—ask what you can do for your country.'
- [30] What is the BWEA doing to promote renewable energy and to identify opportunities in Wales for manufacturing and other downstream jobs?
- [31] Secondly, what would be your comment about the element of support that you are given by the relevant departments of the Welsh Government for the industry and to help to identify employment and green job opportunities in Wales?
- [32] Mr Rhys: With regard to your first point about the fact that there is nothing more that Wales can do to increase the output of renewable energy, Scotland has more potential for renewables, but it seems to have a sturdier intent. This is being led by policy, and there has also been a change in the last few years in that different Governments have more intent to lead on renewables and offset other forms of energy that they are not in favour of. There is a—
- [33] **Andrew Davies:** Can you be more specific about that? We are hearing general comments, but it would be helpful to know what exactly the Scottish Government is doing that is different from the Welsh Assembly Government.
- [34] Mr Rhys: The Scottish Government has greater determination powers, so it is not limited by the 50 MW threshold; therefore, it can determine large projects. In certain examples, it has taken positive decisions. It has also rejected large-scale projects, but, on average, the increase in determination can be seen over the last few years, where the Scottish Government has given positive determination because it follows its renewable energy policy. So, it has an advantage with regard to planning determination, if it wishes to be bold and take those decisions, whereas the Welsh Assembly Government does not have those powers. Larger projects have also come forth in Scotland while many projects in Wales are currently residing within the planning system, including projects under 50 MW, which are therefore with local authorities. There are currently some projects up to 900 MW within the planning system in Wales. That is a massive deal when you think that the target for Wales for 2010 is 800 MW, but projects are locked into the planning system and are going through due process. The industry has been frustrated in some regards, given that these projects are not being taken through the planning system quickly enough.
- [35] The renewable energy industry is a private industry, and it is therefore supported by private investment. On what the BWEA is doing to promote renewable energy and support manufacturers, we try to facilitate and work in tandem with Government to achieve renewable energy targets by using the technologies in which we have competence. Therefore, we follow Welsh Assembly Government policy and guidance, and between 2005 and 2010, it gave us TAN 8 with associated targets, as you will know. That is basically the guidance and

framework that the industry must adhere to. The industry had its say in the lead-up to that guidance being issued, and we now feel that we must work within that guidance. As you know, the guidance leads the industry to certain areas, in regard to big onshore wind projects in particular. The policy guidance on offshore wind projects is a little different, because it is being led by rounds, 1, 2 and 3, and therefore the industry also follows Government guidance in that regard.

- [36] We are always looking for opportunities. We are trying to emphasise the current importance of the renewable energy industry to the Welsh economy. A large number of companies are based in Wales, some of which are indigenous Welsh companies that were set up in Wales and are leading their own projects. There are also large-scale utility companies with Welsh branches, such as RWE Npower Renewables Ltd. A third of the company's staff is based in Wales, and a third of its investment is being directed to Wales. RWE is a major European energy utility company and we are therefore privileged to have that economic edge. I try constantly to promote the potential that Wales has when trying to go forth to create a low-carbon economy and what that would mean in 20 or 30 years' time.
- [37] Your third point was about the relevant support that we receive from WAG. We work closely with the Welsh Assembly Government, and we welcome its support and enthusiasm for renewable energy. The Minister, Jane Davidson, is leading on this and she is unequivocal in her support for wind energy and certain types of marine technologies. The Welsh Assembly Government is determined to increase its targets to make Wales self-sufficient in renewable energy. We welcome that support and try to follow that lead and enthusiasm to provide a payback to Wales for its efforts. I hope that that answers your questions.

9.50 a.m.

- [38] **Andrew Davies:** On the last point, I was asking more about logistical operations support, because under the old Welsh Development Agency, just two of the 1,100 members of staff worked on energy-related aspects, and I wondered whether the situation had improved.
- [39] The accusation often made about the British Wind Energy Association and some—and I am not saying all—renewable energy companies is that they are their own worst enemies in engaging with local communities, because onshore wind can be a controversial and divisive issue locally. A criticism made of many energy companies is that they fail to engage proactively with communities.
- [40] Mr Rhys: Logistical support from Welsh Assembly Government officials is very good. They have shown an intent to come on board and get involved in discussion frameworks and working groups to solve problems such as those around onshore wind. One critical problem is transport and getting turbine components to the site where they can be built. That has created problems and the Welsh Assembly Government's transport officials have been helpful in facilitating that, working with us to find a way around the problem. In addition, officials have been helpful with the national grid issue in mid Wales, and we have received support and encouragement from them. So, yes, the Welsh Assembly Government officials are there to help us and I hope that that is mutual—we try to work with them to resolve the obstacles to delivery. We can rely on the support of Welsh Assembly Government officials and their co-operation in that.
- [41] I take your point that our members have different ways of engaging the public. They all have their individual ways and methods and some of them are project-specific—they decide on the most appropriate way of engaging with different communities and some methods will be criticised more than others. However, as an industry body, we have issued best practice guidance, and the old Department for Trade and Industry had also issued best practice guidance for developers, and we encourage all our members to follow those. There

has been discussion about whether we, as a trade organisation, should revise or modernise our best practice guidance for developers in Wales. That might be in the form of an online database that developers can use, and which is relevant to Wales and the policy guidance framework here. So, that is also under consideration.

- [42] **Gareth Jones:** Diolch yn fawr iawn i **Gareth Jones:** Thank you very much. chi.
- [43] Thank you for that point on community engagement. I think that we will have to leave it there—the point was made. Quite a few Members want to ask questions, but there is a follow-up from Christine Chapman, first of all, and then I will ask Jeff Cuthbert to come in.
- [44] **Christine Chapman:** This is just a follow-up on the engagement by the industry itself. Andrew is right that there is still a lot of hostility, despite your statistic saying that 70 or 80 per cent are in favour. I can understand that—there is often a silent majority—but nevertheless, there is a lot of visible hostility. How much does the wind energy industry itself engage with local authorities? They are the ones who will pick up the strong community feeling. Sometimes it seems to me that people pass the buck on this issue, just saying that the decision was made by the WAG, or was taken at local level. We will not get very far with this until there is strong support from all sides. I think that there are still too many unanswered questions. Is the industry really up for this engagement with the community? I can think of some good practice more recently, but equally, I have seen some awful practice from the industry, which does not help when you are saying that you cannot get the projects through.
- [45] **Mr Rhys:** There are two tiers of engagement and the first is where a company or developer has its own project. They will have to engage with the local authority, regardless of the size of the project. Whether it is above or below 50 MW, they have a duty to engage with the local authority and other statutory bodies, such as the Countryside Council for Wales, and non-statutory bodies, such as the Royal Society for the Protection of Birds. Each company or developer has a different method of doing that and the method might differ for each project. As an organisation, we do not engage in project-specific terms. That is really up to the developer, even though we urge our members to follow good practice and engage widely with the community and the local authorities.
- [46] As an organisation, we try to engage generally with our stakeholders, including local authorities. Over the last couple of years, we have been trying to organise a seminar event for local authorities. It took place in Wales in 2008. Councillors from planning committees were invited to spend the day listening to the industry to hear what the industry is doing and the process that the industry and developers must follow to bring forward a windfarm application. So, we are actively trying to engage.
- [47] We are also considering ways of increasing this engagement and perhaps taking the message out to the communities that will host onshore windfarms in the future—and perhaps offshore windfarms as well. We are certainly looking at those plans for 2010. We are bringing proposals together for some kind of engagement. In previous years, the Embrace campaign tried to increase public support throughout Britain. It looks likely that the Embrace campaign will be re-launched sometime in 2010. That might go hand in hand with what other Welsh members are trying to do in relation to trying to get a road show or a public engagements campaign going.
- [48] **Jeff Cuthbert:** Thank you for your paper and for the comments that you have made so far. My question flows from much of what has been said, and it certainly relates to the green jobs strategy. It is on skills. If renewable energy is to take off in the way that we would all like to see, the workforce has to be appropriate, skilled to the right level, with up-to-date techniques. Do you feel that there is a significant skills gap in the Welsh workforce at this

moment, should the plans that you want to see go ahead get approval and proceed? If so, what is to be done about it? What is the industry doing to advocate the type of skills that are necessary to set up initiatives like this and to maintain them and keep them going on a regular basis? What type of benefit would there be in the long term to transferable skills—perhaps generic skills—to the Welsh economy as a whole, as a result of the establishment of power generation by these means?

[49] Finally, are you considering—either by yourselves or in partnership with others—utilising European structural funds? The whole of Wales is covered by either convergence or competitiveness funding. I know that the sustainable energy materials efficiency priorities are undersubscribed at the moment with projects. All of these, as you are aware, have to lead to the enhancement of skill levels. As a representative of your industry, do you have any views on this and could you inform us of what is in hand at the moment?

10.00 a.m.

- [50] Mr Rhys: You asked whether there is a skill gap in Wales in relation to this industry. I would say that there is and it has been an increasing worry for the industry across the UK, not just in Wales, as the industry is growing so quickly and the targets are being increased. There is a lag that the skills base has to catch up with. Certainly, we are worried about the skills gaps. The BWEA, on a UK basis, has commissioned two reports on this. The first, called 'Employment opportunity and challenges in the context of rapid industry growth', contains some predictions about how fast the industry will grow and therefore the number of potential employees, and that is linked to the industry as a whole. The second report goes alongside that, really, and is called 'Today's Investment, Tomorrow's Asset: Skills and Employment in the Wind, Wave and Tidal Sectors', and focused in on the skills question. I recommend those reports to you for the work of this inquiry. Look at them and, if you have any questions, we can clarify those matters with the marketing and economics team at our head office.
- [51] There do appear to be skills gaps, and they are in different sectors: in planning, certainly, in technical skills and project development, just to mention three. If the manufacturing base with regard to marine renewable energy is developed, as we all hope that it will be, we then have to think about developing manufacturing skills as well. A lot of these skills are transferable. The maintenance of wind turbines is an example: there is an opportunity for existing local companies to look at their present skills and see how they can transfer those skills to fill the skills gap. That will be of direct benefit to the local economy. It is important to think like that.
- [52] With regard to what the industry is doing, the marketing and economics team at BWEA has a dedicated skills officer, who was employed in 2008, to develop this, and she is working closely with the Welsh Assembly Government. You asked earlier about support from the Welsh Assembly Government and, in fact, this was a Welsh Assembly Government initiative to try to consider the skills needed for the renewable energy sectors and to work with the skills sectors of Wales in thinking ahead. We very much welcome that approach and are using our resource from our head office and the skills sector resource of the Welsh Assembly Government to that end.
- [53] With regard to your question on European structural funding, the answer is 'yes'. I know that the Minister is interested in looking at ESF to develop research and development for marine projects in Wales. We support that approach, and would want to learn more about it. With regard to individual funds—I am not entirely sure how the mechanism works—it might be an idea for us to discuss this further with the Welsh European Funding Office and see where there are potential opportunities for the industry to take up, either as a trade body or individual developers, in European structural funding.

