

Cofnod y Trafodion The Record of Proceedings

[Y Pwyllgor Menter a Busnes](#)

[The Enterprise and Business Committee](#)

15/10/2015

[Trawsgrifiadau'r Pwyllgor](#)
[Committee Transcripts](#)



Cynulliad
Cenedlaethol
Cymru

National
Assembly for
Wales

Cynnwys Contents

- 4 Cyflwyniad, Ymddiheuriadau a Dirprwyon
Introductions, Apologies and Substitutions
- 5 Ymchwiliad i Botensial yr Economi Forol yng Nghymru
Inquiry into the Potential of the Maritime Economy in Wales
- 18 Ymchwiliad i Botensial yr Economi Forol yng Nghymru
Inquiry into the Potential of the Maritime Economy in Wales
- 41 Ymchwiliad i Botensial yr Economi Forol yng Nghymru
Inquiry into the Potential of the Maritime Economy in Wales
- 58 Ymchwiliad i Botensial yr Economi Forol yng Nghymru
Inquiry into the Potential of the Maritime Economy in Wales
- 75 Papurau i'w Nodi
Papers to Note

Cofnodir y trafodion yn yr iaith y llefarwyd hwy ynddi yn y pwyllgor. Yn ogystal, cynhwysir trawsgrifiad o'r cyfieithu ar y pryd.

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.

Aelodau'r pwyllgor yn bresennol
Committee members in attendance

Rhun ap Iorwerth	Plaid Cymru The Party of Wales
Mohammad Asghar	Ceidwadwyr Cymreig Welsh Conservatives
Jeff Cuthbert	Llafur Labour
William Graham	Ceidwadwyr Cymreig (Cadeirydd y Pwyllgor) Welsh Conservatives (Committee Chair)
Eluned Parrott	Democratiaid Rhyddfrydol Cymru Welsh Liberal Democrats
Joyce Watson	Llafur Labour

Eraill yn bresennol
Others in attendance

Rhodri Griffiths	Pennaeth Polisi Trafnidiaeth, Cynllunio a Phartneriaethau, Llywodraeth Cymru Head of Transport Policy, Planning and Partnerships, Welsh Government
Edwina Hart	Aelod Cynulliad, Llafur (Gweinidog yr Economi, Gwyddoniaeth a Thrafnidiaeth) Assembly Member, Labour (the Minister for Economy, Science and Transport)
Graham Hillier	Rheolwr Gyfarwyddwr Datblygu, Tidal Lagoon Power Managing Director of Development, Tidal Lagoon Power
Philip Holmes	Pennaeth yr Adran Economaidd, Adfywio a Chynllunio, Cyngor Dinas a Sir Abertawe Head of Economics, Regeneration and Planning, City and County of Swansea Council
Ioan Jenkins	Cyfarwyddwr Datblygu, Tidal Lagoon Power Director of Development, Tidal Lagoon Power
David Jones	Cyfarwyddwr Prosiect, Marine Energy Pembrokeshire Project Director, Marine Energy Pembrokeshire
Dr Ian Masters	Pennaeth, Grŵp Ymchwil Ynni Morol, Prifysgol Abertawe

Gareth Nutt Head of Marine Energy Research Group, Swansea
University
Cyfarwyddwr yr Amgylchedd, Cyngor Bwrdeistref
Sirol Castell-nedd Port Talbot
Director of Environment, Neath Port Talbot County
Borough Council

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

Rachel Jones	Dirprwy Clerc Deputy Clerk
Andrew Minnis	Y Gwasanaeth Ymchwil Research Service
Gareth Price	Clerc Clerk

Cynhaliwyd y cyfarfod yn Amgueddfa Genedlaethol y Glannau, Abertawe.
The meeting was held in the National Waterfront Museum, Swansea.

Dechreuodd y cyfarfod am 09:30.
The meeting began at 09:30.

Cyflwyniad, Ymddiheuriadau a Dirprwyon
Introductions, Apologies and Substitutions

[1] **William Graham:** Good morning, ladies and gentlemen. Can I welcome you to the Enterprise and Business Committee? The meeting is bilingual. Headphones can be used for simultaneous translation from Welsh to English on channel 1, or for amplification on channel 2. The meeting will be broadcast and a transcript of the proceedings will be published later. May I remind witnesses, and also Members, that there's no need to touch the microphones; they should come on automatically. In the event of a fire alarm, you should follow directions from the usher. Could I ask: are there any Members who need to declare an interest at this stage in our proceedings? No? Thank you very much.

09:31

Ymchwiliad i Botensial yr Economi Forol yng Nghymru
Inquiry into the Potential of the Maritime Economy in Wales

[2] **William Graham:** So, we welcome Gareth Nutt and Philip Holmes. Could we you just to give you names and titles for the record first, please?

[3] **Mr Nutt:** Yes. Good morning, everybody. My name is Gareth Nutt. I'm the director of environment for Neath Port Talbot County Borough Council.

[4] **Mr Holmes:** Good morning. My name is Phil Holmes. I work for Swansea council. I'm the council's head of economic regeneration and planning.

[5] **William Graham:** That's fine. Thank you very much. If we may, we'll go to the first question, which is from Joyce Watson.

[6] **Joyce Watson:** Good morning, both. I wonder if you could outline the value and the priority placed on the maritime economy in Swansea and Neath Port Talbot in their local development plans, and any strategies of the authority, and any assessment that has been made of the economic potential of this sector to the south-west of Wales, and how you both work together in achieving that.

[7] **Mr Nutt:** Wow, that's a good opening question. [*Laughter.*] Thank you very much. Perhaps I could start by talking a little bit around the local development plan, which, in Neath Port Talbot, is very close to—[*Inaudible.*] It's currently with Welsh Government—[*Inaudible.*] That plan recognises the importance, particularly in Neath Port Talbot, of the port facilities and the unique port facility we have at deep-water harbour in Port Talbot. We do in fact protect, in that LDP, the port connectivity in terms of the protection of rail/road access, and the LDP has got a number of policies in it that try to promote the use of the port facilities and protect at the same time the land and development opportunities around it.

[8] Just to give you, perhaps, an example, we've got a policy in there that safeguards freight facilities. So, there is a presumption in favour of that activity and the promotion of it within the LDP. We've also got a number of policies in terms of wharfage and the protection of wharfage in Neath Port Talbot. The issue, I suppose, for us in Port Talbot docks, and the Neath estuary, which also has wharfage and portage, is that it is still very much a working port. Whilst there has been development, which you would call other

than port—[*Inaudible.*—]development of housing, et cetera, the large part of the port and the deep-water harbour is still very much a working port. It's very much associated with the industry that exists in Neath Port Talbot, and there is still development land there and opportunities for port-related activities that can still be exploited. So, our LDP does focus on those issues very much.

[9] In terms of working together, perhaps I can just cover that little point. As you're probably aware, the Swansea bay city region operates in this part of the world. That holds together our economic strategy, and we have got a regional economic development strategy that underpins that board. They co-ordinate in terms of our priorities, economically, going forward, and there's a very good mechanism there for co-ordination across the region, both with the private sector and with the public sector. And, for many years, not only with colleagues in Swansea, we've also developed very strong links with our colleagues in Pembrokeshire and Carmarthenshire. We meet on a very regular basis to discuss our economic development issues. I'd like to think that, in south-west Wales, we've got a strong track record of working together. Certainly, we're aware of and understand the issues around the maritime economy for the region, and the need for us to be complementary rather than competitive in the way we go forward. I think that's quite important. I can't really speak for my colleagues in Pembrokeshire, but I know that they would perhaps put a different emphasis on where they are. We understand what's in Neath Port Talbot, Port Talbot port and what's in Milford Haven; the energy issues there are different and need to be complementary. That's part of the reason that we try to work together on that. I don't know if I can pass over to Phil now. Perhaps he can pick up some of the points I missed.

