



Cynulliad  
Cenedlaethol  
Cymru

National  
Assembly for  
Wales

# Cofnod y Trafodion The Record of Proceedings

[Y Pwyllgor Newid Hinsawdd, Amgylchedd a  
Materion Gwledig](#)

[The Climate Change, Environment and Rural  
Affairs Committee](#)

24/05/2017

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Cofnodir y trafodion yn yr iaith y llefarwyd hwy ynnddi yn y pwyllgor. Yn ogystal, cynhwysir trawsgrifiad o'r cyfieithu ar y pryd. Lle y mae cyfranwyr wedi darparu cywiriadau i'w tystiolaeth, nodir y rheini yn y trawsgrifiad.

The proceedings are reported in the language in which they were spoken in the committee. In addition, a transcription of the simultaneous interpretation is included. Where contributors have supplied corrections to their evidence, these are noted in the transcript.

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

|   |   |
|---|---|
| Vikki Howells<br><a href="#">Bywgraffiad</a>   <a href="#">Biography</a>      | Llafur<br>Labour                          |
| Huw Irranca-Davies<br><a href="#">Bywgraffiad</a>   <a href="#">Biography</a> | Llafur<br>Labour                          |
| David Melding<br><a href="#">Bywgraffiad</a>   <a href="#">Biography</a>      | Ceidwadwyr Cymreig<br>Welsh Conservatives |
| Jenny Rathbone<br><a href="#">Bywgraffiad</a>   <a href="#">Biography</a>     | Llafur<br>Labour                          |
| Simon Thomas<br><a href="#">Bywgraffiad</a>   <a href="#">Biography</a>       | Plaid Cymru<br>The Party of Wales         |

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

|                                |   |
|--------------------------------|---|
| Jonathan Cryer                 | Swyddog Polisi Defnydd Tir, RSPB Cymru<br>Land Use Policy Officer, RSPB Wales   |
| Dr Alec Dauncey                | Cydymaith Addysgu, Ysgol yr Amgylchedd,<br>Adnoddau Naturiol a Daearyddiaeth, Prifysgol<br>Bangor<br>Teaching Associate, School of Environment, Natural<br>Resources and Geography, Bangor University |
| Yr Athro Elizabeth<br>Robinson | Athro Economeg Amgylcheddol, Prifysgol Reading<br>Professor of Environmental Economics, Reading<br>University   |
| Frances Winder                 | Arweinydd Polisi Cadwraeth, Coed Cadw<br>Conservation Policy Lead, Woodland Trust Wales   |

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

|                    |  |
|--------------------|--|
| Louise Andrewartha | Dirprwy Clerc<br>Deputy Clerk            |
| Marc Wyn Jones     | Clerc<br>Clerk                           |
| Elfyn Henderson    | Y Gwasanaeth Ymchwil<br>Research Service |

*Dechreuodd rhan gyhoeddus y cyfarfod am 10:32.  
The public part of the meeting began at 10:32.*

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

[1] **Jenny Rathbone:** Good morning and welcome to the Climate Change, Environment and Rural Affairs Committee. This is our first oral evidence session on our forestry inquiry, so you're both very welcome. If you need the translation, it's on channel 1 on your headphones. Otherwise, I'm sure everybody's set their mobile phones to silent. Just for the record, are there any Members who need to make any declarations of interest? No.

10:33

### **Ymchwiliad i Bolisi Coedwigaeth a Choetiroedd yng Nghymru— Tystiolaeth y Trydydd Sector Inquiry into Forestry and Woodland Policy in Wales—Third Sector Evidence**

[2] **Jenny Rathbone:** Could you start by just introducing yourselves for the Record and for the recording?

[3] **Ms Winder:** Hello, I'm Frances Winder. I'm conservation policy lead for the Woodland Trust Coed Cadw.

[4] **Mr Cryer:** Jonathan Cryer. I'm a land use policy officer for RSPB Cymru.

[5] **Jenny Rathbone:** Thank you very much. If I could just start by asking you how you think Wales can overcome the barriers to planting trees. We had a target back in 2010 to increase our planting from 500 hectares a year to

5,000 as part of our climate change strategy, but we are woefully behind in that. So, how do you think we could increase our woodland creation rate?

[6] **Ms Winder:** If I start with that—. So, I think one of the key issues at the moment is it's almost impossible to do because of the uncertainty of the future land use management. Without a policy and with the uncertainty about the common agricultural policy and Brexit, I think we have to be realistic and say that's not going to happen. We've done quite a lot of work looking at why people don't take up schemes and don't take up issues. Some of it's societal: they don't understand how to do it. Some of it is the fear of permanent land use change.

[7] So, what they don't want to do is go and put large amounts of land into something that is permanent, because under the Forestry Act 1967 if you take down trees without a felling licence, you obviously have to replant them. So, how do you overcome that? The general method of doing it is to start small with little bits and build up: build up your confidence in your ability to manage it as a resource and get something out of it, whether it's money or other benefits that you want, and build your own confidence in your ability to manage it in the long term. Now, how do we do that? Well, obviously, we have advisers—all of the non-governmental organisations have advisers who will go and give you that level of knowledge—but it's about making sure that the woods that we plant have a purpose. So, woods with a purpose and you understand what that purpose is going to be. Woods provide multiple benefits—they're brilliant—but putting a small block of trees in the middle of what was an arable field isn't necessarily going to be the best use for you if what you wanted was to be able to walk through it. It's about making sure that the aspirations match the ability to deliver. And that's all about advice, and that is one of the things we must do more on is deliver that advice.

[8] **Jenny Rathbone:** Jonathan.

[9] **Mr Cryer:** Yes, I agree with what Frances has said there. I think the focus on hectare targets probably doesn't do us any favours there. Maybe looking at the wider objectives—deciding what those objectives are before you look at planting. So, if it's flood alleviation, where are the trees best placed? Starting with that as an objective, rather than, 'We'd like 5,000 hectares of trees.' 'What do we want the trees for?' and then using that as the basis for planting, I think, would be a sensible approach.

[10] **Jenny Rathbone:** Simon.

[11] **Simon Thomas:** I just wanted to follow up on—. You mentioned the Forestry Act and the implications for felling, and I just wondered if you could set out a little more about how that impacts on planning for forestry and the different impact it might have on, if you like, more of a commercial forestry plantation, more of an environmental or community one, or more of a long-term sustainable plantation. Is there a different impact from legislation on different woodland management? Does that in turn lead to different decision making around putting land into forestry?

[12] **Ms Winder:** In theory, the process is exactly the same. So, you have to go through an environmental impact assessment process, but it's the level of knowledge. So, if you're a big commercial forester, you have done this several times before—you expect the long time it's going to take. Actually, deciding you want to plant trees and putting them in the ground can be a year and a half, two years or sometimes more—it's a very long process. However, if you're a small community, if you're a local parish council and you've thought, 'What we want is to put in some trees; somebody's offered us that little piece of land and we want to put some trees on it,' you're thinking that you're going to be able to put them in in three months' time—it's going to take you a year and a bit, and it's that understanding, I think, that is our problem in how you get it going. So, the process is there for everybody—it's understandable—but I don't think the guidance is there and I don't think the advice is necessarily there. If you're a big commercial operator, obviously you've got the agent who'll do that for you. If you're a small person, how do you go and get that guidance and advice, and how do you take that forward? I think those are some of the issues that we have to overcome.

[13] **Simon Thomas:** Okay.

[14] **Jenny Rathbone:** It's coming across loud and clear that good-quality clear advice is crucial. How do you think we should be managing the competing interests between commercial forestry, agricultural interests and environmental and recreational benefits?

[15] **Ms Winder:** So, what I'm hoping is that the area statements as part of the Environment (Wales) Act 2016 actually do some of this. I foresaw that that would be part of their process—it would enable people and it would be a bottom-up approach that would look at areas of land and enable you to look

at where the priorities were. At the end of the day, you cannot say, 'What we want is trees over there,' if that guy wants to plant wheat and manage it as a wheat field. What you can look at is the ability of the land to grow trees—the sort of marginal land where, actually, your wheat yields are never going to be very good or the grass growth for high-quality dairy isn't necessarily good. Would it be better if we put some trees there? I hope that that is what the area statement process will do.

[16] **Jenny Rathbone:** Jonathan.

[17] **Mr Cryer:** Particularly when we're talking about publicly funded woodland, it's got to be about multiple benefits. You can't particularly be focusing on just timber or just carbon; we should be looking for the best return from the investment in terms of, with slight adjustments to planning, you could have a woodland that delivers biodiversity, recreation, carbon benefits, whereas, at the moment, particularly within the Glastir scheme, there's a bit of a focus on carbon and we could end up with lots of small areas of woodland for carbon that could've been good for biodiversity as well with a slight adjustment to the initial planning, I think.

[18] **Jenny Rathbone:** Okay, that's a good point. Vikki.

[19] **Vikki Howells:** Good morning. I'd like to ask you both your views on the woodland opportunities map and how you think that that is bedding in.

[20] **Mr Cryer:** The map is completely reliant on the data that underlie it, really, and the data are, from a biodiversity point of view, just not as good as they need to be. Some of the data underlying the map are 10 years old, and most biodiversity—birds in particular—doesn't stick in one place. They will move around over 10 years, so those data can be an obstruction to planting because some areas show that there are species there that maybe have moved slightly. And there will be species elsewhere, or birds that have moved elsewhere, that now don't show on the opportunities map, so the data need to be updated more regularly. And then, also, there is, as Frances mentioned with guidance, you need that kind of on-the-ground opinion on a lot of this as well, which is not happening at the moment.

[21] **Vikki Howells:** Can I ask you, then, Jonathan, what the barriers are to getting those data updated far more regularly?

[22] **Mr Cryer:** Resource, I guess. Yes, ultimately what it comes down to is

money for survey work across Wales.

[23] **Ms Winder:** But there doesn't seem to be an obvious process by which you can say 'Look, we've got these data, can we give them to you?' and I think that's what—. When we commented on the EIA consultation and the data on which that was based, we said exactly the same thing, 'Where is the method that, when we update data, we can feed that to you? Where is the process? You seem to have chosen this particular time and set out that that's your data base, but not come forward with a method.' All data change, everything changes. We need to come up with a process by which we can update things.

[24] **Mr Cryer:** I think, as well, particularly with RSPB data that's gone in on priority species, it's only on four species, so there are, in the time that's gone past since those species were selected, there may be other species now that need to be considered. There may be other biodiversity—mammals, invertebrates—that need to be included as well. So, yes, I think the data behind the map are critical.

[25] **Vikki Howells:** Can I ask you both as well about the fact that our national parks are excluded from this opportunities map? We're looking at quite a significant chunk of Wales there. What are your views around that? Do we need such a draconian approach?

[26] **Mr Cryer:** I think that's changed, actually. I know Brecon Beacons National Park Authority have been working with Welsh Government to adjust that, so I think they're taking away the park boundary. There'll still be a process in place where they'll engage, but it's become a bit more open. And they're working with the other national parks as well, or definitely Snowdonia, I know, at least. I think that is changing already.

[27] **Ms Winder:** One of the key things about that was the national parks are one of the areas where you could do planting because you know what's on the ground. You've got the staff who can give advice. You've got all the people who really understand it because they're there all the time. That's why we have national parks. And we've worked very closely in England with national parks and done some really interesting planting on common land, which has been almost impossible to do in other places, but, because of the staff in the national parks, excluding the national parks was always a slightly odd system, and this terribly precious attitude to things.