- [54] **Jeff Cuthbert:** I am interested to hear what you have to say about structural funds, and I suggest that you discuss it further with WEFO to see what scope there is. Undoubtedly, it could be a valuable asset in assisting with the skills gap.
- [55] I was pleased to hear you say that you are working with other sector skills councils. Would that include, for example, ConstructionSkills and SEMTA? Are those the type of organisations that you are working with?
- [56] **Mr Rhys:** Yes, we are working with a wide range of the sector skills organisations. A working group has been set up, again through the Welsh Assembly Government's initiative, to include the industry plus all the relevant sector skills organisations.
- [57] **Gareth Jones:** I would just like to remind everybody that we only have around 15 minutes left on this particular point. All of this is quite relevant, but the job creation aspect is critical to our review and I would ask that we focus on that. You mentioned there, Llywelyn, employees' potential in those reports, and we would be interested to see them, but I just issue a gentle reminder to Members that I would like to hear more about the potential for job creation.
- [58] **David Melding:** My question is on the opportunities for job creation. I start by echoing the welcome to Andrew Davies and Brian Gibbons, Chair. I feel as if two heavies have joined the committee. [*Laughter*.] Given their extensive Cabinet experience, they really know where the bodies are buried; indeed, they have had executive responsibility for areas of committee interest. I will avoid the temptation to engage in deep retrospective scrutiny of fellow committee members, but I look forward to their contributions.
- [59] It is stated in one of the papers—it may well have been yours—that, if we are looking at manufacturing and research and development opportunities, the time to have taken such opportunities was probably the late 1980s or the early 1990s. Although Wales is a good location and there will be secondary jobs, such as maintenance and so forth, chasing manufacturing in this area now is pretty much a lost cause.
- [60] To turn to tidal energy, given your impending interest in these wider matters, as you look at what is happening in Wales, particularly with regard to small and medium-sized enterprises and the university sector, for instance, are there people out there looking at the development of medium and micro-scale tidal energy solutions—presumably, if such solutions are found, the markets for them in those parts of the world where there is great tidal potential could be massive—or is that just not happening in Wales? Given our extensive resources in specialisation in environmental issues in higher education, what should we be encouraging the Welsh Assembly Government to do to be at the forefront of this emerging technology?
- [61] **Gareth Jones:** Before you answer, I believe that Brian would like to add something.
- [62] **Brian Gibbons:** Yes. I think that that comes across very strongly in the papers, and I would go a lot further than David. Both Llywelyn's paper and Eco2 Ltd's paper say that the horse has well and truly bolted in relation to significant job creation from the windfarm sector. That comes across very strongly, and I was interested in the response to Jeff's question. There is a skills deficit, but the question is how big it is. It may be marginal, but both papers—to me—made the case that, if we are looking to the wind sector to generate a substantial amount of jobs, a few jobs here and there is about the size of what will be generated, and so we should not really be relying on this particular sector to be a major creator of jobs.

- [63] **Gareth Jones:** That is the critical point. Thank you, Brian.
- [64] **Mr Rhys:** I will try to respond to both points. Both of you mentioned that the horse has bolted on manufacturing jobs, and the conventional view is that we have missed the boat, if you like, with onshore windfarms. The initiative has been seized by Germany, Denmark and Spain in the European market. They have taken the market, and manufacturing happens there because there is demand in those countries. This is a demand-led industry, and it makes sense for manufacturers to invest in countries where they know there is a market for their product.
- [65] I would not say that the door to manufacturing is shut and locked in Wales. We never know what is around the corner, and there are already some wind-related manufacturing jobs in Wales. Quiet Revolution is a manufacturer of small wind turbines, based in Pembroke Dock. That perhaps shows the potential for small and microgeneration manufacturing. There are also Welsh companies involved in the supply chain, manufacturing gearboxes and the like for wind turbines. There is always the dream of further manufacturing work coming to Wales with regard to onshore windfarms.

10.10 a.m.

- [66] In respect of offshore windfarms, the UK is a world leader. There is demand, and so it is easy to see that manufacturing capacity will follow in the UK. It must be said that, because most of the offshore developments will happen off the east coast of Britain, that will be the likely location for offshore manufacturing. However, we must remember that these new technologies are always moving ahead and improving. There may be further offshore developments off the coast of Wales and, in that regard, I would like to make the point that there could be a manufacturing and servicing opportunity for a Welsh harbour or port to service developments off the west coast, which we should look at now as a country. That also applies to other marine technologies, such as wave and tidal.
- [67] You also asked about tidal energy and its potential. I know that our member, Eco2 Ltd, is giving evidence later this morning, and it is the leader in Wales on this technology. It is a Welsh company that is trying out different systems underneath the sea to generate electricity and it is very exciting. We all hope that Wales will be able to benefit from those kinds of developments and maybe lead on them. Scotland also has an interest and aspirations in marine technologies, as does the south-west of England. For Wales to be in the vanguard, we need to think about this now. When we talk about marine technology, which we support and want to be further developed, we must remember that it will not be delivered until after 2020, when it will contribute significantly to renewable energy targets. With a lot of marine technologies, we are still at the research and development stage, in which prototypes are being tried out. Some are successful and some are not. A lot of capital costs are involved and therefore a lot of private investment is needed, but we are in a recession when funds are—
- Ltd, if I am called. We must look at things from the perspective of 2020 and beyond. If smaller-scale tidal technologies develop, which can be located in all sorts of places—at the minute, they are in their infancy, basically because the tides rip these things apart—but after a durable solution is found, they will be effective. If we can get that solved, they will make hydroelectricity seem puny, will they not, because of the potential power that will be there? Is there some activity on this? Eco2 Ltd is one example, but is the university sector switched on to this and is the Government encouraging research in this area? If we find at least part of the solution, because we may do it in co-operation with other European countries or countries across the world, we could get something that is a world leader. I want a sense of whether you feel that the networks are already developing. If they are, we do not need to do much other than commend them and their continuation.

- [69] **Gareth Jones:** That is a valid point. Are you satisfied that there is strategic leadership on what could be a brilliant idea? We have all identified that. However, what is happening? Are you content that we have identified the possibility and are really getting on with developing and fulfilling that potential?
- [70] **Mr Rhys:** Concerning activity and networks, there is a network that is led by Swansea University that involves developers and Welsh academia with regard to marine technologies. Its name escapes me at the moment, but I am willing to get the contact details to you through the committee clerk, if that will be useful.
- [71] **David Melding:** That would be helpful.
- [72] **Mr Rhys:** There could potentially be more activity. I will defer a lot of this to Eco2 Ltd, and you can question its representatives later, especially on the durability of the technology and its advancement, where it is and what the potential of such systems is. With regard to the general potential of wave and tidal technologies, it is extensive but, as I say, we are still in the early stages of developing this particular sector and we are still learning a lot. The sector will contribute significantly in the future, but it is still a case of being 'in the future'. Perhaps it would be worth the Welsh Assembly Government's while to conduct an audit of the delivery potential, of what is possible, and of what we can expect from marine technologies—wave and tidal stream technologies—to see what our aim is, where we want to be, and how we could have a strategy to work with.
- [73] **Gareth Jones:** I intend to call on Nerys and Jenny, but do you have a specific question to ask, Brian?
- Brian Gibbons: Yes. Following on from where David is, and why things are not working out, I thought that one of the most significant things that you stated in your paper was that the companies had to self-finance these projects. I think that it was Warren Buffett who said that if you follow the money, you will get the answer. If the private sector—the banks, finance houses, and merchant banks, and Andrew pointed out that it is essentially a case of the private sector—is not investing in this sector, it seems that it does not have any faith in it. If it had faith, the money would be going in and the companies would not have to be self-financing. I do not know whether you would like to elaborate on that. Is it a problem across the United Kingdom or is it a specific Welsh problem? However, if there is private investment failure, it seems to be a very weak sector in which to generate a lot of jobs.
- [75] When you refer to x megawatts, Llywelyn, are you talking about potential or actual delivery to the grid, because we do know that the potential and actual delivery can be vastly different? It can be quite confusing when these figures are bandied about—are we actually talking about what is really being delivered to the grid as opposed to the potential delivery to the grid?
- [76] **Mr Rhys:** On your first point on the faith of private industry to invest in developing marine technologies—
- [77] **Brian Gibbons:** I referred to wind technologies—
- [78] **Mr Rhys:** There is significant investment—
- [79] **Brian Gibbons:** I think that your paper stated that the investment on the books comes from the companies themselves and that the companies are not able to go to the market to seek finance. If that is just a strategic decision that makes good business sense for the individual companies, then that is fair enough. Or is it the case that the companies have to

finance it in this way because there is market failure? If it is the case that this sector will only be developed through companies self-financing, then that implies that substantial Government support will have to be given to the sector through the renewables obligation certificates and so forth, and implies that this is not a sustainable sector in its own right.