[10] **William Graham:** Excuse me just a moment, could I just ask Members to make sure their phones are turned off, and everybody generally to make sure they're turned off; there's something interfering with the IT system today.

[11] **Mr Holmes:** Okay. Thank you, Philip. I think it is hard to—. The first part of your question was what sort of value we put on the maritime economy. It is very difficult to do that in some ways, because of the way the standard industrial classification breaks things down. And, of course, the sector is so diverse—tourism, energy, transport, logistics, port-related industries and the supply chain. It's a very important part of the local economic mix but, again, difficult to quantify. I think it does have a big role to play, both in Swansea and regionally. You may be aware that, in Swansea

and in the south–west Wales region, the Swansea bay region, we do have a productivity issue. We are currently running at about 77 per cent of UK productivity levels. I know that’s an issue for Wales generally, but it’s more pronounced in this part of the world. I think the maritime economy does have a role to play in addressing that productivity issue, but it’s part of a bigger role.

[12] So, within our planning frameworks, and the unitary development plan in particular, we very much protect the maritime economy. We look to safeguard and enhance Swansea bay, because of the tourism opportunities there and the links with the city centre. We look at how to support water–based recreation, linking into things like our Swansea bay strategy, and also protecting the quality of the water—the water quality—and European protected sites. The LDP is coming online now within Swansea. We’re a little bit behind our colleagues in Neath Port Talbot, but we have had good discussions, very much partnership discussions, with stakeholders, including Associated British Ports. It is pleasing to see how that partnership approach is working. One of the things that has come out of that is the development of a new strategy for Fabian Way. We’ve entitled it an ‘innovation corridor’. But, basically, we’re looking at everything from SA1, including the docks, all the way east down to Amazon. That whole corridor, if you like—we call it an innovation corridor, but equally, you could call it a maritime economy corridor, because of the links with the docks, with SA1 and with the tidal lagoon. So, it’s a very, very exciting area to be at the moment. We are working collaboratively with partners and we think, over time, that corridor could actually become a very strong area for change within the region and promoting the maritime economy even more.

[13] **Joyce Watson:** Thank you.

[14] **William Graham:** In your paper, Mr Nutt, you refer to the lack of investment and development at Port Talbot. I think we’re all aware that 40–odd years of nationalisation may not have contributed greatly to the improvement of our docks. Do you have a better relationship now with ABP?

[15] **Mr Nutt:** I think the lack of investment is well recorded. Perhaps the deep–water harbour is a perfect example where the infrastructure there is not modern enough to deal with cargo handling as it exists. It’s very well suited for Tata Steel and what they do, but not for diversification. I have to say that there has been, perhaps, a more difficult relationship with ABP in previous years, but I do detect that, since they have had a new

chairman/chief executive, there is a more open opportunity to have dialogue with ABP. In fact, I've met ABP probably several times this year already to discuss various issues in terms of particular opportunities and whether we can work together to facilitate, in terms of land and other opportunities, propositions that they're currently looking at. So, I think there's a very much more open opportunity with ABP. We welcome working with partners. That's the only way, I think, for local government to move forward—in a collaborative way with both public and private sector partners. I have to say that I'm heartened by the dialogue that is going on with ABP at the present time.

[16] **William Graham:** Good. Thank you very much. Rhun.

[17] **Rhun ap Iorwerth:** Thank you both for giving us an overview of what's happening in relation to the marine economy in your particular areas. But, looking on a Wales-wide level, there's general agreement that there's a lack of strategy about what to do and how to handle the marine economy at the moment. Before I go on to ask what the Welsh Government is doing strategy-wise, how do you think local government, in general, should play into that wider strategy of developing the marine economy and new, specific sectors like marine energy, for example?

[18] **Mr Holmes:** I think, more and more as we look ahead now, the role of local government will become more of a facilitator and enabler. I think we're pretty good at that. At a very, very local level, an example in Swansea is the fisheries local action group that we've established. We've utilised European funding to set up this fisheries local action group, which tries to bring all of the stakeholders together in the various sectors. It's a good example of getting awareness of what funding opportunities are out there and of how private enterprise can play a part. But it's also a good opportunity to talk about various policy initiatives as well. Perhaps that could be, if you like, a feeder for discussion via local authorities with Government in terms of what the policy position should be, going forward. I do think there are opportunities to have a better integrated approach, to bring together the ports, the maritime sector, energy, tourism and the wider economy, and have a far more integrated, joined-up approach. I think that, as a small country, we can probably do that very well, and perhaps better than others.

[19] **Mr Nutt:** Perhaps I could just add, I suppose, that this is around facilitation, but it's also around ensuring that our strategy and policies at a local and national level integrate—and that's the word that I would

emphasise—so that our transport policy fits in with our ports policy, fits in with our rail strategy, fits in with our overall view on where we are with the maritime economy. I think I would go back to this complementary issue—that we don't actually compete with ourselves. I think we want to be complementary around Wales about how we move forward. I think we need to be careful that we don't put ourselves in a position where our port opportunities become less competitive than other port opportunities. In fact, we would like to think that we could become more competitive. We have got a significant infrastructure. Some of it is out of date, but we have got a significant infrastructure. Increasingly, in terms of the carbon world in which we live, movements by freight—by sea and rail—will become more important. Those linkages will become more important as we move forward.

[20] **Rhun ap Iorwerth:** It's clear that you both want to feed into a national strategy, and you're looking for ways for local government to play its part. Do you agree with the finding out there that there is a lack of strategy still—even though there's perhaps a realisation of the potential of the marine sector—that there is still a lack of strategic thinking on the part of the Welsh Government?

[21] **Mr Nutt:** I actually welcome this consultation. I think that's a really positive way forward. I think what we'll be looking for is a framework that we can then work with, dovetail into and support, and help to facilitate that at a local level between that high-level strategy and the local opportunity.

09:45

[22] So, I actually take it as a positive, what's happening at the moment. I think we would like to be in a position to feed into that strategic level, but I think what we really want is that framework, which will give us the opportunity to bring some certainty to where we're going, so that we are actually all on the same page.

[23] **Rhun ap Iorwerth:** We are speaking to the Minister shortly. What would be your message to the Minister in urging her to put together a strategy that we can then refer to to see how we're doing?

[24] **Mr Holmes:** I think it's important to see the benefits of joining these things up, as has been said. I also think, just to emphasise it, that, in the role of local government, really, the word 'local' is key. I do think that we can have policies that are strategic high-level frameworks, and they're very

useful for setting the strategic context—the direction going forward—but there is also the opportunity, I think, to feed up at a local level to inform those policies. I think that's where, sometimes, high-level policies perhaps don't realise their full potential because they can be at that level. I do think it needs the consultation with the people who work in that sector, and I do believe that local authorities are very good at getting those people to the table and getting those views heard.

[25] **Rhun ap Iorwerth:** We've just heard in the past week or so about the establishment—well, the last few weeks, actually—of a task and finish group on marine energy. I know local government—not yourselves—are represented on that. Will you be seeking to feed into that?