[28] **Mr Cryer:** I would just add as well that, with some of the bird data in particular that we're involved with, we're working with Welsh Government at the moment to update the data. With some species that's a lot easier. So, with chough in particular, we know where a lot of the birds are. We know how they're using the habitat, so we can adjust the data underlying the map to allow them to open up some areas and just be a bit more ground truth. Other species are a bit more difficult because we don't know where they all are or they use the landscape in a slightly different way. So, there are difficulties there, but it is something we need to get right.

[29] **Jenny Rathbone:** What is or should be the link between the opportunities map and the area statements?

[30] **Ms Winder:** The opportunities map was of its time and it should be taken into account with the area statements, but the area statements should be a bottom-up approach where we actually look at the experience on the ground. The opportunities map was, as I understand it, very much a top-down process, and we've had a lot of discussions about some of the slightly arbitrary decisions within it, whereas, I'm hoping, the area statements will be a bottom-up approach where we can actually look and say, 'This is going to work here. This won't work there.' So, it should be a guide, but it shouldn't determine what goes into the area statements.

10:45

[31] **Jenny Rathbone:** Thank you for the clarification. Huw.

[32] **Huw Irranca-Davies:** Can I just ask, if you drive it from the bottom upwards through the area statements, rather than that heavy-handed very directive top-down approach, don't you automatically say, then, 'This is going to be a slow, incremental aspect'? Any ambitions of on-scale reforestation, woodland creation—it's going to be a lot slower.

[33] **Ms Winder:** Not necessarily. There are loads of people out there who are willing to plant trees but don't know how to or where to. I know you are going to get evidence from Confor, and Martin will tell you that he has loads of people who could come in and plant loads of trees now, but the process isn't there to enable him. We have planted large amounts of trees when the opportunity has arisen, and we would be able to go into some of those and talk to people and plant trees. I don't think we should shy away from a bottom-up approach, if that, in the longer term, is going to enable us to

have a commitment. What I'm trying to avoid is the sort of tax changes that meant loads of people went and put forestry blocks in, in about the 1970s and 1980s, and they're still sat there as these square blocks, which nobody's managed, nobody's done anything about, because it was just about that bit of—. It wasn't about managing trees; it wasn't about woods for a purpose; they didn't understand why—they were just getting some money. Sorry.

[34] **Huw Irranca-Davies:** No, no, that's helpful. But, the large-scale forestation post war is not the only model. We could look at the national forest in the midlands, and around Leicester and so on, next to an urban environment: massive reforestation—mixed reforestation—including jobs that have been created out of it. You rule that out. Now, that wasn't—. It was bottom-up once it had been decided that it was going ahead, and there was massive community involvement, but it was a scale investment and a scale organisation.

[35] **Ms Winder:** We're doing something very similar. There's an approach to do a northern forest, which is basically the M62 corridor, but it's being led by the community groups.

[36] **Huw Irranca-Davies:** But it's been decided it's going ahead.

[37] **Ms Winder:** There was a movement to get it to go ahead. It won't work unless we take those community groups.

[38] **Huw Irranca-Davies:** I get that. Okay, thank you.

[39] **Jenny Rathbone:** Simon, you wanted to pursue the Confor issue a little bit more.

[40] **Simon Thomas:** Ie, diolch yn fawr. Fe wnaf i ofyn hwn yn Gymraeg, so byddwch chi angen hynny. Gyntaf oll, a gaf i jest ddechrau, gan eich bod chi wedi crybwyll mewn atebion o'r blaen, Mr Cryer, beth y gallem ni ei ddysgu o'r cynlluniau Glastir presennol, ac roeddech chi wedi awgrymu efallai fod un pwrpas, sef lleihau carbon, wedi tramgwyddo pwrpas arall, sef bioamrywiaeth? A

[41] **Simon Thomas:** Yes, thank you very much. I'll ask my questions in Welsh, so you'll need your headsets. First of all, may I just begin, as you've mentioned in previous responses, Mr Cryer, that we can learn from the current Glastir schemes, and you suggested, perhaps, that one aim, which is to decrease carbon, has predominated over another target, which is to

oes yna rywbeth, felly, penodol o'r cynlluniau Glastir presennol rydych chi'n meddwl y dylem ni fod yn ymwybodol yn ei gylch wrth geisio cynllunio ar gyfer rhoi coedwigaeth fel rhan o rheoli tir, yn enwedig yng nghyd-destun gadael yr Undeb Ewropeaidd, a gadael, felly, yr amlenni eithaf caeth sydd gyda ni yn y cyd-destun hwnnw?

[42] **Mr Cryer:** Yes, definitely. I think some of the basic tools are there, within the whole raft of the Glastir schemes. With Glastir woodland, I think if we merged those elements so that there's a carbon woodland element and there's a biodiversity woodland element, the big difference between the two is you get paid more for the carbon element than the biodiversity element. Well, how do you balance those benefits? I would say there are equal benefits. We need to merge those two together so you have, as I said earlier, a more multipurpose, focused woodland, where you get a variety of benefits.

[43] **Simon Thomas:** Is it possible to give an example of a Glastir carbon and a Glastir biodiversity—? You say the money's different, but, on the ground, what's the difference? Is it the type of tree, or the way that they're planted?

[44] **Mr Cryer:** A lot of it is about density of tree planting. So, about 2,500 stems per hectare for carbon, and then about 1,600 for biodiversity. So, in terms of biodiversity, you want a more open structure to the woodland. With carbon, it's about numbers of trees because, obviously, the carbon benefits are greater then. But there's a balance there, where you could get a good biodiversity woodland with maybe slightly less planting, so you still get a good carbon benefit. But, I think, when we talk about carbon as well, it's important to factor in the end use of the timber as well. You know, where is that timber going? Broadleaf trees will be there for a longer period of time, but they do accumulate the carbon much more slowly. But, over a longer term, the carbon benefits could balance out, particularly based on the end use of the timber.

[45] **Simon Thomas:** Ie. Diolch am hynny achos mae'n golygu fy ngadael i i mewn i ran nesaf y cwestiwn yr wyf

[46] **Simon Thomas:** Thank you for that, because it does lead on to the next question that I want to ask. You

i eisiau ei ofyn i chi. Rydych chi wedi sôn am y coed cynhenid, fel petai, yn erbyn coed conwydd, ond mae'n amlwg bod yna gwestiynau a gwersi carbon ynglŷn â choed conwydd hefyd. Achos os ydym yn mewnforio lot o goed, mae yna ôl-troed carbon yn hynny o beth. Felly, mae tyfu coed masnachol hefyd yn bwysig yn y cyd-destun hwnnw. Rydym ni wedi cael gweld bod Confor—y mudiad sydd, yn fras, dros y cwmnïau sy'n plannu ac yn buddsoddi mewn coed—yn gofyn am ddatblygu coed mwy masnachol mewn ardaloedd y maen nhw'n eu galw yn annadleuol. Efallai fydddech chi ddim yn cytuno â hynny, ond a ydych chi'n gweld bod yna le i ehangu mwy ar yr ochr fasnachol yna, sydd yn goed sydd yn tyfu'n glouach ac yn cael eu prosesu'n glouach, ac yn cael eu treulio'n glouach yn y cyd-destun hwnnw? A ydyw hwnnw'n rhywbeth sydd yn rhan o'r weledigaeth y bydddech chi'n ei chefnogi?

have talked about these indigenous trees versus coniferous trees, but it's clear that there are questions and carbon-related lessons to be learned with regard to coniferous trees. Because, if we do import trees, there is a carbon footprint with regard to those as well. So, commercial forestry is also important in that context. We've seen that Confor—the organisation that represents the groups that plant and invest in trees—has asked for the development of more commercial forestry in areas that they call uncontroversial areas. Perhaps you wouldn't agree with that, but do you see that there is room to expand that commercial side of things—those trees that grow more quickly, are processed quickly and used more quickly? Is that part of the vision that you would support?

[47] **Mr Cryer:** So, it's definitely going to have a place in a sustainable land management system for Wales. Yes, there is a place for it. I think, with the kind of planting we're seeing at the moment, it's such a small scale that it's going to have limited carbon benefits anyway. If we do want full carbon benefits, then we do need more planting, but we need to identify where those trees can go, what are the best uses of the land and how we maximise those benefits, and, as I said—I keep coming back to it—multipurpose woodland is much better. Particularly with public investment, multipurpose woodland—*[Inaudible.]*

[48] **Simon Thomas:** Yes, but when you say 'multipurpose', you include commercial conifer in that.

[49] **Mr Cryer:** Yes.

[50] **Ms Winder:** There is nothing wrong with commercial conifer if it's managed sustainably. One of our issues is that all woodland should be managed under the UK forestry standard, but it's unenforceable and frequently ignored. So, really, we would expect something higher grade than that. So, the UKWAS—the United Kingdom woodland assurance standard—which is a version of the Forest Stewardship Council, actually is enforceable, has an audit trail. We can make sure it works. If you look at both of them, they have: you should never be planting monocultures—it's bad for disease, it's bad for the trees. You should be looking at potentially not just clearfell systems. You know, why aren't we using continuous cover forestry and those low-intensity systems? There's a whole series of things. Commercial forestry is not just one thing, but, as part of a sustainable land management system, we should be making sure that any commercial forestry is the most sustainable, that it fits the sustainable development goals under the Well-being of Future Generations (Wales) Act 2015. And there are methods of doing that; we just need to make sure it does.

[51] **Mr Cryer:** Just to add, really, I think forestry has changed. A lot of the problems we have are historical issues with forestry, and I do think that things like the UK forestry standard and UKWAS have improved things. Yes, how that fits within the sustainable land management vision is the key bit, really.

[52] **Ms Winder:** You must make sure that—. Coniferous forestry originally offloaded a lot of its pollution and issues to other landowners, and that's not right. How do we make sure that stops? And that's about bringing an assurance scheme that actually monitors and enforces.

[53] **Simon Thomas:** You can clearly potentially link any public support to standards schemes.

[54] **Ms Winder:** Absolutely.

[55] **Simon Thomas:** That's one way of doing it, but how would you address the potential for very cheap imports to take away that sustainable approach? Is that something that you see or are concerned about that could affect the sector?

[56] **Ms Winder:** I hate trade issues like that. Well, you know, yes.

[57] **Simon Thomas:** We're going to face a lot more of them after Brexit.

[58] **Ms Winder:** Yes, I know. Yes, we should be considering that, and that is why we enable commercial forestry in Wales, because, obviously, if we are committed to our sustainable development goals, then we actually have to tackle that. We will have to look at the way that the markets prioritise things. The interesting thing about forestry is that we don't have to follow World Trade Organization rules, so we could put barriers to free trade of certain things. I'm not sure that that's going to be enabled, but we could. We could actually look at that—

[59] **Simon Thomas:** Tit for tat then—

[60] **Ms Winder:** Yes, and that is the problem, obviously. But it's also looking at making sure that what we're growing is being used sustainably and there are long chain issues that we have to investigate, yes.

[61] **Simon Thomas:** You mentioned a little earlier about previous decisions that had passed on the environmental consequences of some afforestation to other landowners and watercourses as well, potentially. You also mentioned the consultation the Government has been doing on environmental impact assessments. Do you think that the decisions flowing out from that consultation are going to help the concept of afforestation in non-sensitive areas? I'm not quite sure exactly where these are and how you do them, but that's the concept, anyway, we're told.