[80] I think that we have established that there is substantial job capacity in this sector and we know that there is already a premium for electricity in Wales. However, if, as Llywelyn stated in his submission, we want to be a country that exports electricity generated through renewable means—we know that all renewable energy has a premium of 20 per cent to 100 per cent on it already; it is much more expensive than coal, gas and even nuclear generation means—is there a risk that there will be significant additional competitive disadvantage to the Welsh economy as a result of our being unduly dependent on renewable energy and the fact that it is more expensive to generate?

10.20 a.m.

- [81] Mr Rhys: Where shall I start? To pick up your point on ROCs, industries depend on such initiatives. ROCs are market incentives, and have been fundamental in bringing wind technology forward over the last few years. One ROC is set against onshore wind, whereas offshore wind has two, and I think that marine energy has 2.5. There are significantly more in Scotland, which has accounted for its taking the lead in respect of companies that are willing to invest in such technologies—the reward there for such investment is greater. The Government has to measure and balance what it thinks is the most appropriate support mechanism to develop a technology that is still very young and still improving from year to year. That is why there is a market incentive, and the cost of wind technology in particular has decreased significantly, while its efficiency has increased. For example, these days, on-sea turbines can generate as much as 5 MW, and those on land can generate up to 2 MW. That is significantly more than projects in, say, the mid to late 1990s, when turbines generated 0.4 MW. You can get a greater yield and have even less of an impact, as you need fewer turbines to generate more electricity. That is the advantage of the ROC system, which guarantees a return for renewables.
- [82] On the costs and whether it is expensive or not, there is a cost to the market associated with wind. However, we must remember that it is a natural resource; there is no fuel cost. We do not pay for the wind or import it into this country; it just blows, of course, and, as a result, there is no fuel cost associated with wind. We also have to consider the carbon cost with regard to Welsh, UK and international targets. We have to consider, in facing global climate change, whether the expense of one form of low-carbon technology offsets that of carbon emissions.
- [83] **Brian Gibbons:** On the differential, given the high cost of electricity that is generated through renewable means, and that Wales would be producing 100 per cent, is there any additional risk of a further premium on electricity? Wales is a much heavier consumer of electricity than other countries in the United Kingdom because of industries such as the steel industry. Corus, for example, and wood-reprocessing companies are highly energy intensive. Would we be creating a significant market disadvantage for us by having this type of set-up?
- [84] Mr Rhys: I am trying to think whether there are figures in the report. There were figures in another report that we produced last week, when the announcement on offshore energy was made. There will be an energy gap, whichever way you look at it. There will be a gap when nuclear energy is decommissioned and when coal plants go offline. There will be increased costs, whatever the solution. A BWEA report that I read—I will get the figures to you for clarification, as I am going from memory here—showed that there will be an increased cost, but if we rely on wind or get it to fill part of the gap, it will be an increase of 20 per cent, whereas if we concentrate on just filling that gap through coal-powered energy, it

will increase by 60 per cent. So, there are differentials in that regard as well.

- [85] **Gareth Jones:** That is a valid point. I am conscious of the time, so we will leave that specific point there. We will need to return to it because it has great significance for the future as far as Wales is concerned. When you referred to the megawatt level, you asked about the potential, and there is a difference between what goes into the grid and the potential. Are we talking about 50 MW actually going to the grid, or is that the potential?
- [86] **Mr Rhys:** When we talk about megawatts, it is capacity. The capacity of a certain windfarm would be this or that amount of megawatts, and the developer would calculate that. There is what I think is called a base load for onshore wind of about 35 per cent. Offshore wind is higher, because the winds are stronger and more reliable, so it is 40 per cent. Each energy form has its base load, and the capacity is in megawatts.
- [87] **Nerys Evans:** Cafwyd trafodaeth am y ffaith bod y drws wedi cau ar swyddi gweithgynhyrchu o ran ffermydd gwynt ar y tir. Ai dyna'r agwedd, sef bod neb yn ceisio cystadlu ar hyn o bryd yn y farchnad honno? Pa mor realistig a fyddai agor y drws hwnnw i fanteisio ar y swyddi hynny?
- [88] Yn ail, cyhoeddodd Ystadau'r Goron ddatganiad yr wythnos diwethaf ynghylch ffermydd gwynt ar y môr. Soniwyd gennych fod llawer o ddatblygiadau o'r math ar ochr ddwyreiniol y Deyrnas Unedig. Beth y mae'n rhaid i ni yng Nghymru ei wneud i fod mewn sefyllfa gref i fanteisio ar swyddi a ddaw yn sgîl hynny, a pha fath o swyddi fyddant? Mae'n amlwg bod llawer o'r pethau hyn yn dibynnu ar y farchnad, ond pa rôl fydd gan Lywodraeth Cymru i sicrhau ein bod ni yn y sefyllfa orau bosibl i fanteisio ar y swyddi hynny?
- [89] Yn olaf, cafwyd trafodaeth ynglŷn â'r system gynllunio a pha mor araf, drud a rhwystredig y mae. A yw'n anodd gwireddu dyheadau clodwiw Llywodraeth Cymru oherwydd y system gynllunio, neu a yw'r ffin ffals o 50 MW yn fwy o rwystr? Pa newidiadau deddfwriaethol neu reoliadol sydd eu heisiau i wireddu dyheadau polisi Llywodraeth Cymru?
- [90] **Mr Rhys:** Gyda gweithgynhyrchu, pwy a ŵyr a yw'r drws wedi cau ai peidio? Nid wyf yn meddwl ei bod yn rhy hwyr inni fanteisio ar swyddi gweithgynhyrchu yn y sector ynni gwynt, er taw'r farn boblogaidd yw ei bod hi'n rhy hwyr arnom. Pwy a ŵyr? Efallai y bydd cyfle inni fanteisio o safbwynt gweithgynhyrchu yng nghyd-destun ynni

Nerys Evans: It has been mentioned in discussions that the door has closed on manufacturing jobs connected to onshore windfarms. Is it the case that no-one is trying to compete in that market at this time? How realistic would it be to open that door to take advantage of such jobs?

Secondly, the Crown Estates released a statement last week on offshore windfarms. You mentioned that there are a lot of developments of this kind on the eastern side of the United Kingdom. What does Wales have to do to put itself in a strong position to take advantage of the jobs that would be created as a consequence, and what kind of jobs would they be? It is clear that many things depend on the market, but what role could the Welsh Government play to ensure that we are in the best position possible to exploit those jobs?

Finally, the planning system was discussed, along with how slow, costly and frustrating it can be. Is it difficult to realise the Welsh Government's commendable aspirations because of the planning system, or is the artificial cut-off point of 50 MW more of a barrier? What legislative or regulatory changes are needed for the Welsh to be Government's policy aspirations realised?

Mr Rhys: With manufacturing, who knows whether the door has closed or not? I do not think that it is too late for us to turn the creation of manufacturing jobs in the wind energy sector to our advantage, despite the popular opinion that we have left it too late. Who knows? Perhaps there will be an opportunity to take advantage of offshore

gwynt ar y môr. Yr ydym eisoes yn gweithgynhyrchu systemau gwynt bychain, fel y nodais wrth sôn am Quietrevolution yn sir Benfro. Efallai y gallwn fanteisio ymhellach yn fuan yn y dyfodol—pwy a ŵyr? Cawn weld beth sy'n digwydd.

[91] O ran ffermydd gwynt ar y môr, mae cyfleoedd i Gymru, ac mae'n bwysig i Gymru eu hadnabod yn fuan a meddwl am sut y mae am fanteisio ar cyfle a ddaw yn sgîl y datganiad a wnaed yr wythnos diwethaf. Mae ffermydd gwynt alltraeth ger arfordir Cymru eisoes, ac mae gan Gymru brofiad yn hyn o beth. Mae Cymru wedi cael buddsoddiad eang yng nghyswllt ffermydd gwynt, ac mae gennym ryw fath o arbenigedd hefyd.

O ganlyniad i'r datblygiadau sydd yn [92] bodoli oddi ar arfordir y gogledd, crëwyd swyddi yn Nolgarrog, lle maent yn rheoli'r ffermydd gwynt ar y môr mewn ystafelloedd rheoli technolegol modern. Y buddion o ganlyniad i hyn yw swyddi. Hefyd, mae cwmnïau, neu bobl sy'n gweithio i gwmnïau yng Nghymru, sydd yn arbenigo mewn codi ffermydd gwynt ar y môr. Job hynod anodd a chostus yw codi tyrbinau gwynt ar wely'r môr, a bydd yn anos byth wrth iddynt fynd hyd yn oed ymhellach oddi ar yr arfordir. Mae'n rhaid cael deifwyr arbenigol, pobl sy'n gwybod beth y maent yn ei wneud ar y llongau, a llongau adeiladu arbenigol. O safbwynt potensial pellach, fe'i gwelaf mewn datblygu porthladd i wasanaethu ac adeiladu ffermydd gwynt oddi ar arfordir Cymru. Porthladd gweithgynhyrchu fyddai hwnnw.

10.30 a.m.

Mae porthladd Mostyn yn barod wedi gweld cyfle ac wedi elwa'n helaeth ar y ffermydd gwynt sydd ar y môr. Mae yno arbenigedd o weithio gydag Airbus ar gael yr adenydd i'r porthladd. Maent trosglwyddo'r sgiliau. Mantais arall porthladd Mostvn vw ehangder v safle, lle v gellir cadw tyrau tyrbinau heb gost eithriadol. Mae prinder lle fel arfer mewn porthladd, ond ni fydd hynny'n broblem ym mhorthladd Mostyn. Mae'r porthladd wedi bod yn ganolfan i adeiladu'r ffermydd gwynt sydd ar wastadeddau'r Rhyl a North Hoyle, ac yr wyf wind energy from a manufacturing context. We are already manufacturing small wind systems, as I mentioned in relation to Quietrevolution in Pembrokeshire. Perhaps we can increase our advantage in the near future—who knows? We shall see what happens.