[26] **Mr Nutt:** I think that task and finish group has only just been formed. I think we're still waiting to see what the terms of reference are and how it's going to operate, but I think, at a local government level, we would anticipate that we would have the opportunity to feed into that task and finish group. I'd like to think that, once we understand how the group is set up and they understand where they're going, that we will have that opportunity. I'm sure that through, perhaps, local government organisations, we will be able to feed directly into that group.

[27] **Mr Holmes:** I'd agree. I'd suggest that that could be done quite effectively via one representative on behalf of Swansea bay or one representative on behalf of Welsh local government.

[28] **William Graham:** Jeff.

[29] **Jeff Cuthbert:** Thank you, Chair. Partnership working is clearly crucial in developing the maritime economy and many other aspects of the Welsh economy. As you know, in April, the provisions of the Well-being of Future Generations (Wales) Act 2015 will come into force, which will demand good partnership working and, I would suggest, would include something as big as maritime development—the UK Government as well. How well do you think local authorities in this area are placed now to take full advantage of the new public service boards that will come into being and that level of co-operation across the public service and, indeed, the private sector as well?

[30] **Mr Holmes:** I think quite well indeed. I think, as part of the future generations Act, as part of responding to European funding opportunities, as part of the development of the local development plans and other

strategies—economic strategies, wellbeing strategies—local government has quite a strong role within partnerships and has good networks and would be able to perform that role very well.

[31] **Mr Nutt:** I happen to think that, in south-west Wales, we're very well placed with that. I think we've got a really good track record of working together in partnership across the public sector and with the private sector. I think there are a number of mechanisms already in place that can be used, and I think we recognise in local government that we can't do everything; in fact, we need other people to help and support us. Our role, sometimes, may be to take the lead, but our role in other circumstances is to support and facilitate. I think we need to get, perhaps, a bit more agile in some of the things that we do, but I think we are very well placed with the way we've operated over the last, maybe, 10 years, in terms of developing our partnership working. For example, we've got regional European teams who act on behalf of the four local authorities and feed out into the wider world. In trying to support the private sector coming forward, we've got a regional economic development strategy, which we are all, as four local authorities, signed up to. Phil mentioned earlier that we've got a Fabian Way corridor proposal, which is actually going to be adopted by the two authorities as supplementary planning guidance. So, I think I could point to lots of ways and specific examples where we believe that we are well placed in terms of working in partnership across the spectrum.

[32] **William Graham:** Thank you. Joyce.

[33] **Joyce Watson:** You've already outlined—because I asked you—the importance of the maritime economy, but could you give me your views on the priority given to the marine energy and the maritime economy more broadly within the Welsh structural funds programme for 2014 to 2020?

[34] **Mr Nutt:** I think, in the written response, we give a range of areas where European funding can support the maritime economy. We know that, in terms of marine energy in north Wales and south-west Wales, WEFO will be looking to support those areas in terms of European funding for that particular area. We are currently concentrating, I suppose, on the new round of structural funds, perhaps because that's where we've got perhaps the most experience. However, there are other funds that we would be—. We have got a regional team, and if there are opportunities to work with partners who want to exploit those funds, we would support their activity.

[35] Perhaps one of the areas where there has been some success regionally is with the European Investment Bank, for example, where Swansea University have got significant contacts and have exploited that opportunity. So, there is experience in the region of that particular avenue in terms of European funding so that we could exploit the knowledge that we have and the context that we have within the region to support the marine economy. Because I think that a lot of the investments that are required are significant, and they're potentially long term. They're about legacy going forward, and there's not necessarily a quick infrastructure fix in terms of ports, in terms of the significant investment that may be required going forward. I suppose that the example that I would give would be the Atlantic Array proposal. When that was on the table, ironically the ports weren't really in a position that they could have handled that opportunity without significant investment going forward because the facilities were outdated. So, I think that the answer is—

[36] **William Graham:** I'm very conscious of time now, and we've got a lot of questions to get through, which we would like answers on. So, I'm going to move on now. Eluned, would you like to ask about enterprise zones?

[37] **Eluned Parrott:** Yes. Thank you, Chair. Clearly, you've talked a little bit about how a strategy might work, but there are other ways in which we could potentially focus our energies towards the maritime economy. We know, for example, that Ireland has a strategy document that is being delivered across Government, which is aiming to get a particular proportion of GDP out of its blue economy. I'm wondering whether you would favour that kind of approach over a specific maritime enterprise zone, or whether you think an enterprise zone targeted in particular parts of our coastline might have benefits.

[38] **Mr Holmes:** Personally, I would prefer to have a more general strategy. I think enterprise zones could play their part within that strategy, and a good example might be the tidal lagoon. During the construction of that facility there will be many, many spin-off opportunities for local business, skills and recruitment. There could be the potential for the benefits associated with an enterprise zone to help stimulate some of those spin-offs. So, that could work. I know that colleagues in Pembrokeshire have enterprises zone status, and they'd be interested in that sort of thing as well. I think a general policy setting out what the expectations are for that sector and the role it's to play in driving GVA growth would be very helpful for the country, and it would help us better understand the sector. I think it's such a fragmented sector; it

isn't particularly well understood, so I think it would be beneficial.

[39] **Mr Nutt:** I think an overall strategy is, clearly, a good way forward, but there may well be the opportunity for specific interventions that may be supported through such a mechanism as enterprise zones. So, I think it may well be a way of integrating those opportunities, rather than just backing one fit. I think it's about integrating them and there may well be a role for those specific interventions, as well as the overall proposition.

[40] **Eluned Parrott:** One of the criticisms, sometimes, of policy in this area is that it does exist in silos: you have energy, you have aquaculture, you have fisheries and you have, obviously, transport, and all of these things exist in their own places, but not in an integrated way. Do you see that as being a good assessment, perhaps, of how Government works, and do those silos also exist at a local authority level as well?

[41] **Mr Holmes:** I'd have to agree. I think those sectors within the maritime sector, if you like, can be quite silo based. It is hard, sometimes, to make the connections and that is, perhaps, where the opportunities are being missed. But, again, I come back just to our local experience; just the simple process of establishing this fisheries local action group and getting tourism businesses talking to people working in the fishing industry. You could even go beyond that; there are opportunities for making those connections. So, I do think the silos exist, but there are ways, hopefully, through partnership working, of trying to break them down.

[42] **William Graham:** Thank you. Jeff—skills.

[43] **Jeff Cuthbert:** Yes, thank you very much. Philip, you mentioned the word 'skills' in one of your responses there, and clearly if we're to take full advantage of the opportunity of the maritime economy, particularly in terms of tidal energy generation, and if we want to make sure that the maximum number of local jobs are created, we have to make sure that the skill base is as good as it can be. So, as local authorities, what involvement do you have with higher education institutions, FE and, indeed, the various sector skills councils, like ConstructionSkills, to help identify the skills that are going to be needed now and for the foreseeable future, and the delivery of those skills?

[44] **Mr Holmes:** We've got very good support. The south-west Wales, Swansea-based city region was, I think, the first area to establish the

regional learning partnership, which involves virtually all of those organisations, I believe, that you've just mentioned, in particular, higher and further education. Working alongside regeneration practitioners, that partnership is starting, now, to understand the sectors; not just the demand, but the supply of skills for those sectors as well. So, that intelligence is there at a regional level, and it's an effective process, because we can all dip into that resource when we need it, and that, then, will allow us, with projects like the tidal lagoon, for instance, to have targeted recruitment, to have training opportunities and apprenticeships, and to work with local businesses in terms of the supply chain. So, those connections are there within the region. Of course, they could be strengthened and improved, but I think we're quite well placed.