[62] **Ms Winder:** So, in theory, if we follow through on the response to that consultation, we should be giving better guidance on what you have to provide. So, one of the problems is people are unsure about what they have to consider when they plant trees, and we should be giving much clearer guidance on what areas to look at and when the consultation will happen with interested parties and how the decision will be made, and that also needs to be much more transparent. There has been a lack of transparency; there's been lack of clarity and this has affected the Woodland Trust, not in Wales at the moment, but in two UK sites, which has meant that we've spent two years being involved in the EIA process, going, 'We've done this, why are you asking for more?' So, it's that lack of transparency upfront and that lack of clarity. But if we could provide that transparency and clarity, which is written into the response, then it will make it easier for people to understand whether they will get permission in the long term, and they will go and ask for things.

[63] **Simon Thomas:** Is that your—?

[64] **Mr Cryer:** Yes, it is. I think the EIA process has been marketed as being a blockage to tree planting. I don't think there's any evidence for that; that's not the case. I think most of the proposals that have not gone ahead have not gone ahead for financial reasons, generally. The EIA process itself might not be perfect, but it's there for a reason and I think it's doing its job.

[65] **Simon Thomas:** Is there any role at all for—trying to go back to Huw's earlier point—a marrying of local and a national here in the sense of having a national approach? And we talked about the Glastir woodland opportunities, but there are, clearly, other woodland opportunities. Is there any scope for a national approach that maps out and says, 'These are, in our view, at least in principle, areas that can be developed, say, to forest standards', or whatever it might be that you use as your measuring stick for ensuring that that allows people to get over some of the initial hurdles around taking a decision to invest in woodland?

[66] **Mr Cryer:** So, I think there are areas and habitats that get identified as potential for afforestation because of the perceived lack of value within them—*ffridd* is one that kind of jumps out. *Ffridd* is a very important habitat for biodiversity, but there are bits of *ffridd* that are called *ffridd* but they're just sort of bracken slopes and things. What we don't know, and what we're unable to do at the moment is map where the bracken slopes are and where the really good quality *ffridd* habitats are. And I think maybe the resource is not there within the non-governmental organisation sector at the moment, definitely, to do that work, to map out where these areas are, and there's probably potential there. Not only *ffridd*, there are other habitats or other types of grassland and things that might be more suited to planting.

[67] **Ms Winder:** On a completely different element, one of the values of woodland is for recreation, mental health et cetera, and that would mean putting more woods around cities and towns and, actually, that is a national thing that you could say, 'Look—.' And we know, and we've got the data and, actually, I think in our 'Wales is better with trees', one of our submissions, it actually maps where the low canopy cover numbers are, and that is just—you know, you need to identify that and go, 'Yes, this is where we need more trees.' That's not necessarily large blocks of trees, it's thinking about green infrastructure and how we move things through so that you feel you're in a tree environment—it doesn't need to be blanket trees.

[68] **Simon Thomas:** I think that moves us on to the next set of questions quite nicely. [*Laughter.*]

11:00

[69] **David Melding:** How do community woodland groups fit into this, and the value of community woodland? Because how it's run and managed is important, but we do have wider strategic goals, don't we, like biodiversity, access and well-being goals for people's mental health, or just general well-being? I think everyone feels better if they're out in the fresh air, and particularly walking in woodland. So, how would you say that sector's doing? Because if we're going to rely on that for perhaps quite a lot of the non-commercial expansion we would like to see, how are we doing at the moment?

[70] **Ms Winder:** We have loads of people approaching us wanting to run community groups. Some of that is just to be able to have a woodland that they can go in and do some management on and some of those want to run the woodland themselves, and it's how we enable that. Now, we don't have the perfect answer; we're trialling various views on that across the country, we've started working with Durham County Council looking at community owned and managed woodland. And that's everything from the bare patch of land that they go and plant trees in to having large blocks of old conifers that nobody really wants that they do bits of felling in and they do bits of management in. There is no one answer, because there is no one community group, and not all community groups look the same.

[71] Unfortunately, I'm back to my advice and guidance, and you have to have the ability to talk to people in different ways. Yes, there are far more people out there who are willing to do it than who have the woods either close to them or have the ability to do it. If we could upskill them, they would be able to do it. I think it's absolutely key.

[72] **Mr Cryer:** Yes, definitely. We've got 80,000 hectares or more of unmanaged woodland in Wales, and there are groups that are looking to get involved and help manage those woodlands. They could be better for biodiversity, there could be carbon benefits from managing them, and so I think linking the community groups up with those unmanaged woodlands would be useful. And we've got the Welsh Government woodland estate as well, which should be an exemplar of woodland management. There may be



some way of linking the community groups up with areas of local Welsh Government woodland that they could be involved in managing.

[73] **Ms Winder:** One of the things we've looked at is the problems you foresee. So, the insurance issues, the 'Oh my God, that tree needs felling. Who's going to go and fell it?', and all these sorts of things that you think you have to have a professional to do. It is possible, if you work it through on a step-by-step basis, to actually identify those problems and overcome those problems. There are groups out there who will offer insurance, there is training and there are local contractors who will come and do that really big thing that you can't do yourself, but all they do is take the tree down and you get rid of the rest of it. We are trying to build up a caseload of knowledge and experience on that and we have a website, which does have some information on and we are building that up, so that we will be able to move that through. Because that is one of our key aims—the people engagement side of woodlands. Everybody tells you that they love woodlands, but they don't know what to do with them. How do we marry those two together?

[74] **David Melding:** And would that be true in terms of, you know, if it's biodiversity and appreciating a particular wood for its birdsong or whatever and getting the community to invest in that and enjoy it and protect it? I was taken around one recently and the heron nests were pointed out to me, and I'd never seen a heron coming—I've seen them on water, obviously—in to land in a very mature pine tree. It's just astonishing. And then, in terms of how woods can be linked to well-being trails, or whatever, is that where we're weak, and, to be brutal, is it the middle-class areas that do it and then, we've got real access deficiencies where the community of resilience isn't as strong and that you may have these skills lacking? You know, what happens with the tree that needs to be felled? Do we have an acceptable variability there, in terms of relying on a community approach means that some communities may find it much more challenging, simply because of the skills available to them?

[75] **Ms Winder:** I think we have to widen our minds, but the areas that we're doing the most work in in Durham are the old mining areas, which are poor; there are massive poverty issues there and yet they want to be involved. So, a lot of the trees are going on old opencast sites, and some of the woodlands they're managing are next to old mining villages, and you would not have said that this was your classic middle class, 'Let's go and manage the wood'. But they see it as a resource; they see it as a resource to go and walk in. To them, a blackbird is just as magical as lesser whitethroats

or whatever else you might see in southern England. It is just that ability to feel that it is part of the community. But you have to look at it in different ways, and there is no one template for a community wood. And I think that's one of our problems—we have to be broader in mind when we look at it.

[76] **David Melding:** And then do we need to offer more public support, perhaps, to—you know, the equivalent of the Durham coalfield would be the Valleys, wouldn't it? And the inner-city areas as well. I think it's often what we overlook. To give them that confidence that key help is available.

[77] **Ms Winder:** I think what we need to be able to offer them is the small-scale seed money that they need for various things—to pay the insurance, to pay bits and pieces. It's quite difficult for an individual to set up an organisation and go and do that, and that's where we come in and say, 'Well, look, we can help you put this application in', or we do this or do that, and then they can get on with the bits that actually they want to do, which is wandering around in woods or planting trees. So, yes, there is a role for further support and we're working with the county council in Durham because they see that one of their key issues is health, and poverty and the lack of futures in this area. How are they going to overcome some of those barriers? They see us as an absolutely key partner.

[78] We've done dementia treatment. We had a scheme called 'dementia adventure', which was brilliant. We also take deprived children into them, and it's about—we start, but it's enabling, therefore, the community to get around and push it through afterwards.

[79] **David Melding:** Do you want to add anything in terms of—?

[80] **Mr Cryer:** Yes, just building on the points that were made earlier, linking it into the area statements—that's what is important in those areas: the lack of green space, the lack of access and the skills to develop these green spaces. Hopefully that's something area statements will draw out.

[81] **David Melding:** I presume that you agree with the 20 per cent target for your own organisation for urban canopy cover, but I would just like to ask a question on this. You set targets, especially if it's down to how many more hectares you want, or whatever, but it seems to me that, to say that we should be aiming for something like 20 per cent urban cover—people can imagine what that might look like, and some areas already have it. Probably not that many; you know, a lot don't. So, in a way, these aspirations are quite

helpful, aren't they? I'd like to connect that to—all right, not to precise targets; they can then end up as tax breaks and inappropriate conifer development, or whatever—but the Well-being of Future Generations (Wales) Act 2015 talks about declarations, where we might want to get in 2050. Couldn't we set a target for tree cover going up from 14 per cent in Wales to X by 2050, and then to Y by 2100? Because it sets a wider goal and policy environment, doesn't it? And it doesn't tie you down to some of the dysfunctional annual targets that we're, at the moment, not meeting. So, I'd like your views on those issues.

[82] **Mr Cryer:** I absolutely see the value of a target, but I think it needs to be based around the greater benefits that could be provided. If you've got a hectare target, what is that going to deliver? Is it going to deliver carbon, water, biodiversity, recreation? It needs to encompass all of those things as well. So, a purely hectare target is just too simple, really. I think it does need to be based around: what do we want these trees to deliver?

[83] **David Melding:** I think I was trying to push you towards the wider point of declaratory statements, because the well-being of future generations Act takes us in that direction. Don't you want to say what Wales might look in 2050 or 2100—

[84] **Mr Cryer:** Yes.

[85] **David Melding:** —and then we could say, 'We want 20 per cent, 25 per cent tree cover', couldn't we, as a reasonable goal by then, or whatever the figures would be?

[86] **Ms Winder:** So, we have very clearly said we want to, in the longer term, double native woodland cover in the UK. It is aspirational, but it's not talking about large blocks of trees; it's talking about getting more trees into the environment. So, we would talk about, potentially, agri-forestry, or putting more trees and hedgerows, or—that's that whole increasing woodland cover—but fully integrating trees into our everyday life, and stop seeing them as a barrier, and stop going, 'Oh look, that tree is 50-years old, it's on the side of the road, it might eventually crack the pavement, let's take it down', which is the problem we come up with. It's understanding that if trees are an integral part of our life—they might clean our air and clean our water and whatever—then we have to work our way around them, and not see them as something that we can put in, take out, put in, take out, and treat with contempt.

[87] **David Melding:** Thank you.

[88] **Mr Cryer:** Just an example of what we need to address in those terms: so there's a lot of talk at the moment of increasing woodland cover on farms, which is a good idea, and that could allow a greater number of trees, but incorporated into a farming system. We've got an area we're working in, in north Wales, where there was one of these tax-break forestry blocks that was put in in the 1970s, which is having a negative impact on curlews in the area. So, we had applied to remove the trees, which are also on deep peat. We worked with NRW to apply for the felling licence, but it was actually declined on the basis that the peat is degraded and there'd need to be compensatory planting. It's quite a small area, so it's not a big area of trees, but there needs to be compensatory planting elsewhere. So, we worked with the farmer, who agreed, 'Yes, that's fine—there a couple of corners on the farm, a few hedgerow trees and things' and it was turned down by NRW. They wanted a block of—even if it was broadleaved, it had to be a block, not necessarily on the same spot, but a block of trees, which then doesn't work within the farming system. And if we want to see more trees on farms, we have to have a clearer picture of what that looks like, as you say, with a vision of what that might look like, because farmers are not going to want to plant blocks of trees. They're going to want to build it into the wider system of their farm, and to enable that we need the guidance. I don't believe there's any guidance from Government at the moment that says they have to be in a block, but that is the way that NRW have interpreted it in this case. So, some kind of guidance around that—where these trees have to go, particularly for compensatory planting.