On offshore windfarms, there are opportunities for Wales, and it is important that Wales recognises them quickly and thinks about how it can exploit the opportunity that will arise as a result of last week's announcement. There are offshore windfarms already located off the coast of Wales, and Wales has experience in that regard. Wales has received wide investment in relation to windfarms, and we have some expertise, too.

As a consequence of the developments that exist off the north coast, jobs have been created in Dolgarrog, where they control offshore windfarms from technologically modern control rooms. The gains as a consequence are jobs. Also, there are companies, or people who work for companies in Wales, that specialise in constructing offshore windfarms. Erecting wind turbines on the seabed is an incredibly difficult and costly job, and it will only get harder as they are located further out to sea. Specialist divers, experienced boat crews, and specialist construction ships are all required. As far as I can see any further potential, it is in the development of a port to service and raise windfarms off the coast of Wales. That would be a manufacturing port.

The port of Mostyn already seized the opportunity and profited handsomely from offshore windfarms. It has expertise from working with Airbus on getting the wings down to the harbour. They have transferred those skills. Another benefit in Mostyn port is the huge expanse of the site, where the turbine towers can be kept without considerable cost. There is usually a shortage of space in ports, but that will not be a problem in Mostyn port. Therefore, the port has been a hub for building the windfarms on Rhyl flats and North Hoyle, and I am sure

yn siŵr y bydd yn fanteisiol hefyd gyda Gwynt y Môr. Yn sicr, mae yna gyfleoedd, a rhaid inni ystyried pa safleoedd a phorthladdoedd all fanteisio fwyaf ar y datblygiadau hyn. Yn sicr, bydd porthladd yn rhywle ar arfordir gorllewinol Prydain, ac efallai y bydd cais gan un o Gymru.

Trof yn awr at y ffin o 50 MW ac a fydd yn amharu ar ddatblygiadau ehangach o ran y system gynllunio. Y profiad hyd yma, yn sicr ym mywyd nodyn cyngor technegol 8, yw bod y rhan fwyaf o geisiadau cynllunio wedi mynd i lywodraeth leol yn y lle cyntaf. Dim ond yn y 12 neu'r 18 mis diwethaf y mae prosiectau wedi mynd uwchben 50 MW ac wedyn wedi mynd i'r Adran Ynni a Newid Hinsawdd yn Llundain. Fodd bynnag, maent i gyd yn eistedd yn y system gynllunio ar hyn o bryd; nid oes llawer yn cael ei benderfynu. Caiff rhai eu gwrthod ac wedyn maent yn cyflwyno apêl i'r Arolygiaeth Gynllunio. Yr ydym hefyd yn disgwyl i'r IPC ddod yn weithredol, a fydd yn golygu y bydd popeth yn newid eto. Yr ydym mewn cyfnod o osteg ar hyn o bryd.

[95] Mae nifer o bethau technolegol eraill yn amharu ar y system gynllunio, er enghraifft nid yw awdurdod lleol Powys yn barod i gytuno neu benderfynu ar unrhyw brosiect ar hyn o bryd nes bydd y mater trafnidiaeth yn cael ei ddatrys. Dyna pam yr ydym yn ymdrechu'n fawr i ddatrys y broblem hon yn gyntaf, gan wybod y bydd y drws wedyn yn cael ei ddatgloi ac y bydd y prosiectau hyn yn mynd yn eu blaenau.

[96] Yr wyf yn ymwybodol o bolisi pob plaid yn y Cynulliad i geisio newid y ffin 50 MW. Mae'r diwydiant yng Nghymru yn cefnogi uchelgais Cymru i arwain ym maes ynni adnewyddadwy, ac yr ydym yn cefnogi'r hyn sydd ei angen i gyflawni'r targedau hynny.

[97] **Gareth Jones:** Diolch. Jenny Randerson sydd â'r cwestiynau olaf.

that it will be of benefit in future to Gwynt y Môr. There are benefits, certainly, and we must consider which sites and ports can benefit the most from these developments. There is sure to be a port somewhere on the western coast of Britain, and there may be a bid from Wales.

I now turn to the cut-off point of 50 MW and on whether it restricts wider developments with the planning system. The experience to date, certainly in the life of technical advice note 8 is that most planning applications have initially gone to local government. It is only over the past 12 or 18 months that projects have gone above 50 MW and have therefore gone to the Department of Energy and Climate Change in London. However, they are all sitting somewhere in the planning system at the moment; nothing is currently being decided. Some applications are rejected and they then make an appeal to the Planning Inspectorate. We are also expecting the IPC to come into operation, which will mean that everything will change again. We are in a lull at present.

There are many other technological factors that impact on the planning system, for example the local authority in Powys is not willing to agree to or decide on any project until the transport issue is resolved. That is why we are putting a lot of effort into resolving this problem first, knowing that the door will then be unlocked and that these projects will go ahead.

I am aware of the policy of each party in the Assembly of wanting to change the 50 MW cut-off point. The industry in Wales is supporting the Welsh ambition of leading on renewable energy, and we support what is needed to deliver on those targets.

**Gareth Jones:** Thank you. The final set of questions is from Jenny Randerson.

[98] **Jenny Randerson:** I recall reading last year that Wales's only manufacturer of large wind turbines went out of business. Was that due to issues specifically connected to that company or do you believe that there were systemic reasons for that? The reason why I ask that question is because I want to know whether there is a potential for another company to set up in the future and be successful. Secondly, in your paper, the way in which you refer to the nuclear industry is very much as a competitor. What is your attitude, as an association, to

other aspects of the renewable energy sector with regard to marine energy and so on? You have referred to that today and you clearly know a lot about it, but I am interested to know whether you have some sort of consortium to look at those transferable skills to ensure that, across the whole sector, the right skills are being created in Wales, and that people with a set of skills that can be transferred from one company to another, to one type of renewable energy to another, are able to do so. Thirdly, on the lack of grid capacity, I am led to believe that the full potential of wind turbines in mid Wales is severely hampered by the lack of grid capacity. We are more likely to see the development of this industry, and therefore the jobs associated with it, if the grid capacity were there. It just needs some kind of estimate from you about the time it would take before that grid capacity is in place. Are we talking five years, 20 years, or however long?

- [99] **Brian Gibbons:** Could you also mention something about the transport problem in Powys? I had not heard of that before; it is a new issue for me, although others may know about it.
- [100] **Mr Rhys:** You are right to say that we did have a turbine tower manufacturer in Wales—Cambrian Engineering. That was before my time, so I will not comment on what happened and why it relocated to Scotland. I believe that something else happened to the company, so it closed down in Scotland later on. I am not entirely sure—
- [101] **Jenny Randerson:** Did it get a grant from Scotland?
- [102] **Mr Rhys:** I am not going to go on any rumours that I have heard; I will leave that. I do not want to give a negative message that there will never be a chance for onshore turbine manufacturing to happen in Wales again. Companies re-form and look at their old markets, and other companies might come in and invest. There might be investment in other manufacturing roles—I mentioned the potential in developing a port in west or north-west Wales.
- [103] I do not particularly see the nuclear industry as a competitor. It is another form of electricity generation, and it is up to Governments to focus on what share of electricity is generated from which source.
- [104] With regard to transferable skills, let us encompass all forms of electricity generation. There are certainly transferable skills from coal and nuclear to the renewables. The large utilities—RWE, Npower, E.ON, and so on—all have a hand in other forms of energy generation, and they transfer skills within their own companies, with people moving from one department to another. The same applies to the renewables sector of the utilities companies. There will be a team working on onshore generation, and a team working on offshore, with a smaller team developing marine technologies. People will move from one to the other.
- [105] **Jenny Randerson:** If I can interrupt, I was asking whether you plan together across the industry, not within individual companies. I am trying to probe whether the industry takes a whole-industry view of the skills it needs.
- [106] **Mr Rhys:** We try to identify the skills that we need. We are in discussion with our members, listening to their concerns about the gap in skills, and we try to respond to that by working with universities and others. I could get more information to you from our experts in head office, to give you a fuller answer than I can provide today.
- [107] I will mention the issues to do with the grid and transport. With regard to the grid, there are three strategic search areas where large-scale onshore windfarms, according to the Government's guidance on where windfarms should be located in mid Wales, but the grid capacity is often lacking to carry the electricity generated from windfarms to the main UK

network. Therefore, investment is needed to build a new 400 kV transmission line. It has taken a long time to get where we are today. We have been involved in an Entec study which we partly funded, along with National Grid and Manweb-which looked at the constraints of a new gridline in mid Wales. That study has finished and reported back to us. It is now in the hands of National Grid, which has a statutory obligation to consult and to take this forward

10.40 a.m.

[108] They have provided us with a timeline and have consulted with us, but they have a timeline of consultation with statutory consultees and the wider public. They will then have to identify a gridline and a new substation and make one application to the IPC and another to the local authority. I understand, from what the Minister said recently, that National Grid intends to get consent for both the line and the substation by spring 2012. National Grid has informed us that if its timetable runs smoothly, it expects a gridline to be operational by October 2015. So, that will be done by the end of 2015, or perhaps by the beginning of 2016 if we allow for some slippage. That is the timeline that National Grid is following. Our role in this is to work with National Grid to ensure that it keeps to its own timetable because, as you say, a lot of megawatt delivery is dependent on grid upgrade.

[109] I will now address the transport issues. Going back to the strategic search areas which is the framework that Wales wants in order to develop onshore wind energy, and targets have been set for that—because developers are being directed to these locations and have made applications and prepared work and applications for windfarms, there is obviously an intensity of windfarms going ahead at the same time. Therefore, depending on when the grid will be operational, you can expect pressure with some of them because a large number of windfarms are being constructed at the same time within close proximity to each other. The local authority has raised concerns that the transport network is not fit for that to happen and that the disruption would be massive. As an industry, we have tried to work with the relevant authorities on this, including the local authority, the Welsh Assembly Government's transport department and the police. We work closely with Wales's police authorities, which are closely involved in this, with the highways authorities and with the mid-Wales trunk road agency, to try to resolve the problem. We have commissioned consultants to build a transport assessment tool and we are talking to the police about potentially funding an all-Wales traffic inspector in order to plan ahead and remove the problems, making possible a sensible approach to the transport issue.