[45] **Mr Nutt:** I can only add and support what Phil has just said. I think the RLP is the route to go forward in terms of identification and training needs in conjunction with HE and FE, and also the sectors that require those skills. There's work already coming out of that particular organisation, which is helping us significantly in terms of looking at sectors. It may be that, as we move forward, this particular sector will become much more of a focus for the RLP and I'm not sure that they've done a huge amount of work at the moment in this area, but I think it's one that they can support us with.

[46] **Jeff Cuthbert:** So, following on from that, do you have any intelligence at this moment about where the gaps might be in terms of skills and how that's to be addressed? Do you have anything available at the moment?

10:00

[47] **Mr Holmes:** The regional learning partnership has been looking at skills demand for a number of years now, but they've done it on a sector-by-sector basis, so, I think—and Gareth might correct me—they've looked at areas like the care sector, they've looked at areas like the construction sector and the tourism sector. I'm not aware that they've looked at, specifically, the marine industries or maritime sector, but that could be a future area of research for them, and that then would give us a good indication of what skills we have, what's coming through the pipeline, how those new economies that are emerging would benefit from those skills and what additional skills are needed. So, that seems to be the approach, but I'm not aware that they've look specifically at this sector.

[48] **William Graham:** Joyce, a quick one.

[49] **Joyce Watson:** Just briefly, I'm quite aware of Neath Port Talbot's involvement and lead in Cyfle, the construction joint training programme. Do you think that there is room to take that model, which was the first in Wales—it's an apprenticeship training model with local authorities, five of them—and broaden it more widely into all the other sectors once it's been underpinned by analysis of need?

[50] **Mr Nutt:** Certainly that model is working extremely well, and the shared apprenticeship model allows people to move between projects and between employers to fulfil their apprenticeship, move forward and find a supply chain for qualified people, moving forward. It is particularly aimed at the construction industry. I think the idea of using that model, maybe to look at the way forward with marine energy—it may well be a good model to look at. I think the key thing with Cyfle was there was the identification of the gap that needed filling, so I think it may be one that might follow on from that skills identification that we just talked about. But, it is an excellent model that works extremely well.

[51] **William Graham:** In terms of the opportunity presented by the devolution of port policy, what strength do you really attach to that in terms of local authority development? If you haven't considered it, we'll go to the next question.

[52] **Mr Holmes:** Yes, it's not something that I'm hugely familiar with.

[53] **William Graham:** Fine, no problem.

[54] **Mr Holmes:** Again, I think it comes back to us being a small, clever nation and making better links and integrating our strengths.

[55] **William Graham:** So, tell us a bit about planning and consenting processes. Are they a barrier to development?

[56] **Mr Nutt:** I'll take that. Ports do have permitted development rights, and that covers port-related activity, so, you know, in some respects, they've already got a step ahead, shall we say? If it's, perhaps, a hinterland or development opportunity that's not covered by permitted development, then it does require consents. I think the fact that the LDP is in place provides that framework with those protections. I think the issue of having to go—you know, there is a statutory process and there is a transparent process that has

to be followed and that has to be carried out. I think, as a local authority—and I'd like to think I can speak for Phil here as well—worthwhile in terms of developments that require consenting and have our support, you know, we will do our best to ensure that any barriers that are there are removed. I'd like to say that I think I could point to the track record, really, of the authority being very supportive and moving with some agility and speed, when required, in terms of consenting, to ensure developments go ahead. So, I think I'm fine.

[57] **Mr Holmes:** I'd just agree with Gareth's points.

[58] **William Graham:** Thank you very much. We'll move on. Oscar.

[59] **Mohammad Asghar:** Thank you, Chair and thank you, panel. What are your views on the present position of current Welsh land transport links to our ports here in your region?

[60] **Mr Nutt:** This is a key integration issue here in terms of accessibility to ports, particularly, I think, for export opportunities, which I think is an area that needs more exploitation, as opposed to, perhaps, importation. In terms of our ports in this particular area, the European-funded Harbour Way development has given excellent local access to Port Talbot dock. However, I think it's fair to say that any problems with accessibility and the connectivity, the linkage between the port and the road network or the rail network—it has some difficulties, and I think it's fair to say that in south-west Wales, clearly the A40 could be perceived as a hindrance in terms of moving forwards to Pembrokeshire and on to Ireland. I wouldn't like to be controversial around the tunnels further east, but clearly there are congestion issues on the motorway network that need to be addressed, particularly for us in south-west Wales, where those things impact in a different way, perhaps, to just some congestion at those points.

[61] **Mohammad Asghar:** You mentioned 'local' and 'national' many times, but now we need the word 'international', really. We know that, in Dublin—when we went there—the connectivity between the port and the mainland transport link is so good their economy is booming there. So, basically, that's part of the economy in Ireland—tourism and other benefits to the region. What are the plans, therefore, for local transport and port transport, and the national transport planning in your region?

[62] **Mr Nutt:** We've actually got a regional transport plan in south-west

Wales that all four authorities are signed up to, and that plan does reference ports in terms of accessibility and connectivity and the improvement of those road networks. Clearly, that's the local transport plan, and then there's the national transport plan, which needs to make those linkages to ensure that they fit. In terms of the national transport plan, obviously we can only make some comments on that. We can't write that proposition around south-west Wales. However, we see that our local plan, which we've got as a region, does reference ports, does reference the importance of connectivity at a local level, and does feed into the national transport plan in terms of our concerns, which we've raised, around some of the issues on getting access to south-west Wales.

[63] **Mohammad Asghar:** Thank you.

[64] **William Graham:** Thank you very much. Joyce.

[65] **Joyce Watson:** I just want to pick up on that last point about the national transport plan. I agree with your comments, by the way, on the tunnels and the A40; I live in Pembrokeshire. But, I want to pick up on the national transport plan and your input into it. If we're going to have a marine policy, how important do you think it is that you actually are able to feed into that, and how able at the moment do you feel you are in making your views known?

[66] **Mr Nutt:** Well, we did feed into the national transport plan. Off the top of my head, I can't remember the representations we actually made to it, but we did have that opportunity and we did feed into it, and we did make representations around a number of propositions, and we did indicate the impact that the national transport plan would have in terms of our local aspirations. So, I can't point to the particular representations we made, but certainly we did feed in and we did feel that we had the opportunity to put forward our views.

[67] **Joyce Watson:** Thank you. I want to move on quickly, because time is going to beat us very shortly. I want to know about the key priorities that you have for port developments to support economic growth and how you think they could be supported, first of all by the ports themselves, secondly by Welsh Government, and thirdly by Welsh local government.

[68] **William Graham:** If you could give succinct answers as we're almost out of time.

[69] **Mr Holmes:** We mentioned earlier the Fabian Way innovation corridor. I suppose in terms of Swansea and the Swansea gateway area, that is a clear indication from us in terms of how we'd like to see the port of Swansea develop. The situation would be different for Port Talbot. When you think that you have the new Fabian Way university campus, you have the proposed Trinity Saint David development at SA1, you have the city centre and its aspirations to link with the waterfront, you have Bay Studios, and all of this industry around, the port, really, is in a very strong position to diversify. Obviously, we want ports to retain port-related business and to grow that, but we also see port land that is non-operational becoming available for, perhaps, research and development facilities, manufacturing facilities, linked to all of this growth in academia and industrial collaboration through the universities. So, we are working with Associated British Ports through the local development plan process to help facilitate that, and it has to be done in a sensitive way that complements what's going on, but also protects and safeguards that port as a key industrial asset for the region.