[89] **Jenny Rathbone:** Moving on, Huw Irranca-Davies.

[90] **Huw Irranca-Davies:** Thank you, Chair. Well, I think that quite neatly takes us on to the concept of 'the right tree in the right place'. Do you want to expand a little bit on your thinking on that concept of 'the right tree in the right place', and what you'd need to put in place now to make that happen?

[91] **Mr Cryer:** Shall I go first?

[92] **Ms Winder:** Yes.

[93] **Mr Cryer:** So, particularly for the RSPB, 'the right tree in the right place' is more about avoiding the negative impact on biodiversity. So, for the

kind of priority upland species that we are mostly involved with around Glastir, a single tree in the wrong place will wipe out a whole area for these species. So, we need to be very, very careful about where we locate the trees. So, that's more an example of the wrong tree in the wrong place, really, but it's those kind of impacts that we're trying to avoid. I think 'the right tree in the right place' is too broad a term, really. We need to refine that, but—and RSPB is working with the Woodland Trust, I believe, in England, to start to come up with some more general principles around what we mean by 'the right tree in the right place'. It's been a bit of a fall-back position, I think, and we are trying to address that.

[94] **Huw Irranca-Davies:** Would that be your understanding as well, that it's, in effect, a policy to ensure we don't have the wrong tree in the wrong place?

[95] **Ms Winder:** Yes, it's the positive side of 'stop putting the wrong trees in the wrong place'—you know, don't go and put a block of trees in an ex-arable field in the middle of nowhere. Does it actually provide any continuity of cover? Does it actually provide any connectivity? What is it actually achieving? Is it so far away from the road that nobody's going to be able to manage it? It's talking about what—. We're back to trees for a purpose. Now, obviously, I think the world is much better with loads more trees, but actually thinking about what the purpose of those trees are and why you want them—if all you want is just trees that you can walk through them, it doesn't really matter where you put them, whether it affects Jon's biodiversity or not. If that's what you want, that's fine. But, in the longer term, let's think about why they're there, and let's make sure that they're going to deliver on that purpose.

11:15

[96] **Huw Irranca-Davies:** Okay. Thank you for that. Can I just touch on something you mentioned earlier on? It obviously rang a bell, particularly with Vikki and myself representing former coalfield areas—the work that you've been doing in Durham. Could I just ask—again, coming back to this issue of bottom-up, and I see some really good, by the way, bottom-up schemes coming forward—are we missing a trick in the south Wales Valleys in terms of some of the ownership of land? Because it's not simply NRW or other landowners, it's also people like the Coal Authority. Now, does the Woodland Trust or others—do you have engagement with people like the Coal Authority to say, 'Well, let's see what we can talk about in community

planting on your land’?

[97] **Ms Winder:** I’m not aware of our relationship with the Coal Authority. We do have relationships with a whole series of people. RSPB do a lot with the ex-minerals-extraction industry. So, we actually go and tackle these people and say, ‘Look, what are you going to do? How do we incorporate best biodiversity practice and best community practices in there?’ We could do more, yes. We could do more. And I am not aware that we’ve tackled the coal board, I’m afraid.

[98] **Huw Irranca-Davies:** I make the observation because it strikes me that many of the urban or peri-urban communities that go along these strip valleys in the south Wales area, exactly those areas where the wider well-being benefits could be most significant, are bordered by sometimes private landowners, particularly on the high uplands, but immediately around them—wrapping around them—is Coal Authority land, where the pits and the collieries used to be. They’ve done a lot on drainage works and so on and so forth, and I’ve seen some elements of woodland, but there’s a lot—. Anyway, sorry, I’ll just leave that thought with you.

[99] **Ms Winder:** I think there is a fear about putting trees on to old coal slags. Some of the issues in Durham were different because a lot of it was opencast. The issues in putting trees on coal slags can be severe. I’m not sure they’ve overcome that; the coal board are very wary about that. But I will take that back and actually check what we’re doing about that, because, yes, when I drive through there I just think, ‘That’s awful; can’t we do something?’

[100] **Huw Irranca-Davies:** Okay. Well, thank you. I’m going to return to my line of questions. My apologies for going off on a slight diversion. Part of my bedside reading at the moment is a lovely book by the National Trust on ancient woodlands; I’m sure there are other publishers out there as well that have got good books on ancient woodlands. Can you tell us a little bit more about what’s happening with and the problems with the restoration of ancient woodland sites?

[101] **Ms Winder:** So, planted ancient woodland sites were ancient woodland sites where they’ve put commercial forestry of some description. It could be Sitka spruce; it could actually be beech or I’ve seen red oak put on as well. That decreases the biodiversity. You can restore them; you will not get ancient woods back, but you will get a level of that biodiversity interest back. It is a Welsh Government aspiration to do it, it’s a policy—it’s not being

implemented. We have a series of advisers. We've had grant support from the Heritage Lottery Fund to send advisers out to talk to people, and we've been very successful where we've had that, but there's a feeling that it's not necessarily a good thing—'We don't want to do it'. The aspiration of the Government policy is not being implemented by Government officials.

[102] **Huw Irranca-Davies:** Okay. Do you have sympathy with the Confor idea that actually the thing that's slowing this down is the fact that they have nowhere to expand their woodland commercial forestries elsewhere?

[103] **Ms Winder:** As far as I'm aware, that's actually not what's slowing down the policy. It's misunderstanding about whether you can actually make enough money from doing it. If you have been managing your wood, doing your 30-year thinnings, then the next stage of doing PAWS restoration will make money as you had expected and therefore it isn't a problem. The people who are most antagonistic to it are the people who haven't managed it and it's going to cost them some money to get it back into a state where they can start managing it. Will it actually affect the ongoing income? There are some issues about that, but, if you look at other funding opportunities, it's there. We have made money in PAWS restoration; it is not a negative. Whilst I noted Confor's concern about this, that's not one of the reasons we've been given by landowners about why they won't do it.

[104] **Mr Cryer:** Just to add, with the PAWS sites, quite often, these are ancient soils and they hold a lot of carbon, so restoring them is good for the carbon benefits as well. When we are incentivising woodland planting for carbon benefits, we have no woodland management scheme at the moment, which could be benefitting biodiversity, it could be contributing to the PAWS restoration programme. Locking up carbon in those soils, or restoring the areas that have been degraded by planting—there's carbon benefits as well there.

[105] **Jenny Rathbone:** Thank you. Vikki, I think you wanted to probe the issues around larch disease and ash.

[106] **Vikki Howells:** Yes, thank you. I'd like to ask you some questions around tree health. So, currently, we're looking at just under 9,000 hectares of larch in Wales that's infected with larch disease, and about 63 per cent of our grid squares with ash dieback present, which is now working its way into the wider environment as well. So, I'd like to ask you both whether you think that NRW and Welsh Government are actually doing enough to manage the

health issues that we're facing.

[107] **Ms Winder:** My response would be 'no', but I think that's because they're not clear. This is where I think Huw's view of national guidance—and you do need to take a national approach to this. Ash dieback is going to be absolutely appalling. We're going to lose up to 95 per cent of all our ash trees and, because we've already lost all the elm, ash is probably the most prevalent farmyard tree, in particular.

[108] What we need to do is look at how we're going to replace them, and what sort of support we're going to give people to replace them. That's not happening at all. We're still in that panic phase of, 'They're all going to die. They're all going to have to be taken down. How do we take them down?' Okay, that's fine, but felling trees isn't a particularly difficult issue. What are the next stages? I don't think that NRW have tackled that properly.

[109] In terms of phytophthora and larch disease, I think, again, it's how we deal with the future. How do we replant those sites? How do we make sure that we put in some form of resilience that does not mean that the next disease wipes them all out? So, there's a whole series of—. Red band needle blight, which comes in and attacks Corsican pine—there's a whole series of them.

[110] If you're planning future plantations, you need to look at that level of resilience—don't plant monocultures, look at how you can get your early warning systems in. One of the key methods of spreading phytophthora was forestry contractors, who never cleaned any of their equipment. Now, we've looked at that in the animal sector, and we've looked at basic phytosanitary regulations. It should be best practice for all forestry contractors to clean everything now, before they move around—and that's not happening.

[111] Again, I'm not sure whether that's NRW not giving the proper advice or the forestry sector not taking it seriously enough, properly. And this is only going to get worse. As a lot of these forests move into that stage where they are very vulnerable, we are going to get more diseases that come in, unfortunately.

[112] **Vikki Howells:** Thank you.

[113] **Mr Cryer:** I'm going to default to Frances's opinion as the expert there. All I would say is, if we're thinking about sustainable management and



natural resources going forward, then ensuring we avoid these monocultures, which do make disease issues worse, is a key part.

[114] **Vikki Howells:** I've been to visit, in my constituency, a great example where NRW have felled a large number of larch trees and are replanting with a sustainable mixed woodland. So, are you both saying that that's the exception rather than the rule?

[115] **Ms Winder:** Yes. Unfortunately, it is, yes. So, once you get disease, you get served a plant health notice. The plant health notice is outwith the felling licence application system, so you can't actually set any restrictions on what is replanted. Some people would choose not to replant, some people will just go into the next most favourable species, and for many of them it's Sitka spruce. The guidance from a lot of the commercial forestry sector is that you can still plant monocultures of Sitka spruce. It's not sensible. We should be ensuring that there is enough evidence out there to show that, or that there's enough guidance, and that we do not provide grant aid to enable that to happen.

[116] **Mr Cryer:** Sitka spruce is a huge issue for open habitats as well. A lot of our upland designated areas are suffering through self-seeding of Sitka spruce blowing out onto blanket bogs and things and drying out the bog. So, monocultures of Sitka are going to damage other habitats, and then there are knock-on effects on water quality and things as well.

[117] **Jenny Rathbone:** Huw, you just wanted to follow up on that.

[118] **Huw Irranca-Davies:** Vikki's line of questioning seems to take us back to this issue of the UK forestry standards and the UK woodland assurance standards, the UKWAS. I'm assuming that both of you would want to see those absolutely embedded—forced to happen. Could I just ask you on a technical point: is it your understanding that that would need to be done on a UK basis, or could it be done on a Wales basis only?

[119] **Ms Winder:** UKWAS is actually commercial, so you could do it in Wales, and you could insist on it as part of the standards for your grants schemes. UKFS is a UK issue. We obviously are going to have to look at this in more detail, because Scotland has just launched its new forestry Bill. It's taking the Forestry Commission away, and it's been the Forestry Commission that has worked on UKFS. Whether we maintain a UK organisation, I don't know.

[120] **Mr Cryer:** All grant-funded woodland in Wales is supposed to meet UKFS. There's no monitoring of that on the ground to make sure they do actually meet the requirements.

[121] **Huw Irranca-Davies:** My supplementary to that would be that if we were to embed those, put them firmly in place, mandate them in one form or another within Wales, both within commercial forestry, but also in wider woodland management, would you then say that we have the right structure for being more bold on commercial reforestation?

[122] **Ms Winder:** Yes.

[123] **Huw Irranca-Davies:** Thank you.

[124] **Jenny Rathbone:** David, you wanted to come in.