Diolch [110] **Gareth** Jones: ichi. Llywelyn, am hynny. Mae wedi bod yn drafodaeth ac yn sesiwn graffu eang iawn ac yr wyf yn siŵr ei bod wedi bod yn ddigon heriol i chi fel unigolyn, ond mae'n amlwg bod diddordeb mawr yn eich gwaith. Diolch am eich cyfraniad a'ch atebion, ac am eich addewid i rannu gyda ni'r adroddiadau a'r materion eraill y bu inni gyfeirio atynt. Efallai y gallwch gysylltu â ni yn y dyfodol agos gyda'r manylion ychwanegol hynny. Ar ran yr Aelodau, diolchaf i Llywelyn Rhys. pennaeth Cymru, Cymdeithas Ynni Gwynt Prydain, am ymuno â ni'r bore yma ac am ei gyfraniad.

Gareth Jones: Thank you, Llywelyn, for that. It has been a broad discussion and scrutiny session and I am sure that it has been quite challenging for you as an individual, but it is clear that there is great interest in your work. Thank you for your contribution and your answers and your promise to share with us the reports and other matters that we referred to. Perhaps you could contact us in the near future with those additional details. On behalf of the Members, I thank Llywelyn Rhys, head of British Wind Energy Association Wales for joining us this morning and for his contribution.

[111] Symudwn ymlaen yn awr at ail ran We will now move on to the second part of

eitem 2, lle yr ydym yn craffu ar greu swyddi item 2, on generating jobs in the green

yn yr economi werdd. Pleser y bore yma yw croesawu cynrychiolwyr Severnside Recycling, sef Peter McGuinness, y rheolwr gyfarwyddwr, a Tim Price, rheolwr masnachol cenedlaethol gwerthiant a marchnata. Yn ymuno â ni hefyd mae Eco2 Cyf., ac yn ei gynrychioli mae Darren Williams, y cyfarwyddwr masnachol.

[112] Estynnaf groeso cynnes i chi a diolchaf am y dystiolaeth ysgrifenedig yr ydych wedi'i rhannu gyda ni eisoes. Yr ydym yn rhedeg yn hwyr, ac ymddiheuraf am hynny. Er tegwch, gofynnaf i chi wneud cyflwyniad byr iawn, ac yna cawn ni, yr Aelodau, gyfle i ofyn cwestiynau. Yn sicr, hoffwn roi cyfle i chi drosglwyddo'ch prif bwyntiau inni. Severnside Recycling sydd gyntaf, ac wedyn Eco2.

economy. It gives me great pleasure this morning to welcome representatives from Severnside Recycling, namely Peter McGuinness, the managing director, and Tim Price, the national commercial manager of sales and marketing. Also joining us is Eco2 Ltd, and its representative is Darren Williams, the commercial director.

I extend a warm welcome to you and thank you for the written submissions that you have already shared with us. We are running late, and I apologise for that. Out of fairness, I ask you to make a very brief presentation, and we Members will then have an opportunity to ask questions. I certainly want to give you an opportunity to convey your main points to us. Severnside Recycling is first, and then Eco2.

[113] **Mr McGuinness:** Good morning. I am Peter McGuinness, managing director of Severnside Recycling. Briefly, my company is responsible for supplying the raw materials for paper making to my parent company St Regis, and we are part of DS Smith plc. We are the largest paper maker in the UK. We make around 1.1 million tonnes. Severnside itself recovers around 1.9 million tonnes, which we supply to many markets. Ostensibly, our main product is cardboard or corrugated cases, but we have a paper mill that makes educational papers, and we have an office in Caerphilly where we do much of our development work.

[114] **Mr Williams:** Good morning. My name is Darren Williams and I am the commercial director of Eco2 Ltd. Eco2 is a relatively small renewable energy development business that is completely privately owned and funded. It has been in existence since 2002 and we have now grown to be a team of 22 people at our Cardiff base. We also have a small office in Manchester and another in Valladolid in northern Spain.

[115] The business is involved in a number of renewable technologies. We have deployed about 10 MW of landfill gas throughout the UK. We have built a 12 MW windfarm in Scotland, and we have built and currently operate a 14 MW biomass plant in Port Talbot in south Wales. Going forward, we have a portfolio of about 400 MW, about 100 MW of which currently has planning permission through three projects. One is located in Wales, one in the east of England, and one in Spain. We are currently in the process of funding those, although the past 18 months have been pretty difficult. We are also involved in the development of our own marine-current tidal device. It is in the early stages. We have completed the detailed design phase, and we currently have a planning application in Pembrokeshire that we hope will come through by the middle to the end of this year. We intend to put our trial device in the water at the end of this year.

[116] **Gareth Jones:** Diolch yn fawr iawn. Nerys Evans sydd â'r cwestiwn cyntaf.

**Gareth Jones:** Thank you very much. Nerys Evans will ask the first question.

[117] **Nerys Evans:** Mae gennyf gwestiwn byr am y system gynllunio. Cawsom drafodaeth eang yn flaenorol am y system gynllunio. Beth yw barn Eco2 Cyf. am y system gynllunio yng Nghymru, a pha newidiadau sydd eu hangen ar y system yng

**Nerys Evans:** I have a brief question about the planning system. We have had a lot of discussion previously about the planning system. What is Eco2 Ltd's opinion of the planning system in Wales, and what changes, if any, should be made to it?

Nghymru, os o gwbl?

[118] Mae'r cwestiwn nesaf i'r ddau ohonoch. Clywsom o'r blaen fod delwedd ryngwladol o or-reoleiddio ym maes datblygu cynaliadwyedd yng Nghymru. Beth yw eich barn am hynny. A ydych chi'n credu fod hynny'n wir? Os felly, beth all Llywodraeth Cymru ei wneud i oresgyn hynny?

[119] Yn olaf, i Peter McGuinness, gan eich bod yn gweithio ar draws gwledydd y Deyrnas Unedig, sut mae gweithio gyda Llywodraeth Cymru yn cymharu â gweithio gyda Llywodraethau eraill y Deyrnas Unedig?

The next question is for both of you. We have heard previously that there is a perception internationally of overregulation in sustainable development in Wales. What is your opinion of that? Do you think that it is true? If so, what can the Government of Wales do to overcome that?

Finally, to Peter McGuinness, as you work across the nations of the United Kingdom, how does working with the Government of Wales compare with working with the other Governments in the United Kingdom?

[120] **Mr Williams:** On the planning system, first, it is great that the Welsh Assembly Government has taken a positive step in producing planning policy guidelines on the development of renewables. My only concern about the development of new policies is that, during their consultation period and development process, there is uncertainty. When they are introduced, there is also a period of uncertainty while they are interpreted by local planning authorities. We have highly qualified, good people in planning departments who, in the case of TAN 8, went through a period of four to six years of not really knowing where they stood on the policy, as it takes a long time to understand.

10.50 a.m.

- [121] From a development point of view, change is bad. We like to have systems in place that we understand and know, regardless of whether they are beneficial or detrimental to our projects, because a development business needs a quick 'yes' or 'no' answer, rather than a long drawn-out process and the answer is still uncertain at the end of it. While that drawn-out process is going on, we are spending development capital that we could put towards a better project. It is a strange thing to say but, if the answer is 'no', we would rather know straight away and have the policy in place to acknowledge that.
- [122] Andrew Davies: Perhaps I should declare an interest here, because I was responsible for energy as a Minister when TAN 8 was taken through, some six or seven years ago. So, I am perplexed by this idea that there was somehow a huge area of uncertainty. At the time, the industry welcomed TAN 8 because it felt that it was in great contrast to what was happening in England or Scotland, where there was, essentially, a laissez faire, free-for-all approach. In Wales, we took the view that, with the strategic search areas, it was best to identify those areas where development was likely to be most beneficial and optimal for developers. I find it difficult to understand why there is a degree of uncertainty, because TAN 8 has been in operation for some time. That is not to deny that supplementary planning guidance issued by local authorities within the SSAs did not cause uncertainty, but I am perplexed by this long period of uncertainty that you mentioned because TAN 8 has been in existence for some time.
- [123] **Mr Williams:** I am not criticising the TAN 8 process because, as I said at the start, I welcome the fact that positive action is being taken to implement renewables policy. We see it not just in planning policy, but also in the review of the renewables obligation process. Every time there is a slight change, it takes double the time for that to filter through so that people can get comfortable. In the case of the renewables obligation, funders and project developers need to understand where revenue streams will be secure and where the risks are. That was my point. It is not just about TAN 8 but also, as you said, about supplementary

planning guidance and local authorities taking the time to understand what they need to do. It is not a criticism of TAN 8; it is just that all change for us creates a time lag when we are spending money all the time.

arall am y perygl o or-reoleiddio a'ch gwaith mewn gwledydd eraill?

[124] Nervs Evans: Beth amy ddau bwynt Nervs Evans: What about the two other points about overregulation and your work in other countries?

[125] Mr McGuinness: My issue with planning is somewhat different from my colleague's. My company has grown from just being a recycler into looking at alternative technologies, and we look at the waste stream now in a very different way. We have recently started to develop a new way of looking at the waste stream, and we a have a group based in Caerphilly that is looking purely and simply at large multinational companies to see what we can do to help them. That moves into where and how that waste stream can be handled, because we want to move material away from landfill using alternative technologies. The issue is how quickly those new technologies can gain planning permission because, throughout the UK but particularly in Wales, we need to develop alternative solutions to the waste stream—and I am thinking of anaerobic digestion, gasification, and other moves. So, that is our concern.

[126] Moving on to another issue that is part of planning and how local authorities handle their waste stream, one concern that we have as a company is how the waste is collected from households. Many of the systems in place will move into co-mingling. While I welcome the recent part-funding of the new materials recycling facility at the mill in north Wales, the money would be much better spent if we put in separating systems at the household, so that we did not collect this material together and spoil the type of waste that we collect. It would also be much more cost-effective and beneficial to the end user given how we handle it.