[70] **Joyce Watson:** So, are the three elements of local government, national Government and business all engaged within that?

[71] **Mr Holmes:** Yes, through the city region, those links are all made.

[72] **Joyce Watson:** Thank you.

[73] **William Graham:** Thank you very much, both of you, for your attendance today. That brings this part of the session to a close. Thank you very much.

10:12

Ymchwiliad i Botensial yr Economi Forol yng Nghymru Inquiry into the Potential of the Maritime Economy in Wales

[74] **William Graham:** Good morning, Minister. May I welcome you and your official to our meeting this morning? Could I just ask you, in our usual fashion, to give your name and title for the record?

[75] **The Minister for Economy, Science and Transport (Edwina Hart):** Yes, I'm Edwina Hart, Minister for the Economy, Science and Transport.

[76] **Mr Griffiths:** I'm Rhodri Griffiths. I'm head of transport planning, policy and partnerships.

[77] **William Graham:** Thank you very much. Perhaps we could go to our first question this morning, which is from Eluned Parrott.

[78] **Eluned Parrott:** Thank you. Good morning, Minister. Wales is surrounded on three sides by the sea, and yet we don't have a blue economy strategy, or a strategy that deals with how we can maximise all of the opportunities that our proximity to the ocean brings us. I wonder: why is that?

[79] **Edwina Hart:** Well, I think, Chair, that the committee will recognise that there's a mixed ministerial responsibility on some of the issues surrounding this. The development of the Welsh national marine plan for the Welsh seas is, of course, a matter for my colleague, Carl Sargeant, the Minister for Natural Resources. As you are aware, the marine and coastal access stuff was established in all the UK ministries back in 2009, and the UK maritime policy statement is the framework that we use. The plan for Wales is being developed, I think, to develop our national priorities, and my officials are fully engaged currently in the planning process through membership across Government bodies, I believe, Rhodri, with departments, which is ensuring that the economy and transport is in there, and, of course, I believe this is all reflected in the programme for government that we have actually produced. I don't know if there's anything that Rhodri wants to say about the cross-departmental working that might be useful.

[80] **Mr Griffiths:** I think, yes, it's a cross-party working group that has helped to shape the plan, led by natural resources and the Minister's portfolio officials. That's been a really good working opportunity to shape the focus of the plan.

[81] **Eluned Parrott:** Can I query whether it's cross-party or cross-departmental?

[82] **Mr Griffiths:** Sorry, cross-departmental.

[83] **Eluned Parrott:** I was beginning to wonder why the invitation hadn't arrived. Clearly, we absolutely recognise that the opportunities for the marine economy cross several departmental boundaries, but there is a criticism that the potential for silos to exist around, if you think about it,

energy and tourism, and transportation, and aquaculture and fisheries—all of these things are obviously sitting within different departmental boundaries, but if we're going to maximise the opportunities from the blue economy, we need to bring them together.

10:15

[84] When you are—. Is the result of this interdepartmental working likely to be a cross-cutting strategy that the Welsh Government will use to drive forward the blue economy agenda?

[85] **Edwina Hart:** Yes, it will be a cross-cutting strategy. I concur, actually, with some of your comments about the importance of looking at bringing everything together. I think we have a fine example, sitting in Swansea today, with the proposals on the tidal lagoon, because the tidal lagoon isn't just about the development of energy and clean energy, and the opportunity isn't just for Swansea, but for Cardiff, Newport and elsewhere. We've got excellent, I have to say, marine projects as well up in north Wales. We need to focus on that, because that will also help businesses to produce for the construction of the tidal lagoon, so there's long-term work there. But then you look at the benefits. What does the tidal lagoon become? A tourist attraction. What can be built around the tidal lagoon? There could be holiday flats, there could be restaurants—there could be anything. So, you are correct that what's done in one area should be really linked to the development of other areas in terms of the economy and tourism. The hope is that the work that's been undertaken across Government now in terms of discussions with departments will have that type of policy agenda, because I think it's important that we all have clarity about how this policy can be taken forward. Because when you say that three quarters of Wales is surrounded by water, we mustn't miss out on the opportunity that that is actually a big selling point for us in terms of how we use our ports for trade, and it's a selling point for us in terms of tourism. You've only got to look at the coastal path and how that has been successfully and recognised internationally. So, I think, Chair, the Member's absolutely correct that drawing together strands will be very important in the development of this particular policy agenda.

[86] **Eluned Parrott:** The Minister will be aware, perhaps, that the committee visited Dublin and met with officials and Ministers of the Irish Government, I think, two weeks ago. We were very impressed by the leadership that was shown. We were very impressed by the strategy and how

committed Ministers there were to delivering on that strategy, and to holding themselves to targets that were very stretching in terms of the proportion of GDP that can be generated from the blue economy. I'm wondering whether you've looked at the example of Ireland. Clearly, they're a partner of ours; they are people who we can collaborate with on European programmes as well. What discussions have you had with the Irish Government, and what lessons can you draw from the example?

[87] **Edwina Hart:** Yes, we've been particularly impressed with the work that the Irish Government has been doing on this agenda. In fact, one of my senior officials will be attending a conference in Dublin next week to talk about the very issues around marine et cetera. I also understand that Rhodri Glyn Thomas is attending that conference as part of his role in the regions and everything. I think we've got a lot to learn from Ireland. We have close links in Irish terms about the whole tourism agenda with them, and we are talking more closely with them, as advised by the Commission, about the port links, in particular, into the island and the stretching of those in terms of the European network, because Ireland is very close to us in that regard. Interestingly enough, of course, I've got somebody from an Irish ports background who chairs the Milford Haven enterprise zone, bringing all their experience and understanding, hopefully, into that particular agenda. But we do have regular dialogue across the piece, and it will be my intention, once my officials have attended this conference, to consider whether we want to formalise more discussions on a ministerial level to learn the lessons. I'm glad that the committee had such an excellent experience. I very much hope that perhaps the committee would be prepared to drop me a line on what they felt their experience was and what they thought was useful to help us in the dialogue across Government.

[88] **William Graham:** Certainly, we will.

[89] **Eluned Parrott:** In terms of the marine spatial plan that the Welsh Government is developing, can you please outline your department's role in that? Can I ask what assurance you can give us that the marine spatial plan will have a better destiny than the all-Wales spatial plan did?

[90] **Edwina Hart:** As somebody who, of course, is retiring from the Assembly, I can only do the work that I undertake currently while I am fairly confident that we will get to where we want to get in terms of the spatial plan. I won't comment about history or the future.

[91] **William Graham:** Thank you very much. Rhun.

[92] **Rhun ap Iorwerth:** Os gallwn ni droi at ynni morol yn arbennig, yn amlwg, mae yna gynlluniau cyffrous ledled Cymru—yma yn Abertawe a nifer o gynlluniau o gwmpas fy etholaeth i. A oes yna strategaeth genedlaethol yn y maes hwnnw hefyd?

Rhun ap Iorwerth: If we could turn to marine energy, clearly, there are exciting plans afoot across Wales—here in Swansea and many in my constituency. Is there also a national strategy in this area?