[125] **David Melding:** An equally crisp answer may be possible to this question. In a candid bit of evidence, NRW said the woodland strategy advisory panel should be, and I quote,

[126] 'revitalised and more dynamic in its approach',

[127] which makes it sound as if it's inert and inefficient at the moment, or just not present. Is that your experience? I have heard that the commercial and then the general woodland sectors on that advisory group have not worked very well. Is that a fair comment?

[128] **Mr Cryer:** I think the key thing we'd like to see about the group, really, is opening it up to wider stakeholders. So, NGO input—I know Rory from the Woodland Trust sits on that group at the moment—but some kind of species group, maybe recreation interests as well; just opening the group up to be a bit more reflective of the future generations goals would be useful.

[129] **Ms Winder:** Yes. I don't think it has been serving its purpose. It has been very detail orientated rather than actually looking at the broader picture.

[130] **David Melding:** Okay. That's a very crisp criticism.

[131] **Jenny Rathbone:** Okay, so just focusing on obligations under the future generations Act and the environment Act, one of the biggest issues we

face is that we're the third biggest importer across the UK of wood in the world, and there's lots of demand for wood as a more sustainable alternative for house building, for example, and yet we're such a massive importer, the price could only go up if we have a hard Brexit. I think planning is something that we haven't discussed. I think these are two really big concerns in terms of how we meet all our objectives under the future generations Act. What's your view about these? Briefly, as we are due to finish.

[132] **Ms Winder:** I do think it's something that we need to tackle. I think there are broader issues about people not recognising the value of broadleaf timber for house building, and there's the belief that steel is better than wood, which it isn't, and that needs to get into the building industry. I think if we started developing that, then more landowners would be willing to manage their hardwoods and there would be a market for hardwoods. We tend to default to importing poor-quality timber and turning it into pulp, and I'm not sure that we need to do that. I'm not sure that's the best use of wood in any case. There are other mechanisms, both in terms of recycling what we've got and looking at putting sustainability conditions within our system, which would tackle some of the issues about importing so much as well as enabling us to find a market for what we home-grow.

[133] **Jenny Rathbone:** Thank you. Jonathan.

[134] **Mr Cryer:** I think being clear on what the timber uses are. The timber that we're importing—what is that used for? Can we replace that with Welsh timber? Are we using it unsustainably for pulp and things? Also, if we bring our woodlands that are currently unmanaged into management, perhaps there is wood there that could be used in the markets as well.

[135] **Jenny Rathbone:** Thank you very much for your contributions. Thank you very much for coming. We'll send you a transcript of your contributions so you can correct any inaccuracies. Thank you very much indeed.

[136] **Ms Winder:** Thank you.

[137] **Mr Cryer:** Thank you.

[138] **Jenny Rathbone:** We'll now take a brief break before we start the next session.

*Gohiriwyd y cyfarfod rhwng 11:30 a 11:37.*

*The meeting adjourned between 11:30 and 11:37.*

**Ymchwiliad i Bolisi Coedwigaeth a Choetiroedd yng Nghymru—  
Tystiolaeth oddi wrth Academyddion  
Inquiry into Forestry and Woodland Policy in Wales—Academic  
Evidence**

[139] **Jenny Rathbone:** Thank you very much indeed for coming. This is the second oral evidence session that we're holding on our strategy for woodland management and forestry. If you need to use the translation, because we're bilingual, it's on channel 1 on your headphones—it should be on already and you can adjust the volume to your liking. Just to start the session, I wondered if you could introduce yourselves and say who you are.

[140] **Professor Robinson:** My name's Elizabeth Robinson. I'm a professor of environmental economics at the University of Reading.

[141] **Dr Dauncey:** I'm Alec Dauncey. I'm a part-time teaching associate at Bangor University. I've got quite a long story in forestry in Wales—I started as a forestry worker in north Wales, worked with the Forestry Commission as a forestry district manager, then worked on policy in the Department for Environment, Food and Rural Affairs and, briefly, as a special adviser here to the environment Minister. I own a 10 hectare woodland as well.

[142] **Jenny Rathbone:** Thank you very much—we've got a note of your curriculum vitae. I wonder whether you could both just tell us briefly what your vision is for the enhanced role that woodlands can play in Wales and how we could take this forward in a post-Brexit world of land management.

[143] **Dr Dauncey:** I'm channelling my colleagues at Bangor here, really. I think, probably, if I was to summarise the biggest concern, it would be that things need to be spatially explicit, in terms of deciding what kinds of forests there are and where. The policy statement says that: that trees should be the right trees in the right place, effectively, and that they should be better managed. I think that probably summarises the views of my colleagues: that all of those things need to be brought together in a more local kind of way—not local in the narrowest sense. We've tended to approach the whole of Wales in a uniform kind of way, without looking at communities or without looking at the detailed ways in which climate change and carbon issues vary from place to place, the economic and commercial values of forestry and the

ways in which farmers and the agricultural community can be brought on board or find woodland features and woodland creation valuable.

[144] **Jenny Rathbone:** Thank you. Elizabeth.

[145] **Professor Robinson:** Let me say that I think I was invited here because I'm not a Welsh woodland and forest expert. I'm an outsider, so I'm going to give you my outsider perspective. I don't know if I'm apologising in advance for that, but I think that's why I'm here, in a way.

[146] When I read about woodlands in Wales and I think about woodlands in Wales, I think about three things, I suppose. I think about the fact that there are existing native woodlands that we don't want to lose, there are woodlands that are not being managed very well that we might want to manage better, and then there are woodlands that don't yet exist. And so there, we need to think about where we plant them and why we plant them and who benefits and who loses and who pays. So, I think there are three quite distinct areas. I get a little nervous when there's a target—'We need this much more woodland'—or we're told we need this much more woodland because it'll suck up some carbon dioxide. So, I think there's quite a nuanced vision of woodlands in Wales, because I read all the responses that people sent and it's almost like we think woodlands are going to save the world because they do everything: they can help with our mental health; they can help with our physical health; they can suck up the carbon dioxide; they can provide jobs; they can provide income for Wales. So, we put a lot of pressure on our expectations for woodlands and so I suppose when I imagine woodlands—this is going to sound very silly, maybe, but I'm an economist—a rational reasoning as to why in fact we're looking for more woodlands and where they would be. But ultimately, it's about woodlands that benefit a broad range of people, that improve equity, improve efficiency of the economy and improve well-being and how one can really achieve that best.

[147] **Jenny Rathbone:** Nobody can disagree with that, but some of the challenges we face—

[148] **Professor Robinson:** They may.

[149] **David Melding:** I'll have a go. [*Laughter.*]

[150] **Jenny Rathbone:** We are the third biggest importer of wood in the world, just looking at the UK, and yet there's huge potential for wood to

replace other building materials to create more sustainable homes, and if we're relying on imports then obviously that's going to have an impact on price. But obviously there are lots of other competing things around why we might be wanting to plant more trees, and I think generally people think we ought to be planting more trees for a variety of reasons. But how can we overcome these barriers? Because obviously there are lots of different views in all this.

[151] **Professor Robinson:** If I just go back a second, because I suppose on the one hand we want—we—there is a feeling that we want to import less wood because we import it, so why don't we grow our own? But on the other hand, we want affordable wood products. There's another perspective that we want environmentally sustainable houses because it sort of fits better with the twenty-first century and the reality of where we're living. Sometimes the things that we want aren't always compatible, so therefore we do want to ask ourselves: at what cost? If we—if Wales—is importing wood for housing and we think it's more sustainable to use wood for housing, then we need to ask ourselves: what price are we going to pay if Wales is going to grow the trees itself? And therefore then we ask: what is preventing that? Is it that it's just more economically feasible to import wood? And then there is a question again as to why we want Welsh wood. Then we look at the additional benefits. Or maybe we want higher quality wood coming from Wales and accept that we're never going to be able to compete with cheaply imported wood.

[152] **Jenny Rathbone:** But clearly these are long-term projects, because it takes 25 years at least to grow wood for other uses. Huw.

[153] **Huw Irranca-Davies:** Can I just ask: are there any overriding economic imperatives to increase woodland? Are there basic ones, whether you're in the UK or Germany or France, or here in Wales, that would say woodland is a good thing from an economist's point of view?

[154] **Dr Dauncey:** I'm happy to come in on that. I suppose my specialist subject is the history of afforestation in Britain, and until the beginning of the twentieth century, the woodland cover of the whole of Britain and Ireland had fallen quite low, and the reason for the great spruce forests that we see now was a strategic one. It almost sounds silly talking about it now, but it was the second world war. There were people advocating planting trees at some cost in order to relieve the distressed areas of Ireland or whatever. The first world war came along, there was a serious shortage of timber for the

coal mines, and that's why the Forestry Commission was established, and the conifer forests of Wales for that reason. So, they were a massively subsidised public project—the great spruce project, I think of it as. Financially, well, I think of something the National Audit Office said in the 1980s: the cost of establishing this appears to exceed considerably the value of the trees and the timber that is there. And world timber prices have probably fallen since then.

11:45

[155] **Huw Irranca-Davies:** The reason I ask this, and perhaps I can rephrase it slightly—. I'm looking at the intergenerational aspects. Are we at a point in time now where there is broad agreement that, not necessarily a target figure, there is benefit to having a higher proportion of woodland cover for us and for future generations? Because whether it's to do with biodiversity, climate change, flood alleviation, climate change adaptation—all of these things—is there now agreement from an economic point of view that this is a public good?

[156] **Professor Robinson:** I think, certainly, when we talk about the economic value of a tree, timber's just one part of it, yes. And so, with the ecosystem assessment, and with, certainly, economists now starting to talk about ecosystem services, we're starting to think about how we can put a value on the tree. So, part of that value is timber, part of it is carbon sequestration, depending—the spatial element—on where we put that tree. It can be mental health, physical health, biodiversity, defragmenting areas, but that isn't necessarily compatible with the timber. So, where that tree is and who it's nearby. The only thing that's not spatial, really, is climate change, and carbon sequestration—that role of trees. Otherwise, it is very spatial, so, it depends, as the economist always says, where that tree is depends on the economic value of it.

[157] **Dr Dauncey:** Could I clarify my rather negative sounding comment earlier? I took it to mean commercial, making money, if that was right. I mean, obviously, all the other things are economic, and I wasn't meaning to suggest that the forests that we have aren't valuable and can't be made valuable, and that more trees don't have all the economic values, as Elizabeth said.

[158] **David Melding:** And there's a considerable value, potentially, in stopping the public subsidy of unproductive use of lands in marginal areas

that are given to arable crops, which would be better off as woodlands. There's a very precise economic justification for some of those choices, isn't there?

[159] **Dr Dauncey:** Yes. Essentially, I think there's a lot more research needed, and my colleagues think there's a lot more research needed into a lot of areas. That sounds like us looking for jobs, lobbying for work as well, I guess, but it certainly seems to me—. I find myself thinking of David Jenkins occasionally, who used to be the director of Coed Cymru, who would say that he thought the woodland creation target might be being met, but nobody knows, through the natural regeneration of trees on less-used agricultural land—maybe grazing land more than arable. We don't really know how much of that there is and where it's happening, so I'm a bit wary of making big claims on that, but—research needed—it is a way of spending less and getting your trees to grow naturally. There's an interesting exhibition in the foyer, which includes photographs of trees growing out of the tops of buildings and so on. So, there are a lot of situations where trees will grow without human intervention; you don't always have to plant them.

[160] **Simon Thomas:** Those are buddleia, though, aren't they?

[161] **Dr Dauncey:** Sorry.