[127] **Gareth Jones:** I appreciate those answers. Let us all remind ourselves that there are certain obstacles, and we wish that things could be better, but if we could overcome them, what benefit would there be? Would it create jobs? If so, it would help us tremendously with our review. I understand that you have answered the questions, but let us all try to bear job creation in mind.

[128] **Nervs Evans:** Yr oedd un cwestiwn na chafodd ei ateb, sef yr un ynghylch sut mae cefnogaeth Llywodraeth Cymru yn cymharu â chefnogaeth Llywodraeth yr Alban ac yn y blaen.

Nerys Evans: One question was not answered, which related to how the support provided bv the Welsh Government compares to that of the Scottish Government and so on.

[129] Mr Williams: The introduction of TAN 8 is a clear indication of the Welsh Assembly Government's support for renewables, and it is working hard to make sure that there are support mechanisms in place to introduce them to different areas. So far, it is doing a pretty good job, and I certainly would not criticise any of that work. From a developer's point of view and from my experience, nothing can happen fast enough. That goes back to regulation. I do not think that we are overregulated. It is important for the public's perception that things be regulated properly so that the public knows that these projects are challenged to the extreme to make sure that they are good-quality, proper projects for the areas in which they are located. My only complaint about regulation is that there are times when the bodies involved are undergoing periods of change. Regulation that is constantly changing is the biggest issue for us. If we could pin something down and say 'We know that that is what we need to meet for this period', things would happen a lot faster. That is not a criticism of the body; it is just that it takes time to do all these things and to put regulation in place. While that is happening, project developers struggle to meet requirements of which they are not aware.

- [130] **Mr McGuinness:** My experience is that what happens in Wales does not vary too much from what happens in the rest of the UK. My only concern and suggestion would be that certain other countries in the UK have a think tank or a panel of people who move things along a little quicker than seems to be the case in Wales. That is the only suggestion that I would make.
- [131] **Andrew Davies:** On that point, would they be executive bodies or just advisory bodies?
- [132] **Mr McGuinness:** They bring both together. All sectors of industry, as well as local authorities and the Government, are brought together so that decisions and alternative solutions can be discussed. Decisions seem to be made much more quickly.
- [133] **Andrew Davies:** That is the case in other parts of the UK, you say.
- [134] **Mr McGuinness:** Yes.
- [135] **Gareth Jones:** Tim, did you want to add anything?
- [136] **Mr Price:** No, not particularly.
- [137] **Jenny Randerson:** Going back to the co-mingling of recycling, in your paper, you imply—or you say quite clearly—that that reduces the quality of your product. How does our policy on collections in Wales compare with that in the rest of the UK? We will be less likely to develop a strong recycling-based industry in Wales if we are not collecting the product in the optimal manner. Clearly, that has implications for jobs. That question was for Peter specifically.
- [138] My next question is for Eco2. In your paper, you are critical of TAN 8 and its outcomes, particularly the fact that TAN 8 projects on Forestry Commission land were all awarded to larger companies or utilities based outside Wales—and I remember the concern at that time. There are all sorts of reasons why it is difficult to control that, but are you saying that the system in Scotland, for example, enables one to overcome that issue? If projects are put out to tender or to open competition, you end up with big companies from miles away, and therefore you are not creating jobs at home. I would like you to compare the process in Wales with that in Scotland.

11.00 a.m.

- [139] Finally, you have emphasised a point that previous witnesses have made, which is that the horse has bolted in relation to the manufacture of wind turbine components and so on in Wales. However, you said that there are significant opportunities for manufacturing-based jobs in new technologies, such as tidal and wave generation, and microrenewables. What does the Government need to do to ensure that that happens? We have sat around while this revolution has taken place and other countries have seized all the goodies in the form of manufacturing bases for wind energy. We do not want that to happen again, so we need to know what the Government needs to do to stop that from happening.
- [140] **Mr McGuinness:** Recently, the advice was to put in segregated collections, which we would support. Unfortunately, we are not seeing that being passed down to local authorities. The problem in the UK, and in Wales particularly, is that we talk about recycling, but we do not recycle. The material is recycled at the point of reprocessing: that is the paper mill, the plastics granulator plant, or the aluminium smelting plant. So, when we talk about recycling, we should mention its recovery. At the moment, we are putting huge systems in to recover more and more and, unfortunately, that material will only be used if it is exported. If

you do not hit the quality and the right type of material, then you will miss out on the export market.

- [141] I will take the example of paper. In the UK, we use 12.5 million tonnes of paper—and I am sorry that I am talking about the national figures rather than those for Wales—while we recover 8.5 million tonnes of paper. However, unfortunately, we recycle only 4 million tonnes of paper in the UK. So, we always have to export 4.5 million tonnes. It would be much better if we could use that locally. The proximity principle should be used. We should encourage people to build solutions and create jobs in the area where the paper was produced. We have the same issue for plastics. The point that I would make on co-mingling is that, unless you hit the quality and get that right, in the end, that material will not be used and we will be left with a problem.
- [142] **Gareth Jones:** That is clearly an important point.
- [143] **Brian Gibbons:** I am interested in what has been said. I do not have the final figures, but my impression is that something of the order of three quarters of local authorities in Wales are either engaged in segregated kerbside collection or are intending to do so. There is only one local authority that has made a conscious decision to co-mingle its waste collection. It should not be impossible to find out what the practice is. You are suggesting that co-mingling is the common practice, whereas I understand that co-mingling is very much on the way out and that nearly every local authority, with one possible exception, is committed to segregated kerbside collection. What is your view on that?
- [144] **Mr McGuinness:** If that is the case, we would support that.
- [145] **Brian Gibbons:** What is your view, or your perception?
- [146] **Mr McGuinness:** Our perception on the ground is that much of the material is comingled.
- [147] **Mr Price:** Even where segregated collections take place, there still seems to be variety in the quality of the material coming from local authorities. I think that we can put that down to different levels of education, the general level of understanding, and the fact that the public might be given mixed messages with regard to what they should be recycling and how they should be recycling.
- [148] **Gareth Jones:** Clearly, we need to take note of that.
- [149] **Mr Williams:** It is important to note that TAN 8 exists to promote renewable energy. Its prime objective is to ensure that we get megawatts on the ground. My comments are more related to its impact on employment. At the moment, the wind sector is probably the most tried and tested, and, for Wales, probably has the biggest potential for providing those megawatts on the ground. However, wind projects do not generate jobs for each project. As I have said, I do not see much in the way of the manufacture of components coming in.
- [150] There may be an opportunity for tower manufacturing, because there was a company previously in Wales that manufactured towers. I do not know whether such organisations are looking to come back in.
- [151] Technical advice note 8 is great for its objective, and I think that we will now see a big bulk of projects putting megawatts on the ground. From a personal point of view, we tried to get into the TAN 8 process. I think that I would go back to my point of whether it is TAN 8-related or local authority-related time lags have caused us problems with our projects, which were either inside TAN 8 or on the periphery of it. My paper was based on our

personal opinion.

- [152] The increase in wind deployment should create some jobs. I am sure that some developers will locate their development teams in Wales. How many new jobs that that will create is yet to be seen, but I know that RWE has a presence in Port Talbot. There are also turbine manufacturers looking to establish service centres. If TAN 8 works from now on, and if these projects are passed through the planning process and they start to be constructed, there will be a marketplace that will allow the turbine manufacturers to put their service teams in areas where these projects are. To date, because turbine projects have been progressing in a slightly piecemeal fashion—all the projects have taken time to come through—they have tended to operate the turbines from remote locations or have the service teams outside the area. Going forward, that is the kind of employment that could be created by TAN 8.
- [153] As for my other comment in the paper on newer technologies, microrenewable technology is certainly not an area of expertise; it is just something to keep an eye on. There is the prospect of a feed-in tariff coming into force this year, which will make it easier for people to justify the investment of renewable technologies on a domestic basis. Again, it needs the creation of a marketplace to encourage businesses to take people on and move into the area. However, just the introduction of a feed-in tariff will help. Personal finances will probably have a bigger impact, but that is a relatively short-term prospect. There should be an influx of companies looking to develop their manufacturing facilities for some of the components. In particular, we have heat pumps, which are basically fridges. It is relatively simple, known technology. If we can get that marketplace off the ground, there is an opportunity for creating a manufacturing base.
- [154] On the more novel technologies, from our experience of working on a marine device—my marine colleagues are working on the planning application in Pembrokeshire today, otherwise I would have brought one along—there is no real skill set that matches the requirement of that at present. We need to create the skills that we need to develop those businesses. That is where the real opportunity is. The starting point—and I say this with a vested interest—is to get a device in the water in Wales so that we are utilising Welsh port facilities. Our intention is to use the local engineering expertise and local marine expertise to its full potential to make sure that our device works. In the longer term, if we can encourage more devices into Wales, whether it is on a trial basis or whether we speed up the process by which we determine what sites are suitable for marine development, it will encourage developers and manufacturers of equipment. If you look at the Pembroke Dock area, you will see that we have fantastic experience and port facilities down there that we can use on these devices.
- [155] **David Melding:** By 'devices', do you mean turbines?
- [156] **Mr Williams:** Yes. I say 'devices' because it is not known yet which will be the lead technology; it is at that early a stage.
- [157] **Gareth Jones:** There was a point that Christine wanted to raise. I will then ask Jeff to come in.
- [158] **Christine Chapman:** I have just a brief point to make. Going back to the purpose of our inquiry on green jobs, do you think that we should be actively making the recommendation that the Government should be encouraging much more small-scale developments? From my knowledge of work in Denmark, for example, I know that there are a lot of community-led projects there, and I was thinking of the sustainability principle when smaller communities get involved. We talk about it, but should we really emphasise that in our report? In other European countries, community and small-scale local projects involve sustainability as well.

11.10 a.m.