[93] **Edwina Hart:** I've obviously been talking to my Energy Wales strategic delivery group, and, of course, I've got a sector panel that's also very interested in these issues. Their overriding view on energy is that we've got to be innovative in terms of what we're doing, and we've got to have a clear landscape for the industry so they understand stability in terms of what we can do. Because we've got so much unlocked potential, I think, in Wales, and we can bring the expertise together. We can focus, using the industry and using academics, to really get the marine economy in terms of energy going.

[94] But there is a big issue, and there is the elephant in the room, because, when you go back to the tidal lagoon issues—they've only announced this morning—if they can't get certainty on strike price, then it's going to be difficult for investment to actually be able to deliver the first lagoon project. It is fair to say—I don't say this lightly and I don't want to be overcritical—that we're not having any clarity in the UK Government's energy policies, which makes it very difficult for the sector in certain areas. We've had all the debacle on renewables, what's going to happen with wind power and everything, and we can't afford to have that as we're now in the marine technology area, because they're going into new technologies; they're developing new things. It's not like something historic that's been done before, where you can say, 'We can do A, B, C, D and that will be'. It's a very new environment, so it's very important that we have that type of support as well.

[95] Also, we've got to look at our climate change targets in this regard, because if we don't get what we want in terms of being able to deal with renewables, particularly in the exciting area of marine, I think that there will be issues around that. We've obviously been supporting very much the Morlais project in north Wales, which is particularly exciting, and, of course, down in Pembrokeshire, Joyce, I've seen the marine energy project there. So,

we've got the technology, I think, we're developing the supply chain, we've got academia on board and the public sector are working together to get a centre of excellence. So, I think, in those ways, we are motivating the industry, but I have to say there's always more you can do with industry.

[96] **Rhun ap Iorwerth:** Rwy'n Rhun ap Iorwerth: I think you have meddwl eich bod chi wedi crybwyll mentioned Morlais. The absence of a Morlais. Yn absenoldeb strategaeth, strategy, of course, for marine wrth gwrs, ar gyfer ynni morol, nid energy, means that you can't ydych ychwaith yn gallu neilltuo earmark a budget to implement that cyllideb er mwyn gweithredu'r strategy. Morlais, for example, has strategaeth honno. Mae Morlais, er reached an incredibly advanced enghraifft, wedi cyrraedd pwynt sy'n point, considering that they have rhyfeddol o bellgyrhaeddol o ystyried only spent £200,000. They now need mai dim ond rhyw £200,000 maen more assistance from the nhw wedi ei wario. Maen nhw rwan Government. Something like Morlais angen rhagor o gymorth gan y should be part of the Government's Llywodraeth. Mi ddylai rhywbeth fel strategy, but the budget isn't there Morlais fod yn rhan o strategaeth y because there is no strategy. Is that a Llywodraeth, ond nid yw'r gyllideb fair assessment? yno oherwydd nad oes strategaeth. A ydy hynny'n asesiad teg?

[97] **Edwina Hart:** I think there is a strategy, yes, in terms of what we see for the future in terms of tidal, but there is—and I'm quite open about this—more work to do in that area, and we need to look at the investment potential. When we look at the tidal lagoon particularly, they are going out for investment and trying to get big-term investment in, and that's the future for projects. Because Government money will always be limited in this area when you look at the financial position of the Government. When you look at the dialogue we have in the Assembly, I regard energy and these projects, and you do as a committee, and the economy, as all being absolutely essential. However, when you look at the discussions in the Assembly, where are the big grasps? Where are the big grabs on money? NHS. Education. So, there's got to be a balance, and I think Jane Hutt has got to think very carefully as she presented the budget, because we don't know what's going to happen in the comprehensive spending review about who's going to have what. I wish I could say there was a pot there that we could go for. I think we need to do more in helping companies to look at where they could get funding from. There's obviously interest internationally, I think, from sovereign growth funds about doing this. I think we've got to be smarter in

that type of engagement, and I think committee members have said on the floor the Chamber how important it is to have dialogue with the European Commission and European Investment Bank about whether they can be a useful vehicle in terms of delivering some of the money.

[98] But I think it would be helpful, because I've got various groups working on the marine energy strategy at the moment. I think it might be helpful for the committee if I asked the group that's looking at it perhaps do a provisional note about where they see the direction of travel on this that might help the committee in their deliberations when they've finished this report, if it would be helpful at all.

[99] **Rhun ap Iorwerth:** Un pwynt terfynol, os caf: mae'r arweiniad gwleidyddol a'r statws sy'n cael ei roi i'r maes ynni morol yn bwysig iawn. Nid oes gennyf i ddim amheuaeth o gwbl ynglŷn â'ch uchelgais chi i wneud y gorau o'r adnoddau sydd gennym ni oddi ar arfordir Cymru, ond mi ddywedodd Marine Energy Pembrokeshire, er enghraifft, wrthym: **Rhun ap Iorwerth:** One final point, if I may: political leadership and the status given to marine energy are very important. I have absolutely no doubt about your ambition to make best use of the resources available to us off the coast of Wales, but, for example, Marine Energy Pembrokeshire told us:

[100] 'Ministers to represent and promote Wales at high profile conferences outside of Wales. This has not yet happened.'

[101] Mae angen yr arweiniad gwleidyddol yna. Mae yna gyfle, er enghraifft, i Weinidog o Gymru gymryd rhan yn y gynhadledd yn Nulyn yr wythnos nesaf. Rydym ni'n deall na fydd y Gweinidog, Carl Sargeant, yn manteisio ar y gwahoddiad hwnnw. Onid yw hynny'n arwydd i bobl sy'n edrych o'r tu allan nad yw hwn yn faes y mae'r Llywodraeth wirioneddol am ddangos ei fod ym mlaen eu meddyliau? **That political leadership is needed. There is an opportunity, for example, for a Minister from Wales to take part in the conference in Dublin next week. We understand that the Minister, Carl Sargeant, won't be taking up that invitation. Is that not an indication to people looking in from outside that this is not an area that the Government really wants to prioritise?**

[102] **Edwina Hart:** Obviously, I can't comment about other ministerial

engagements or what business other Ministers are on. But I've indicated that I'm sending a very senior official to the conference to take advantage of it. When we talk about marine strategy in Wales, can we be quite clear? It's not like Scotland. I don't have energy and ports devolved, which makes a tremendous difference when you're looking at some of these agendas. Things are just not devolved to us. We don't know where we're going to be in terms of the Wales Bill. I know the First Minister has indicated to Plenary that he has had a constructive dialogue with Stephen Crabb; we've got to be clear on those details. I've started work with stakeholders to develop the ports strategy, which obviously goes into the energy agenda. I think it's important that we recognise we have got a dialogue with the UK Government about what's going on with some of these issues as well. So, I'm not passing the buck, but I don't actually have all the levers in my possession.

[103] **Rhun ap Iorweth:** Diolch yn **Rhun ap Iorweth:** Thank you very
fawr iawn. much.

[104] **William Graham:** Jeff.

[105] **Jeff Cuthbert:** Thank you very much, Chair. Apart from the moat around Caerphilly castle, my constituency is completely landlocked. Nevertheless, I believe passionately that the marine economy is extremely important to Wales. I want to ask you about some of the issues with skills and training. I appreciate that, formally, it's in a different portfolio; but, nevertheless, there are clear links, I think, between your portfolio and the provision of the relevant levels of skills. We've heard from other inquiries that there is a skills gap. If we're to maximise the number of jobs that can be created, particularly by tidal energy, then we need to make sure that our skill levels are as good as they can be. So, I'm wondering how you feel that the collaboration between HE, FE, private industry and Government is progressing so that we can make sure that the skills are at the right level to take full advantage of employment opportunities.