[162] **Simon Thomas:** They're buddleia, aren't they?

[163] **Dr Dauncey:** I looked—there's a rowan growing from a chimney pot. It usually is buddleia, you're quite right, but I did check.

[164] **Jenny Rathbone:** Okay. There's obviously lots of competing interests here, anyway. Vikki, you wanted to pursue this.

[165] **Vikki Howells:** Yes, that's right. It builds on the question that David asked you, actually. I mean, that would be the ideal scenario, if we could achieve that kind of thing. What we've come across in our inquiry to date is the fact that there are so many different competing interests at stake, with regard to land management. Specifically, you've got your commercial forestry, productive agriculture, and nature conservation as well. So, I'd be interested in finding out your views about how we can best manage those.

[166] **Professor Robinson:** I think the starting point is always to understand what value each of those possible land uses can give, because we always



need to know the trade-offs. We don't even have to know the exact value. We kind of just need bounding arguments, you know. How much more valuable does this land have to be, as a sort of nature area, that we decide we do that rather than have arable crops? How much more valuable does sheep farming in certain areas have to be before we say we're going to subsidise sheep farming rather than our forestry? The complicated thing is who gets the value, who realises the value.

[167] So, we might see an area and say it's good for nature, and we might sort of have some vague idea that it provides some health benefits or some future biodiversity benefits, but we don't realise the value like we might if we had commercial forestry. So, I think it's just really important, and this is why a lot of you will get annoyed—and people always get annoyed with me because I become too academic, but that's why I'm here; because I'm an academic. But I think it is laying out very clearly what the social value is, what the cost is, and then who actually gets the benefit. So, a farmer deciding what to do on their land will make a decision based on the current subsidy system and their own preferences. The society at large will be able to make a decision by looking at all the different values. So, it is a matter of having the numbers to hand. They don't always have to be detailed. Sometimes we just need to know: as long as we think it's more valuable than this, then this is a better use; or as long as the subsidy is smaller than this, this is the better use.

[168] **Dr Dauncey:** I think I'll come back to this spatial explicit point. There may be places, for instance, where highly productive Sitka spruce planting of improved varieties now, which grow faster than the ones that we've had in the past that I was commenting on earlier, where that makes a lot of sense at low interest rates, and where there is a financial benefit from doing that. There may be other places where we have existing conifer forests where we might consider whether they could be rewilded. They may be marginal forests too. In Wales, they tend to all be treated or managed a bit the same. So, it's back to doing different things in different places. The same goes for the farming community and the placement of woodland on agricultural land and how farmers can see that as beneficial, financially, to themselves.

[169] All these things link together too. There's a sort of that concept of holistic, as in the whole is worth more than the sum of the parts. So, obviously, a hectare of oak has a certain nature conservation value. A hectare of spruce has a certain timber production value and perhaps a bit less conservation value. If you place those in the right places in a landscape, or

maybe even relatively in Wales, and you link them in habitat networks and so on, they interact with each other, in a way. So, you can have a big spruce forest, but if it's got a pertinent network of broadleaf woodland in it, then, as you fell those spruce trees, the biodiversity benefits come. That's a properly designed forest. But we tend to sort of say, 'Well, here's a properly designed forest. Here's our model for it', and we apply it perhaps to all the upland forests of Wales, whereas maybe the value forests that are a bit detached from their communities and where there are all sorts of struggles—. Someone called Lawrence Kitchen at Cardiff University looked at the interaction of people and forests there, really quite provocatively. That's going to be different from one of the forests in maybe mid Wales with a poor eroding system and so on, and maybe lower growth rates of timber where you might consider some sort of rewilding or closer-to-nature ways of managing the forest for timber and other things. At the moment, I think—I hope I'm not being fair on Natural Resources Wales, and maybe area status will change this—but they tend to treat the forests in the Valleys the same as the forests in remote parts of mid Wales.

[170] **Vikki Howells:** Thank you.

[171] **Jenny Rathbone:** Okay. So, moving on, really, to how we could better manage the land, Simon.

[172] **Simon Thomas:** Yes, and particularly you've already mentioned the need for research. You've already pitched, basically, the need for more research in this area. Of course, the removal of EU farming subsidies when we leave the European Union may well change the dynamics around how we use land and land management in Wales in particular. But I wanted particularly to ask around what the academic research approach is at the moment, particularly as we're leaving EU. Is there cross-border research? Do we understand wider lessons about Welsh forests from work elsewhere in western Europe and how that might be impacted, going forward, and whether there's anything that we should be trying to protect and keep now in order to ensure that we get that best data and information to allow us to plan that more sustainable future?

[173] **Dr Dauncey:** I'm trying to think of networking research. One interesting thing that occurs to me is that a lot of the common agricultural policy—I'm a sad person who can half quote the directive of at least a few years ago: noting the deleterious effect of land abandonment on nature conservation values in Europe—where you might say that that made a lot of

sense if you were in the Alps or some marginal part of the Massif Central where woodland is taking over every bit of agricultural land. That might not be true in Wales. There might be places in Wales where we could be a little bit more relaxed about trees regenerating and where we need to build that into the agriculture system. And then, you know, the payment system at the moment penalises someone who starts to have either new or even existing trees mixing with their agricultural land. So, I'm not really answering your question about research networks there. It's almost that there's an opportunity to look at—there is an opportunity to look at new opportunities, whatever you feel about it.

[174] **Simon Thomas:** Well, if I could put this in a different way, in that the Royal Society just produced today, actually, a report on what we've done in terms of research as a UK out of Horizon and framework plans and all the rest of it. Bangor University, by the way, gets 38 per cent of its income from EU funds, and it's in the top 10, just to see how important that is from that point of view. Okay, it's a headline thing—it's agriculture, forestry and fishing together—but if you look at EU funds, they're small amounts, but framework 7 has got 0.4 per cent going to that from EU funds, Horizon 2020's got 0.3 per cent going into our agriculture, forestry and fishing, but the UK's own investment into agriculture, forestry and fishing is 0.1 per cent. So, it seems to me, as a whole, that, though the proportion is quite small and the sums are quite significant in terms of millions, that the EU has been prepared to put more in terms of research into agriculture, forestry and fishing as a whole than the UK Government has been prepared to do. I suppose what I'm wondering is whether we're going to have this best information that you've already told us we need in order to plan that future, if we're doing two things: withdrawing from the European Union, we're losing access to these funds, but are we also losing access to the networks and the information to put that joint kind of work together?

[175] **Dr Dauncey:** I think the answer is it has to be a danger because all that European funding was intended with those purposes. That said, I'd like to think academics are quite good at co-operating internationally. It may be that there'll need to be more of a bottom-up effort, I suppose, in that we're building our own partnerships. There are other mechanisms. There's an International Union of Forest Research Organizations, for instance. Maybe those are things we need to revisit. I'm thinking on my feet a bit; I might consult and take that back. Are you happy to receive notes if we—

[176] **Simon Thomas:** Yes, indeed.

[177] **Jenny Rathbone:** Yes, absolutely.

[178] **Simon Thomas:** That's how we do it.

[179] **Professor Robinson:** If anything, there are a lot of exciting opportunities. You know, economists love the idea that, rather than moving from a system that's been under the common agriculture policy, where you're just paid something irrespective of what your land could produce or the services you're producing, suddenly there's an opportunity to really feel that if we can understand the value that the land can give in different ways, that a more logical or perhaps rational use of subsidies is available. So, there's certainly a lot of excitement and ability from the environmental economics community to be able to address these questions. We do it in a lot of other countries, and maybe we haven't been doing it here because there hasn't been so much reason. But, I have colleagues who look at pollination services, and, again, the spatial aspect is very important. So, as an academic community, we have the tools and the expertise to really provide interesting insights into what are the trade-offs, what are the values, and how a subsidy would change how an individual chooses to use their private land.

[180] **Simon Thomas:** And, just on that, are you aware at the moment, either in Wales or outside of Wales, of research that's done now that could help us see where that economic value—and I use 'economic value' in the wider sense of the term; not just commercial value, but economic value—of forestry could help design for future land management? Are there things that we should be looking at now that point in a direction where, for better or worse, we don't have the strictures of CAP payments and subsidy payments, so we can range across the environment, if you like, and see where the maximum impact is for economic benefit, and taking into account social benefits? Is that something that's being done now already and we should be looking at?

[181] **Professor Robinson:** Bits and pieces are being done. Many of us have students doing that kind of thing. Is there anything co-ordinated?

[182] **Dr Dauncey:** I can't think of anything specific, but we have—. Elizabeth works internationally anyway, and plenty of people in Bangor are working all over the world, and we see ourselves as an international forestry centre of value that goes beyond Wales and Britain. So, I think we're well placed to develop those links, and for things like community forestry, you know, that

spreads wide. Although I think there are things we can learn from Europe, even, on that. Plenty of European communities own their own forests and we don't do that in Wales.

12:00

[183] **Huw Irranca-Davies:** It strikes me, following up on Simon's question, that it must be a decade ago that the Foresight future land use project was undertaken, which looked at forestry, agriculture, everything—housing demands and so on. I remember, at the time when it was launched, there was some scare around it as well, because of some of the worrying scenarios that were painted about the future implications for land use management, but also these trade-offs between productive agricultural land and reforestation, at the time because of carbon, but now we could talk about other ways. I wonder, in light of the discussion and the inquiry that we've just come off the back of on post-Brexit agriculture, if you think, from an academic point of view, from a forestry point of view, from an economics point of view, whether there is a need to revisit that in the light of what's happening with CAP, in the light of Brexit scenarios, and to look at land use planning, across the UK, but particularly in terms of Wales.

[184] **Professor Robinson:** I think definitely. All of a sudden, incentives are going to change for individual land owners and we don't know how. I also think if we take that more broad look at how best—. If we think about forestry, we really need to be thinking about what we think the landscape's going to look like in 20 or 40 years' time. And if we start thinking that there are going to be more trees being planted, does that mean that there's more risk of invasive species? If we're going to create corridors—. So, you know, it's great for the birds, the butterflies and the bees, but maybe it's great for the invasive species too. If we are going to stay true to what are considered native species, are they going to lose their resilience as temperatures increase? So, I think, because the incentive structure is changing and suddenly there may or may not be a lump sum of money that can be used to subsidise farmers or forestry, and we're in a situation of changing climate, and Wales wants to significantly increase the tree cover, all these other issues we suddenly have to start thinking about. We can't think in isolation of just planting trees. We have to think about the other implications: the resilience, the adaptability, the climate change, the invasive species, which will change with climate, too.

[185] So, we really need to see this in a very dynamic perspective. Where

might we be in 20 or 40 years' time? What are the implications for all those other things we might not have to face now, because if you don't have enough trees, there are natural gaps so that the invasive species can't jump, for example?

[186] **Jenny Rathbone:** Aren't these academics actually looking at these issues now, because, at the moment, there's still access to the European research funding? We clearly need to be thinking now about what we're going to do post 2020.

[187] **Professor Robinson:** I'm not sure.

[188] **Huw Irranca-Davies:** Chair, an observation: the previous Foresight futures project was heavily involving academia, but also industrial, commercial operators as well and wider land management issues. But it was driven by Government recognising some of these things. But the landscape is changing under our feet—sorry, the metaphorical landscape is changing under our feet now with Brexit as well and the diminution of CAP payments.