- [159] **Mr McGuinness:** It was interesting to see that Brecon received a grant for its green valley proposals today—that is a small scheme. Locally, it would sometimes be useful in small communities where the energy plants that we are talking about use alternative energies—they could be anaerobic digestion or gasification plants, which are smaller plants. It is how you use the heat from those, rather than the electricity that they generate, which is much more sustainable and useful. They tended to move into that in Scandinavia in a much bigger way than we have in Wales. That holds a lot of potential for some of the solutions in waste that we are talking about.
- [160] **Jeff Cuthbert:** Thank you both for your paper and for what you have said so far. It is extremely interesting. I want to talk about green jobs and associated issues, but first I want to congratulate Peter and Tim on setting up your office in Caerphilly. I drive past it at Penrhos almost every day; I should declare an interest as the Assembly Member for Caerphilly.
- [161] **Mr McGuinness:** We are very pleased to be in Caerphilly, where we are developing a skill set that we think is second to none and will change the way waste is handled in Wales, and we look forward to that developing and to pushing that through into the UK.
- [162] **Jeff Cuthbert:** Thank you for that. On the green jobs strategy—and a number of these points have been alluded to—I want to focus my remarks, as I did with the previous presenter, on the issue of skills, and the implications in that regard. Do you feel that there is a significant skills gap in the industries that you represent at the moment in Wales? If so, what are you as an industry—either individually or collectively—doing to seek to address that, perhaps utilising the sector skills councils that we have in Wales? To what extent do you lobby the educational sectors in Wales, both further and higher education, to help to address any skills gaps? Assuming that any skills gaps will be addressed, are there implications for the development of transferable skills within engineering generally that will help to strengthen the employability of the Welsh workforce?
- [163] Finally, I want to ask about European structural funds, because all parts of Wales are covered either by convergence or competitiveness funding, and the material sufficiency priority in particular is undersubscribed. Are you making use of structural funds, either directly or in partnership with other organisations, to assist in this process?
- [164] **Mr Williams:** From a skills point of view, I was pleased about the television advertising campaign that promoted sciences, because there are not enough people coming through the university system with engineering and science backgrounds. If you take our tidal device, we targeted Pembrokeshire as an area for setting up our trial device because we believe that that is where the skills are. The skills are out there, but businesses have shrunk to a point where they are almost afraid to take on new people.
- [165] **Jeff Cuthbert:** Are you saying that you think that the skills are out there?
- [166] **Mr Williams:** There is not as great a skills shortage as we might think. There are skills there, but we need to get more younger people involved in these industries, and we need to create an opportunity for businesses, and to do that we need the marketplace to establish a viable commercial opportunity.
- [167] From our point of view—and we are a small business—all the new employees that we take on tend to be fresh graduates, just out of university, or perhaps with a year or two of experience, and we have not had a problem in filling posts. I am proud of the team that we have, and I think that we have a fantastic group of people. So, we have been able to secure the

skills that we need. Going back to the marine device, we found some skills in Pembrokeshire, but in other, more specialised areas of work, such as blade design, we had to go to other parts of the country. However, there is a hell of a lot of expertise out there in Wales, and we just need to make use of it.

- [168] **Jeff Cuthbert:** That is interesting, thank you.
- [169] **Mr McGuinness:** Similarly, our experience is that the skill set in Wales is very good and also tends to be very transferable. So, we are able to use those skills and transfer them into some of the other types of skills that we require. We are not into heavy engineering at our level within the business, so ours is a much more green approach.
- [170] One of the opportunities that may exist going forward—and I am no expert on this, although I am becoming one—is the carbon economy. We have started to talk about how we can affect the carbon economy. The companies and people that we deal with now all want to talk about how we can reduce our carbon footprint. Going forward, developing and honing those kinds of skills and techniques will be useful, because that is where the knowledge gap is. I recently had a conversation with a chap at a school who asked me how he could affect his carbon footprint. That question was very difficult for me to answer, but we must all start thinking about how we can educate people in order to change the way that they behave, react and act. That would be a good way of developing some skills within Wales and to carry them forward.
- [171] **Mr Price:** I just want to pick up on Peter's point on the carbon agenda. From our point of view, the waste management sector is not traditionally the sexiest of industries to be involved with, particularly for new graduates, but we have been running graduate recruitment schemes in Severnside for the past seven or eight years. Given the carbon agenda, the waste industry is being professionalised and we are moving towards using technologies rather than just landfill. In our graduate intake programmes, we have certainly seen more interest in the industry whereas we have always had to compete with other industries for our engineering intake and so on. So, the way that the waste management industry is becoming involved in the carbon agenda is helping us to attract a skills set into the industry. That is not specific to Wales, but to the UK in general, but we have certainly seen it here with our own graduate recruit scheme. So, that is helping.
- [172] **Jeff Cuthbert:** I asked whether you have any involvement with, or are thinking about, the European structural funds.
- [173] **Mr Williams:** We have had, and continue to have, superb support from the Welsh Assembly Government, particularly from the Welsh European Funding Office, with regard to structural funds. So, we do try to make use of those funds wherever we can. That is all that I can say about that.
- [174] **Mr McGuinness:** We are aware of them, but we are not using them at present.
- [175] **Jeff Cuthbert:** Is that a conscious decision on your behalf?
- [176] Mr McGuinness: Yes.
- [177] **David Melding:** I will ask my first question to Severnside Recycling. Notwithstanding what you said about the difference between recovery and recycling, how are local authorities doing in collecting business waste? The small and medium-sized enterprise sector creates a lot of waste. How effective are the incentives, if they are effective, for SMEs to engage in recycling?

- [178] My next question is to Eco2. Let us think what the situation might be like in 2025. I have two questions. First, will there be technology, particularly at the micro and medium-sized end, that will be able to capture tidal energy and will be efficient and durable? Do you think that is going to happen? I presume that if it does happen, there will be a huge market for it. Secondly, will Wales be one of the main areas for manufacturing and research and development in that sector?
- [179] **Mr McGuinness:** As for business, as I mentioned, my company has developed a skill set where we can work with businesses. Over the past five years, local authorities have been beaten up in just about every which way they possibly could be over how they are going to reduce their waste streams and what they are going to do, and I have a lot of sympathy for them. They have been told that they must recover more and more, but no-one can tell them how to recover it. That sometimes drives people into using the wrong kind of collection systems. Business has escaped somewhat, because the emphasis has been placed on the municipal waste stream. It is high time that we started to have a much more cohesive plan that puts pressure on businesses to have exactly the same involvement in how their stream is handled. It can be through local authorities, when huge buildings or businesses are in a shopping centre, and the responsibility for removing the waste will lie with the local or municipal authority. That waste is not recovered or recycled at all. So, there is scope to target the business sector much more.

11.20 a.m.

- [180] Mr Williams: With regard to the marketplace for marine, tidal and wave technologies, we believe as a business—because we are investing our money in our device—that the marketplace will be there and that there is a significant market opportunity for such devices. I am glad that you mentioned 2025, because the path from today to 2025 is a little unknown for all technology developers. We are at the early stages and, ultimately, these devices are in the harshest environments where we could put anything. There are still a lot of unknowns, but they are not insurmountable. We can overcome them and we can provide a good proportion of our electricity requirement from out at sea.
- [181] Can Wales be at the forefront? Scotland has stolen a bit of a march, again, in that it has set up the European Marine Energy Centre up in Orkney. It has two facilities: one for tidal and one for wave. Our point of view is that we are a Welsh business and we do not want to travel to Orkney to develop our device, so we try to stay closer to home. It comes back to the issue of if we can get these devices in the water around Wales, whether they are our devices or not, services and expertise will be built up in the ports and in the surrounding areas to facilitate longer-term growth. Will Wales be at the forefront? I do not know the answer to that question. Could Wales be at the forefront? I think it could be there or thereabouts. There is an opportunity for us to create a significant skills set.
- [182] **David Melding:** While we wish your company every success, Wales needs lots of Eco2s, does it not, because who knows which product will be durable and then successful? It will not necessarily be the best product, because, in the area of new technology, the winner is not always the best in a technical sense. We want to test whether we are developing these sorts of networks. I have one direct question: which universities do you work with at the moment?
- [183] **Mr Williams:** We work with Cardiff University, Swansea University and Cranfield University.
- [184] **David Melding:** That sounds excellent. So, that side of things is accessible by the sound of it.

- [185] **Mr Williams:** If you have any detailed questions, I can get our tidal team to respond to them formally in writing.
- [186] **David Melding:** It would be useful to know with which departments your tidal team is working and the advantages that are seen and, if there are any barriers, what they might be.
- [187] **Mr Williams:** I agree with you, I am not promoting the idea that Eco2 will put its device in the water and that that will be Wales's answer. We need to encourage other technology companies to trial their devices in our waters. To do that, we need to establish a quick way of finding areas where the risks of trialling these devices are acceptable. I do think that we will be able to cover all the risks, but we need to find some areas where there is an acceptable risk in trialling these devices for a fixed period.
- [188] **David Melding:** That was an interesting answer.
- [189] **Gareth Jones:** What David Melding referred to ties in with the recent review undertaken by this committee of the economic contribution of higher education, and key to that is the link with development and research and so on. I think that Andrew has a specific question on that, before I finally turn to Brian.
- [190] Andrew Davies: Following up the areas that David was exploring, you said on several occasions, Darren, that the market would decide and that these were market solutions. We have a regulated energy market; nevertheless, it is a private market, so I am still struggling with a lot of the evidence that I have heard today as to what exactly the role for the Government in Wales is on this. I keep hearing that Wales has maybe lost out on manufacturing in relation to wind and that Scotland has stolen a march on us, but what exactly is the role of Government? That is what we are concerned with as a devolved institution.
- [191] **Mr Williams:** It is a tough question to answer to be honest—it is bound to be a tough question because that is why you have a committee looking at it. There are so many variables and unknowns in this equation that it is almost a stroke of luck as to how business success is brought in. I go back to my point about the solidity of process and policies. No matter how difficult it is to work to a policy or a requirement, if you know that it is there, and you can meet it, then you can develop your project. It is a period of uncertainty and I know that TAN 8 and the 2020 targets have to be looked at again, but there are projects coming through on TAN 8 and it will be exciting to see what developments are brought forward and which industries are brought in as these bigger projects come forward. We need to speed things up as much as possible. As I said, we need to look at the risks that are involved with implementing these technologies and accept that not all of these risks or the impacts can be mitigated. If we can get to a point where we can quickly ascertain what the acceptable level of risk and impact is and stick to it, that will create a steady-state marketplace for people to enter into and develop their technologies.
- [192] **Brian Gibbons:** This has been fantastic; it has been an interesting and fascinating discussion. I think that we have ended up with more questions than answers, even after the evidence. We are very grateful to Llywelyn and you for coming in today. There are a number of questions and some have been generated from the points that have been made today. Darren and Peter, what are the main sources of funding for your projects? Darren mentioned that the recession is not a good time to get investment for your projects. If we are going to generate jobs from the green sector, we are going to need investment. Where do you see investment for your businesses coming from? Will you be able to go to the private market or will you be dependant on things like the European investment fund, which Llywelyn mentioned in his contribution? Where is the money going to come from for this?