[106] **Edwina Hart:** Skills is the big issue that the private sector raises with me all the time in terms of developing their particular business. Also in terms of skills, we do have close working relationships. We have been prepared to look innovatively at skills, but the skills for this sector are the same, sometimes, as the skills for the nuclear sector. So, it's important to recognise where we've got skills that are very transferrable in terms of the industries that we're developing. We've done an awful lot of work on the nuclear skills agenda and we've been very fortunate with excellent arrangements with the

FE colleges in north Wales and the universities in the development of skills up there. Those skills also suit marine and we've got good working relationships across the piece in terms of developing the marine sector.

[107] I have to say, it is actually quite difficult sometimes for employers, because if this industry isn't coming online—. It's rather like nuclear. We very much hope Wylfa will be agreed, so it's probably worth an employer taking a risk, thinking, 'I'll send somebody for training and I can do this, that and the other. I'll get this bit of machinery, because I'll go into the supply chain'. There's an element of certainty. When it comes to some of the big projects in marine, there's a risk for the employer to say, 'I'm going to help'—even with the help of Government—'I'm going to spend thousands training this person to this level', when something might never come and might not actually benefit in those terms. So, I think this is very difficult, sometimes, for those in the private sector.

[108] But we do work very closely in terms of our relationship with the Deputy Minister there. We find that particularly our relationship in HE is very good. We have the new engineering campus, which we're opening just down the road today. They've got good industrial links, which will prepare us. In terms of FE, I think there's a good FE agenda emerging, I have to say, particularly when you've got FE colleges like you've got in Deeside and in north Wales, where they're really into the industrial development. But, I do think that there's more that could be done on this agenda in terms of horizon scanning about the skills that would be required.

[109] **Jeff Cuthbert:** If I may, just before, we were talking to representatives from local government and they referred to the regional learning partnerships. They were aware of the work that's been done on hospitality and tourism, for example, but they felt that they were not as well informed about the work that may have been done on the marine economy. Do you feel that perhaps there's a need for greater communication there, and is it something that you would want to find out, in terms of regional learning partnerships, about how they're actually addressing this matter?

[110] **Edwina Hart:** Regional learning partnerships, I know, are looking at this agenda, because I know the Minister's looking at the agenda. Can I say to local government that they've only got to pick up the phone or send an e-mail and they can ask the appropriate question?

10:30

[111] **William Graham:** Okay, thank you very much. Minister, in terms of engagement with the Irish Republic, how do you foresee that in terms of history? How do you foresee that developing? We had a very good meeting in Dublin. We gained the impression there that, shall we say, relations could be improved on this subject.

[112] **Edwina Hart:** Well, I think we have got good relations in general with the Irish Republic and Ministers who deal with issues. But I'm very much taken by the comments that have been made in committee about perhaps developing a closer relationship—not just having it at official level, but seeing it as part of the broader discussions we should be having. We have good relations, obviously, because we have the British–Irish Council. In fact, I will be going to a meeting on creative, where we do have very close relationships across the piece. But I do take the point that you are making, Chair, that perhaps it would be opportune to engage at a higher level, at ministerial level, on this, rather than at an official level, so that we can have the mutual benefits. I thank the committee very much for their comments on that.

[113] **William Graham:** Thank you, Minister. A comment about motorways of the sea: have Welsh ports really embraced this in the way they might have done?

[114] **Edwina Hart:** We do have a ports group. Of course, you will know better than anyone, with your interest, obviously, in ports, Chair, that they are, in the main, independent businesses, yes? We of course have other ports like Milford that are not controlled by us; they are a matter for the UK Government. I think there is a willingness to work on some of the agenda, most definitely, but I think sometimes perhaps their business interests come first, rather than the interests of the nation.

[115] **William Graham:** Thank you very much. Joyce.

[116] **Joyce Watson:** Good morning, Minister. I just want to ask you how you think Welsh ports policy will be developed post-devolution and what the likely priorities of that might be.

[117] **Edwina Hart:** We've got a problem because we haven't seen the draft—. We need the draft Bill to see the detail of some of this. I have spoken to Robert Goodwill about the trust ports study, what's happening on that and

what the emerging outcomes are, because that will obviously be an issue for us to look at. We are developing—is it a memorandum of understanding, Rhodri?

[118] **Mr Griffiths:** Yes.

[119] **Edwina Hart:** That's with the ports sector. So, I want to get that understanding of where we can go. It goes back, really, to my answer to the Chair. We've got to see where we can align our interests, I think, which is pretty important. But I think these pieces of work reflect that ports have to be run on a commercial basis, and I recognise that. But it's the unique status of trust ports in Wales that I think we've got to look at because what benefit is that, then, for local stakeholders? If you have got Milford, what is the benefit of being a trust port and how does it then help local stakeholders? Obviously, we have had some conflict over the years with the trust ports about what we'd like to do and what they wanted to do, and that's got to be far greater aligned. In terms of the commercial ports, we have had good relationships, can I say, historically, with some of the commercial ports. Some of the excellent work that was done on the windfarms up in Mostyn—we have had a good relationship and dialogue there. We are particularly having good discussions with Stena about the operation of their ports because that's so important with the Irish links, and what more can be done on the ports that we can help and assist with. So, as far as I'm concerned, the Wales Bill will be published, so we will be clear on that. We're developing this ports strategy, and I think that we will definitely come to fruition. Linked to the ports strategy, I have also been having a look at freight in relation to general stuff, and I have reinstated the freight group and put additional people in it, because I need to look at road transport links with freight, and rail to freight to the ports, actually, to develop the connectivity issues on this particular issue. I have asked Brian Curtis to chair that group, and there will be quite a wide representation of ports and interested parties in that to try and develop it. I think it follows on from the ports strategy that I deal with some of the freight issues as well—the European freight issues.

[120] **Joyce Watson:** So, that will form part of a national transport and finance plan; it'll all link up.

[121] **Edwina Hart:** Yes. At the end of the day, it has got to be part and parcel of what we are doing across the piece. It's got to all be interlinked. I'm not certain that we've strategically interlinked ports sufficiently in the past in the discussions on some of this agenda. But it has been refreshing, I have to

say to the Member, that we have seen our ports taking a real interest in what is going on. The dialogue we are having with Stena, particularly, because of the opportunities up in Ynys Môn, has been first class. That type of public-private partnership will be important, because they can bring a lot to the table and so can we.

[122] **Joyce Watson:** You've answered a lot of the other questions that I was going to ask, but could you just elaborate a little bit on the extent of what enterprise zone status gives to ports policy, particularly including Port Talbot?

[123] **Edwina Hart:** Well, interestingly enough, there are a lot of discussions about Port Talbot because Port Talbot, of course, is an excellent deep water port, which currently services Tata and Tata's needs. There's been a lot of discussion, as well, about what more could actually be brought to the port of Port Talbot. There has been discussion about whether you can look at it as berthing for cruises and all sorts of things and about the development of that particular port. I know there are ongoing discussions between the port and the local authority on this particular area, and we'll await those discussions there.