[189] **Dr Dauncey:** The key problem is uncertainty and the problem for forestry is that it's so long term. We are now harvesting the forests that were planted for the reasons I gave earlier, which are quite different to the reasons for which we now use them or wish to use them. I suspect that we've all become so used to a system of agricultural subsidy, which is essentially an income support system, that it's probably almost hard for us and certainly hard for the farmers who are going to have to struggle with these issues, and for you, I guess, because you have the decision as to what to replace that with, as a devolved matter. So, there's a huge question there.

[190] And then there's even the global flow of timber that we were talking about. Well, that's often very dependent upon the value of the pound and the value of imports. In a way, to answer your first question, there's a spatial explicitness about how we trade things in the world. You know, sea transport is actually pretty sustainable and we don't necessarily have to grow everything here, particularly trees. There are some countries that are huge forestry countries and have been happy to supply us with timber for centuries, but those trade relations are uncertain too.

[191] **Jenny Rathbone:** Well, clarity on this is obviously very important. I think we need to move on. David, I think you wanted to come in about the social, environmental—

[192] **David Melding:** Yes, I'd like to test a received view. I'm sure we'll have very vigorous answers. We often hear that community ownership of woodlands can bring very particular social, economic and environmental benefits, as compared, I suppose, with state or private ownership. Is this a fair judgment? I suppose I'm particularly thinking in terms of urban and—is it 'peri-urban' it gets referred to? Those sorts of areas. Have you observed that? Do you know of any academic literature that supports that view?

[193] **Professor Robinson:** I do all my work in African countries. This is something that's studied a lot—the devolution of land ownership and the devolution of community forests to be either managed or even owned and managed by local communities. The general observations I've had—certainly in Tanzania, where I do most of my work—is that forests are likely to be much better managed when they're managed by the people who have a stake in them. So, if the community is allowed to have a stake in the forest, then the likelihood is that it's going to be able to manage it better. The community may need support, the community may need information and it may need a way of realising money from the village.

[194] Generally, we assume that the people living near the woodland or the forest, if they use it and if they benefit from it, have the incentives aligned. If you have a Government trying to manage forests, they don't have so much knowledge about how the forest is valued, how the woodland is valued and how people use it. So, it makes sense, but that doesn't mean it's easy. It doesn't mean, necessarily, that everyone wants to spend their time getting involved in community management. But, in general, the evidence is, in other countries, that it makes a lot of sense.

[195] But communities, given the leeway to manage a woodland, will manage it the way that benefits them the most, and that may not be the way that benefits society most. So, again, in the villages I work in in Tanzania, a community may manage a forest in one way, but if society feels there are increased benefits to having carbon sequestration, they may be given a payment to ask them to extract less from the forest, to manage it differently so that society benefits more and the community can still benefit. So, community management, we need to understand that if we give a woodland to the community to manage, it would make sense if they managed it for their benefit, and then the question is: is their benefit the right benefit for society? If not, are there win-wins or trade-offs by aligning the incentives?

[196] **David Melding:** That's a very interesting answer. Then, in our context—a post-industrial society, largely—is there a danger that it's the more middle-class communities that are able to sustain these things, both because they're not in employment that means they don't have a certain amount of leisure time or they're not under stress to earn an income all the time, and they have a better skills basis in terms of the professional skills available to them? Is that a real problem and how do some countries address that, because, obviously, there are equality issues there that are very important?

[197] **Dr Robinson:** As soon as you started asking the question, I wrote down 'elite capture'. So, in low-income countries, we tend to talk about elite capture, where the better connected, richer people in communities tend to get the benefits. I wouldn't call it elite capture here, but, actually, it's like that. Quite a few of the responses I read were from people riding their horses, and it's fabulous. Isn't that lovely? When I go on holiday in Devon, I love seeing people riding their horses. It makes me feel I should be living there and not in London, and when people are riding their mountain bikes or have more leisure time. So, the equity considerations are really important. So, who captures the benefits? Maybe the people with the time and the money will create a woodland for everyone and everyone will want to use it, but if we then start looking at subsidies to help communities protect their woodland and the major benefits go to the more affluent people—I don't want to label us one way or the other as to who's going to enjoy forests or woodlands more. But, it's certainly something we have to be very careful about. I think the equity issue is very important, and that's probably something that's—. In a way, it's going to be woodland specific and location specific, but also it's going to be about how society nudges people towards appreciating what benefits there may be. I don't know if that came out.

[198] **Dr Dauncey:** I think the question both about equity and about how communities will manage their forests makes me think of France and Germany, which have quite a lot of community-owned forests. Some of them they just took over from landed gentry after the revolution. That's the history of it. But I remember visiting one in Germany—it's a bit anecdotal, this—but there were two communities and one had a forest that we were visiting and it was really rather interesting, and the other one had clear felled its forests at some previous point because they wanted a leisure centre. So, when you have community ownership, you don't necessarily get something that meets your national policy. But I think the description was it was a poorer village, and they wanted something, and they chose to liquidate their forest, just as a



private owner might. So, you get that sort of thing.

[199] In terms of Britain and research and experience, Forest Research do quite a lot of work on social forestry, and there was a time in the 1980s when there was a feeling that—. It was quite interesting. The overseas development administration was doing an awful lot in other countries talking about community involvement in forests, and at some point somebody said, 'Well, actually, what's happening in the mother country? It's a bit colonial this, isn't it? People in green vans and green uniforms doing all of it.' There was a paper that actually talked about it in those terms. I'm not exaggerating. It was a sort of extreme view in a way. Then communities, particularly in Scotland, started to say, 'Where are the jobs?' Some of these were timber-production interests; they had to do the jobs and the work that they were promised in the 1930s, but where were they? So, there's been quite a lot in Scotland and quite a lot of those have been researched, and of course Scotland has legislation that facilitates communities taking over land that may be owned by the state, as it is here.

[200] There other area where there is research, and I was involved in this—I was the director of Tir Coed at one point, which ran the Cyd Coed project. I think it was £9 million of European money in the end, a lot of which went to allow communities in Wales to buy bits of woodland in order, again, to have control. So, you've got this thing called the Arnstein ladder of involvement of communities. Firstly, you just inform them: 'We're doing this in the forest behind your village.' Then you consult them: 'What do you think about this plan that we're more or less going to do anyway?' And then, 'Maybe we'll tweak it a bit.' And then, 'We'll really involve you, and we'll have lots of sessions where we all get together'—Simon knows all about this—'with yellow Post-It pads and things and we work out—.' He knows more about it than I do. And we involve people in communities in what they want to do. Then you go right through and you say, 'Right, community council, existing local authority, let's place it in the hands of the community council.' As an Assembly, you could choose to place some of the land in the hands of local authorities of different sizes if it made sense in different places.

[201] **Jenny Rathbone:** Fine. Interesting. Shall we move on to urban?

[202] **David Melding:** Yes. It follows on slightly, I think, but we often overlook the benefits of trees in urban areas, and that can be very much linked to equality issues—you know, inner-city areas, for instance. I just wonder what you think of present strategies to preserve trees in urban areas,

or improve it just on the curtilage, on the edge of urban areas. The Woodland Trust, for instance, has a target of 20 per cent tree canopy cover in urban areas, and is obviously working with those particular communities that are far off that target. What do you think of that? I know you were slightly sceptical about targets earlier, but that one is quite specific, and green areas in urban places sound quite attractive to me. But I'd like to hear your views on that.

[203] **Professor Robinson:** Targets are a way to work to something, so I don't completely hate targets. I think there's increasing evidence about how important urban green spaces are. There's the immediate benefit of sucking up some of the pollution. In the longer run, we hope we're not going to be polluting our urban air spaces, but there are proven benefits. There are the health benefits, especially the mental health benefits, and there's the quality of life benefit. When I walk to my bus stop, if I walk through concrete versus if I walk through a small park. You can get quite good quality of life benefits through corridors, and you can get very important benefits through the air pollution.

[204] So, there's not a lot of research, but I've seen some research—one of our PhD students did some on the benefits of urban green spaces, and if a target helps, that might be a good one to have, yes.

[205] **Dr Dauncey:** I think we're back, to a degree, to spatial explicitness. The wrong trees in the wrong place can be at their most expensive if they're damaging pavements or buildings or whatever in urban areas. So, design is really crucial.

12:15

[206] **Simon Thomas:** And it can also hinder improvements to air pollution if the wrong trees are in the wrong place, or the wrong trees in the right place.

[207] **Dr Dauncey:** Yes. So, there are real questions about good design, and I think that would be the danger in my mind. I think there's also—there's an interesting positional one there. We actually talk of leafy suburbs, and by the 'leafy suburb' we mean the nice place to live, where maybe the people who are better-off are. So, I think there's a question there. And I think there's quite a lot of research to support the idea that having attractive woodland and green spaces within walking distance of places is a benefit, and quite a lot of the Cydcoed projects were that. So, there are things that have been

done in Wales that can be researched.

[208] Obviously, Wales didn't have community forests. There were—I forget—12 community forests in England—it was something that Wales didn't participate in—going back to the 1980s. That doesn't mean that there weren't great model and early restoration projects—Swansea valley comes to mind. So, there's plenty of experience of this sort of thing in Wales, and how woodlands near where people live are used. Perhaps the biggest question is in the Valleys, I think, where people feel alienated from them, even now, to a degree.

[209] **David Melding:** Our urban settlements in the Valleys in particular lend themselves to this sort of approach, don't they, because of their shape at the moment.

[210] **Dr Dauncey:** Yes.

[211] **Ms Robinson:** I think, if I can pick up very briefly, it's true that I was being facetious about the targets, but, ultimately, you want to know what is the benefit, what is the net benefit of the tree, and you keep planting the trees until you don't get the net benefit. So, targets, you can at least—. It says you're actually monitoring, but what really matters is: is this tree in this place improving something? So, therefore, if you do—. There's a cost to planting urban trees, and, as pointed out by Alec and Simon, there's a cost to planting the wrong one in the wrong place or the right place. And so one does need to have a little bit of research that does say, 'What are the—can we quantify some of these benefits?' and we do want to see that the benefits are going to outweigh the costs. The research suggests that there are benefits if done right, but one needs to really know what those benefits are.

[212] **Jenny Rathbone:** Excellent. Vikki, I think you wanted to talk about a specific benefit.

[213] **Vikki Howells:** Yes, I did. Thank you. We touched upon the issue of climate change, but I'd like to just drill down a bit more there and ask you both: how important are the benefits of woodlands in helping to mitigate the impacts of climate change, both in terms of carbon sequestration and also in terms of flood-risk management as well, and how do we actually try and quantify that?

[214] **Ms Robinson:** On carbon sequestration, I'm not a forester, I'm an

economist. On the carbon sequestration, different trees will have different ability to sequester carbon, depending on the speed they're growing. So, how you manage your woodland, how you thin your woodland, what trees you plant, how old those trees are when you cut them down, all influences how much carbon sequestration there is. So, one might adjust a rotation period to take account of increasing carbon sequestration. So, the private value of a timber rotation will be different from the social value when we take into account carbon sequestration. I don't want to pretend that I know more details than that.

[215] The flood benefits are very important, and people will know better than I. I know, anecdotally, that there's a lot of concern about sheep grazing in certain hill areas and how that compacts the land, and how, if one had trees there, there would be better flood management and more carbon sequestration.