[193] Darren, you mentioned in your submission that TAN 8 and the subsequent Wales renewable energy strategy have concentrated too much on policies and guidelines for the deployment of wind projects in Wales. I just wonder from what perspective you are saying that. We know from Copenhagen that 2015 is the critical time and talking about 2025 is too late. When you say that too much emphasis has been placed on wind energy, are you talking from the point of view of creating jobs or carbon reduction and so on? I think we need that to be clarified. There is no doubt that what Peter said about heat has opened a new area of discussion. I know that in my constituency, in Port Talbot, heat is going up in the air from Corus and GE Energy, and possibly even from Darren's own company in Margam. I presume that the reason that that heat is going up in the air is because there is no infrastructure in place. How realistic is it to put an infrastructure in place to capture that heat as part of a wider low-carbon strategy, and from the point of view of this committee's investigation into job creation? What are the barriers to that? What is needed to catch that heat?

[194] I have a final point for Peter and Tim. The waste stream is diverse and, from what you said, you specialise in cardboard and paper. However, if you were to advise the committee, which is looking across the various waste streams that exist, from a Welsh point of view, where are the added-value streams in waste reuse and recycling and so forth? Where is the value added? Where are the potential job-creation opportunities linked to the added value?

11.30 a.m.

[195] **Mr Williams:** My paper is targeted purely at employment. TAN 8, as I said earlier, is a slightly different policy in that it is designed to put megawatts on the ground. My comment was that if we cannot go forward and look at employment, then we should not consider wind as a major potential employer, but other technologies. To go back to the funding question, I feel strongly that, while we have had a more than difficult time in the bank funding market, the renewable sector is still going to be one of the prime target areas for funders going forward.

[196] **Brian Gibbons:** Are you talking about the private sector?

[197] **Mr Williams:** Yes. This is a known technology that is understood. There is solid policy for creating a bigger marketplace for it and the income stream is understood and almost underwritten by Government policy. It is a good, safe asset-based investment area that funders are looking to get into. At the moment, we are looking to seek bank funding. As has been said, it is not the best time to do it. From the middle of last year, as far as we were concerned, the banks were closed for business; now, although the door is not yet completely open, it is ajar, so we are seeking to obtain some bank funding and we are currently looking for around £200 million. We are having a good go at it. We are optimistic and the feedback that we have had is that it is a doable proposition.

[198] **Brian Gibbons:** There was another question on the infrastructure.

[199] **Mr McGuinness:** You talked about the heat. The problem with capturing heat is that these projects have to be started from day 1 and, quite often, the big problem with them is that of continuity. They are 50, 60 and 100-year projects and that is what you have to commit to. To try to capture the heat that is going up the chimney already would be a very difficult proposition. However, regarding small projects in small communities, there is a high potential for identifying how you are going to do that, and what system you are going to put in place. Building the system within that community then becomes a distinct possibility.

[200] As I understand it, the Brecon solution is now going to generate energy from the streams or rivers that are flowing through Brecon. Similarly, we talk about waste, but it is a

valuable commodity going forward. Technologies are being developed all the time that will enhance the value of it. Sometimes, we have to be a bit more innovative and a bit more 'blue sky' in the way that we look at some of the waste streams. I am against burning waste—I think that burning for the sake of it is a terrible thing—however, as part of the hierarchy, waste-to-energy has to play a part. The right type of solution for certain types of waste can produce huge benefits.

- [201] At Severnside, our main focus has been on paper. We have spent some time making sure that we analyse the waste streams, so we can advise the people that we deal with on the best solution for that waste. What we have not done is say that we are going to build those solutions, because we are working with the experts who can do it. However, there are quite a lot of opportunities to create jobs within that area. Green jobs should not just be seen as green jobs, they should be seen as jobs. They are sustainable and long lasting, and they work because they are cost-effective. If you create a solution that is not viable and has to be funded to survive, it will not survive for very long.
- [202] **Brian Gibbons:** Could you expand on the value-added waste streams?
- [203] **Mr McGuinness:** Most of what is in a stream has a value.
- [204] **Brian Gibbons:** Yes, but if you are going to pick the winners—
- [205] **Mr Price:** The value-added streams are cardboard, paper, plastics and metals. However, as for the next big thing, no-one has stolen a march yet, certainly in relation to our customers, on organic streams. One of the papers that I was reading talked about Marks and Spencer and Plan A and so on. Severnside is responsible for delivering the waste side of Plan A for Marks and Spencer. Marks and Spencer, and a whole gamut of companies up and down the country, are now attacking their organic waste streams because that is the next big thing for them.
- [206] **Brian Gibbons:** Did you say 'organic'?
- [207] Mr Price: Yes. The problem in the past has been how to get that out of the streams. Blue-sky thinking and innovation is providing the means of getting that out of the streams; the next challenge is where it will go. We have the organic waste streams ready go, but the infrastructure to cope with that organic waste is not really there in the UK. There are plans for it, but it is not there at the moment. No region of the UK has stolen a march on that. There are patches in the UK that are providing good organic treatment facilities, but there are gaps in provision. So, the waste is there, but there is no regional solution. There may be an opportunity to look at that and develop it and, obviously, jobs for the economy would be created around that.
- [208] **Brian Gibbons:** When you look at this, are you looking at things such as anaerobic digestion?
- [209] **Mr Price:** Yes, anaerobic digestion is an example of what could form part of the solution. However, as Peter has suggested throughout today's meeting, there is no single solution that stands out above others. Anaerobic digestion is part of a wider solution.
- [210] **Brian Gibbons:** You have said that there is no infrastructure in place, but the Assembly Government is investing heavily in anaerobic digestion and there should be a nationwide network for anaerobic digestion in Wales.
- [211] **Mr Price:** That is excellent news. If we look at the UK as a whole, that is not in place at the moment. If we look at Marks and Spencer—and I am sure that it will not mind my

using it as an example as what I am about to say is public information—the current challenge is that if it wants to send all of its considerable organic waste streams to anaerobic digestion, or any other treatment, it would have to transport it great distances up and down the country. That has all sorts of negative social and economic connotations because the local network is not there. I am not suggesting that Wales can serve the whole of the UK in that regard, but there is an opportunity there.

- [212] **Gareth Jones:** We will draw a line under that now, albeit a dotted one because I am sure that there are other questions that we would have liked to ask. It has been an interesting session. I thank the three of you, because the businesses that you represent are showing initiative. We are talking about potential. We want to do everything that we can to make recommendations to the Government that will help all of us to achieve eventually a sustainable Wales. We thank you for giving of your time and sharing your expertise with us. I hope that you also found the session to be of use. It has been of great use to us and it will help to inform our review of job creation in a green economy. Diolch yn fawr iawn. All the very best to you in your businesses.
- [213] **Mr McGuinness:** If anyone would like to visit our facility in Caerphilly to see what we are doing, how we are handling this, or just to have better insight into what waste streams we are handling, they would be more than welcome.
- [214] **Gareth Jones:** Thank you for that.
- [215] **Jeff Cuthbert:** I will have to go, will I not?
- [216] **Mr McGuinness:** It would be good to see you.
- [217] **Gareth Jones:** Mae pum papur i'w nodi: 'Creu swyddi yn yr Economi Werdd-Asiantaeth yr Amgylchedd Cymru'; 'Creu swyddi yn yr Economi Werdd—BT'; 'Creu swyddi yn yr Economi Werdd—Busnes yn y Gymuned Cymru'; 'Seilwaith Rheilffyrdd Cymru yn y dyfodol—TND Anderson'; a chofnodion y cyfarfod blaenorol.

**Gareth Jones:** There are five papers to note: 'Generating Jobs in the Green Economy-Environment Agency Wales'; 'Generating the Green Economy—BT'; 'Generating Jobs in the Green Economy— Business in the Community'; Railway Infrastructure in Wales—TND Anderson'; and the minutes of the previous meeting.

11.38 a.m.

### **Cynnig Trefniadol Procedural Motion**

breifat?

[218] Gareth Jones: A wnaiff un o'r Gareth Jones: Will one of the Members Aelodau gynnig ein bod yn symud i sesiwn propose that we move into a private session?

[219] **Nerys Evans:** Cynigiaf fod

Nervs Evans: I move that

y pwyllgor yn penderfynu gwahardd y the committee resolves to exclude the public cyhoedd o weddill y cyfarfod yn unol â Rheol from the remainder of the meeting in Sefydlog Rhif 10.37(vi).

accordance with Standing Order No. 10.37(vi).

[220] Gareth Jones: Gwelaf fod y Gareth Jones: I see that the committee is in

pwyllgor yn gytûn.

agreement.

Derbyniwyd y cynnig. Motion agreed.

> Daeth rhan gyhoeddus y cyfarfod i ben am 11.38 a.m. The public part of the meeting ended at 11.38 a.m.