[216] **Dr Dauncey:** It's a huge question, unfortunately. Clearly, deforesting the Amazon is a lose, lose. That's pretty clear, but it gets a lot more complicated in our situation, I think. So, at risk of always asking for more research, it looks obvious that you shouldn't have trees drying out a peat bog in Wales, and you should clear those and restore the peat bog, but some of the research—Professor Healey at Bangor drew my attention to some work there—doesn't always point in that direction. Natural flood-risk reduction—it's again the right trees in the right place. And, again, one of my colleagues, Dr Tim Pagella—I'm going to drop their names today—was telling me about a situation where tree planting hadn't—. Evidence seemed to be that it didn't always work. And where does it work, and where doesn't it?

[217] There are all sorts of other—. I can remember, actually, working in the Forestry Commission on some of the models that resulted in our current target here in Wales, where we made assumptions about what the carbon emissions from the cultivation that you needed to do were and find ourselves in sort of, 'Do we tell the Minister that for the first 10 years, it's emissions, not sequestration'? Because we don't—you know, it's the question of the soil carbon that is released when you cultivate a plant, and that is very uncertain. We know a lot about how the trees grow and how much they sequester—how they bring the carbon out of the atmosphere—but we know less about soils. There's even debate about whether firewood is as good as some people think—you know, it's carbon neutral, looks like it displaces other fossil fuel, but there's a little bit of a debate about that at the moment, in fact. I think the general view is that using firewood is carbon neutral and displaces fossil

fuel and is good from the atmosphere's point of view, but, on the other hand, if it's a slow-growing forest and you thin it out, it may take so long for an oak wood, perhaps in a slow-growing part of Wales, to re-sequester your emissions from burning it on your wood stove—you know, quite what are the sums there? I'm sorry, I'm making a point for more research, and I hope I'm explaining what our uncertainties are. Essentially, I think we can say that more woodland cover, perhaps in place of agriculture—certainly certain kinds of agriculture, and there's a whole special question there about different kinds of agriculture—is likely to result in sequestration in the trees and in the soils. So, woodland creation targets do seem a sensible thing, broadly, from a climate change point of view. I think I'd have to end on that.

[218] **Jenny Rathbone:** Okay. I think, Simon, you had a specific question.

[219] **Simon Thomas:** Yes. Before I ask some more questions on that, just to—. This isn't a question, I'm just putting it out there, because you mentioned the earlier participatory approaches and, of course, one of the key things as well as access to forest, your actual, physical location—. One of the key things around communities is skills, whether you have the skills to manage, and the skills to organise, and the skills to do it. So, it's time, skills and access, and that's something that's also been missed, I think, from some of the work that has been done in Wales to increase this, but hasn't taken into account equity in that sense as well.

[220] But I wanted, quickly, because—. It's very difficult to call Alec Dauncey 'Mr Dauncey', as I've had many discussions with him on these matters over the years—we try to be formal in committee. But your evidence from—your new role in Bangor is particularly interested to look at life-cycle analysis here, because, in response to Vikki Howells, you know, you gave as much—. There aren't hard-and-fast answers, but we have to have some certainty, don't we, around productive products, and the life cycle? We have to be able to weigh some of the earlier points we're making about why we're growing timber in Wales as opposed to just having imports. This also is reflected in decisions that we have to make around our meat sector coming out of the EU—it's very much reflected in that. Which part do we have to trade in, and which part do we have our own industries and our own skills around those industries as well? So, I was just wondering if you could say a little bit more about what work is being done around that life cycle and what it's pointing towards in terms of planning for Welsh woodlands. Because, clearly, when we invested for pit props, that industry eventually went, so it was the wrong investment at that stage. But we have to make decisions now for wood that

will be available only in 20 to 25 years' time.

[221] **Dr Dauncey:** I'm really glad you mentioned life-cycle analysis, because I finished my answer just now and I thought, 'I've left a whole area out there', and that is it. It is actually amazing that this is sequestered—I'm not sure what this is made of, but this is sequestered carbon. The more that you use forests and use timber products from wherever in the world—. Because the atmosphere is a global common, and if you use wood and don't put it—

[222] **Simon Thomas:** I'm sure this is sustainable, by the way. I'm sure it meets the standards.

[223] **Dr Dauncey:** I'm sure it is. I'm sure it is; it's probably from Coed Cymru, isn't it? So, yes. There is a lot of work going on on life-cycle analysis and looking at the whole story of how timber products are used in buildings and used to retain sequestered carbon. It builds on—you start with, 'Do you cultivate?', you start with, 'Do you thin?', you start with, 'Is it used as firewood?', 'Is it used in buildings?' Putting it into buildings is the best, really. But then you've got the fact that our mission—does it go back to Agenda 21, you know, 'think global, act local'? It could just be that, thinking global, we don't actually have to sequester the timber into trees in Britain and process them in Wales—grow them in Wales and process them in Wales—to benefit the global atmosphere. There may be other things that we can do there. But, that said, we've got great timber-producing forests now anyway, established for a previous reason. Clearly, they're there, and they're a resource to be managed sustainably.

[224] **Simon Thomas:** With a focus still on sequestration or carbon management, is there something, to your mind, that's fairly obvious that we're not doing now in Wales that we could do significantly more? Housing has been mentioned several times already—people have been telling me for at least 10 years that we can do more with Welsh timber in housing, and yet we still only see small outcrops of buildings using that. Is that the area, or should we be looking for something different now?

[225] **Dr Dauncey:** I find myself trying to think from the point of view of the global atmosphere, and the more timber that goes into housing the better. All the initiatives, whether it be Welsh timber or timber from other places in the world—that has to be a good idea. Concrete is pretty bad news, you know, and steel. There is a lot of work going on there. I can't remember how many storeys it is, but they've put up almost a skyscraper in Bergen recently

that's timber framed. So, I think if you're asking me for one thing there, it would be—. Yes, if Wales was a really pioneering place for timber buildings, whatever the source of the timber, then—

[226] **Simon Thomas:** But not necessarily a Welsh source; it could be a mix.

[227] **Dr Dauncey:** I guess so, yes. When you look at the jobs involved that are given for Welsh forest-related industry, an awful lot of those jobs are actually processing timber from elsewhere, too. So, in a way, don't underestimate that, that a lot of the jobs are to do with processing timber that isn't grown in Wales. So, yes.

[228] **Jenny Rathbone:** Thank you for that useful information. Huw.

[229] **Huw Irranca-Davies:** This is specifically for Dr Dauncey. I wonder if you've got any thoughts on the decision by the Welsh Government not to raise the hectare threshold for afforestation projects for mandatory EIAs in those non-sensitive areas.

[230] **Dr Dauncey:** The short answer is I haven't come prepared to answer that question. I'm sure I've got colleagues who can help and I'd be very, very willing to send you a note on it.

[231] **Huw Irranca-Davies:** It would be helpful to hear.

[232] **Dr Dauncey:** A general comment—.

[233] **Huw Irranca-Davies:** It's been particularly put to us in the light of whether it would be a deterrent to larger-scale afforestation projects.

[234] **Dr Dauncey:** Yes. EIA requirements clearly are something that puts people off, because it's a bureaucratic burden, or just seeking the determination is. I don't know. You've obviously got to balance it against the purpose of the regulation itself, which is to protect the biodiversity and other values.

[235] **Huw Irranca-Davies:** Well, look, rather than put you on the spot, if you—or if you do have colleagues who could perhaps put some written supplementary to the committee on their thoughts on this judgment and whether it was the right decision, but also whether it would have a detrimental effect on bringing forward projects for afforestation, that'd be

helpful.

[236] **Dr Dauncey:** Yes.

[237] **Huw Irranca–Davies:** A separate question is to do with the idea of how woodlands would feature in any documents that underpin the Environment (Wales) Act 2016 and the Well-being of Future Generations (Wales) Act 2015 as well. The well-being plans, the natural resources policy area statements, we've touched on already. Is it safe to assume your view would be that woodlands, and woodland creation, should feature in those plans?

[238] **Dr Dauncey:** Well, having word-searched some of the documents recently, it seems to me that all the appropriate sort of pegs are there in the policy statement that I looked at. I think the linkages are being made, broadly, but that doesn't mean that these huge challenges about, you know, how you deal with this question about spatially explicit planning and so on—. The development of area statements is going to be the key for that, I think—how NRW prepare area statements that bring all of this together.

[239] Perhaps I'm not answering—. Well, I think that might be the answer to the question. Yes, that's the key, that they bring all those issues together and have a degree of spatial explicitness that looks at a key area, looks at the interaction with the communities, and the different characteristics or the ability to grow timber or biodiversity values or whatever in a particular area.

[240] **Huw Irranca–Davies:** Very good.

[241] **Simon Thomas:** Can I just follow up on that and possibly include Elizabeth Robinson as well? Is there an international comparison here? Are there examples of a spatial approach being taken whereby Government has said, 'These are the areas that we expect to be developed in this way for this kind of timber for this kind of approach', or in another way for another kind of approach? Is that something that is a general feature of development?

12:30

[242] **Professor Robinson:** Quite often—certainly, in African countries—forests are very much defined: they're production forests or protection forests. So, there it's a matter of not losing the forests, rather than planting more necessarily. So, the focus of—. But, yes, very much, one looks at the sort of biodiversity hotspots and those would be the protection forests and



then the production forests are where the value of the forest really is in the timber. Certainly, Alec and I think in very similar ways. You can imagine taking a map of Wales and spatially quite simply just mapping where the areas of poverty are, where the areas of high biodiversity are, where the areas of existing forest are, and you could map and you could overlay the benefits you get from forests. You would see the hotspots of where the forests need to be developed. You'd see the cold spots of where, actually, there's demand for forests in those areas for a variety of reasons. That would be a way to look at this in terms of endogenous zoning of where one really needs to either protect the forest or to work the forest better. I don't know Welsh forests in detail, like Dr Dauncey, but certainly there are 80,000 hectares of under-managed woodland. So, before one even talks about planting additional woodland, how far would we get managing that woodland better? Is it cost-effective to manage that woodland better? At the margin, planting more trees, which will take 20, 40 years to grow to maturity, or managing existing woodland better? We need to start thinking about those trade-offs, I think, much more.

[243] **Simon Thomas:** I think that comes back to the earlier point that you did make that NRW tend to treat woodland the same by its characteristic, say Sitka spruce or whatever, rather than think where it is and the communities it relates to, and, potentially, the industries or other benefits that might come around that as well.

[244] **Dr Dauncey:** And the economic productivity of it. I think I have one proviso, which is there have been Wales-wide mapping things: the red zone and so on—

[245] **Jenny Rathbone:** And we've now got the Wales opportunities map, which is endeavouring to do this multi-layering approach to where the opportunities are.

[246] **Dr Dauncey:** Yes, well, that's welcome—breaking down the idea, the possibility, that we're doing too much national planning in a way. But there are going to be area statements that they're going to draw up, essentially catchments mainly, aren't they? That provides an opportunity. But, yes, different layers and different scales and spatial explicitness.

[247] **Jenny Rathbone:** It's reassuring to know that we are at least beginning to do what you're suggesting we should do. We have run out of time, but thank you both very much indeed for your evidence. We'll obviously send you

a transcript of what you've said so you can correct inaccuracies. We'll obviously be picking up some of the points you've made with our next witnesses on 14 June. So, thank you very much indeed for coming.

[248] **Professor Robinson:** Thank you.

[249] **Dr Dauncey:** Thank you.

[250] **Jenny Rathbone:** So, we'll pick up this inquiry on 14 June, when we'll be hearing from some of the commercial interests and we'll also be hearing from the Cabinet Secretary for Environment and Rural Affairs on our marine inquiry. We'll now briefly go into closed session.

*Daeth y cyfarfod i ben am 12:34.*

*The meeting ended at 12:34.*