[124] In terms of the enterprise zone, obviously, Milford Haven is an enterprise zone, and the chair of the enterprise zone is very keen to align what they want to do in the enterprise zone in terms of encouraging small and medium-sized enterprises and others and the development of the site through the work that is going on with the port. We had hoped that the port would have allowed the chair of the enterprise zone to attend their board meetings just as an observer. That is not the case. They have a dialogue with the community and they've got this wider group, which he is part of. I didn't think there would be a problem with that because he could always exclude himself on financial matters as other observers do on boards, because I thought it might've been helpful. But the dialogue does seem to be improving down there. I think the port needs to recognise, with possible changes in who's responsible for policy, that there's got to be a more open dialogue about how we can work together.

[125] I am sure Members will remember the debacle at one stage when I was purchasing a site and the port board were rushing to see if they could purchase it before me or outbid me. Well, that site has now fortunately gone to Egnedol, so there will be work done on that site. We can't have competition—. We are too small a nation for us to be having competition

effectively between public bodies. We've got to get the dialogue absolutely right. I think enterprise zone status will help the port there, with the interest it has, and I think some of the things we've done on business rates and other things down there are very welcome.

[126] **William Graham:** Thank you. Oscar.

[127] **Mohammad Asghar:** Thank you very much, Chair. Minister, thank you very much for all the information. I come from the south-east Wales region, where, actually, three corners are full of land, and only south of south-east Wales—. One of the highest tidal ranges in the world happens there every 24 hours. Sadly, you're retiring, but I think you can put a foundation for planning for the coast and the port development in the future, especially in my area. In your own view, there is still a need for it to be developed—

[128] **Edwina Hart:** Oh absolutely.

[129] **Mohammad Asghar:** —this planning process. So, can you put in a foundation to make it easier in future to develop these coastal areas in Wales?

[130] **Edwina Hart:** I can see what you're getting at, because there is an issue, isn't there, about streamlining consents for the developments in marine areas? There has been an issue about that. I think, if we have further devolution, it gives us the opportunity, but there are lots of other issues—you're right—about this, which we won't have responsibility for that will help other things. Grid infrastructure: this is going to be a big issue in terms of the development of marine energy and the development of the ports. You know, we just need to have mechanisms in place to help us with some of this as we drive this agenda forward, because the grid will definitely be an issue, I think, on the development of marine energy and, of course, streamlining consents for developments would be an issue in ports because, if you're going to do a development, you want to be able to do things quite quickly and effectively, don't you? So, I think it's a point well made.

[131] **William Graham:** Thank you very much. Rhun.

[132] **Rhun ap Iorwerth:** I've just a couple of questions on infrastructure issues that, possibly, are hampering our ambitions as a nation in terms of developing our ports. Shall we start with rail and how crucial it is to ensure that we push ahead with electrification? To what extent does ports policy

play into that business planning?

[133] **Edwina Hart:** Can I say I absolutely concur that it's important that we get on with the electrification? The electrification of the main line to Swansea is absolutely key. So are the discussions of the proposals we are putting to the UK Government for the electrification across north Wales. It'll be very important to the economy and the ports, the western ports. Also, I allude to Swansea, of course, but there are going to have to be improvements further west to get into the ports structure. Even though we haven't talked about electrification further than Swansea, that is a dialogue I think we're going to have to have in the future if we can sort out the electrification in years to come—even if it's a long-term proposal, if it's necessary, do we need to look at it? What do we need to do to be sharper?

[134] I think rail is integral to the discussions on some of this in terms of ports policy. I think it's integral in terms of transporting people but also freight. There are a lot of issues on that. Hence I have got the freight group, which will actually be having a look at some of these issues on ports as well as the general freight strategy and update across Wales.

[135] **Rhun ap Iorwerth:** Is the situation in Newport, where there is a clash between certain Government plans on roads and the ambitions of Newport port, a sign that there perhaps isn't enough collaboration between departments that should be looking at both roads and ports policy and making sure that one doesn't detract from the other?

[136] **Edwina Hart:** Well, it doesn't detract because it's all in one department. I don't know what clash you're alluding to at all in terms of the policy agenda on roads, rail and everything else we might be doing, Rhun. Let me make it absolutely clear: in terms of what we're doing, we're obviously cognisant of the views of the Associated British Ports with regard to Newport. And, obviously, ABP will be discussing with us for a long time, if any proposals go ahead, what level of compensation they would get as a result of any project. So, I think we've got to be absolutely clear that that is a dialogue. No, I don't see any conflict between any of the plans that we've got currently with the future development of ports.

[137] **Rhun ap Iorwerth:** But if there is a threat to the potential future growth of Newport, it suggests that there's not joined-up thinking going on in terms of potential alternatives for the M4, for example.

[138] **Edwina Hart:** I have to say that threats would have to be—. What is a threat? How is it substantiated? What does it mean? Do you know the current business arrangements that exist there, the number of ships that are going in, and what's going on? Now, let's be realistic and honest about this stuff. Let's not go into a dialogue about the M4; we'll have plenty of opportunities to discuss that further. I do not see that as being a conflict situation. Wherever I go and there are roads being built, there are businesses that are affected. Businesses then like to maximise the amount of compensation that they have, and businesses will sometimes tell you, 'We'd be expanding if you weren't doing something'. So, I take all this in the round, and let's see where it flows to.

[139] **Rhun ap Iorwerth:** For the record, yes, of course I've discussed with Newport port how many ships are going in and out, and what parts of the port would be unusable were the black route to go ahead.

[140] We know there's been a squeezing on road spending. How important is it that there is substantial investment in road infrastructure in north Wales, in particular—probably including a third Menai crossing—if, again, we are to maximise that hugely important port at Holyhead?

[141] **Edwina Hart:** Yes. We're obviously looking at the issues about whether we require another crossing to Ynys Môn. I think, in terms of the developments of the nuclear, it might be very helpful for them to have a separate crossing for that particular period, and then to come back into public ownership.

[142] In terms of roads policy, we are spending what we're able to in terms of the financial transport plan. I can see that there is investment going in on across the piece. It's interesting that you mentioned investment in north Wales because I'm always quizzed in the Chamber about the A55 and investment. Well, yesterday, I had an e-mail from somebody who told me to stop spending money, that it's an absolutely wonderful road, the A55, and do I want to put any more money in it? So, there's always mixed reactions when you deal with issues about roads and transport. I see the A55 as being absolutely crucial, and other parts of the network in north Wales, to ensure that we have greater economic activity in other parts of Wales. We've got to understand, in terms of roads projects, that there will be the key roads that we have to do, but we also have to recognise that there's a responsibility for local authorities to keep their road structures efficient et cetera with the money that they have from us, to make sure that they're properly re-

surfaced, and to make sure that when you are going to an industrial estate the road looks nice to encourage investment into it. So, I think it's a responsibility across the piece. But we are where we are in terms of Government expenditure. I don't think the finance Minister is very hopeful about where we will be after the comprehensive spending review, and some areas will inevitably get cut. But, you see, my argument always is, as economy Minister, if you cut on the economy and you cut on transport, you're actually cutting on the future because you actually need to have that money in so that we can get the jobs in. When you have more jobs in you have more income coming in, and then you can deal with things differently.

[143] **Rhun ap Iorwerth:** And tightening purse strings here obviously makes it more important then to turn to various other potential funding streams, Europe being an obvious one.

[144] **Edwina Hart:** Absolutely.

[145] **Rhun ap Iorwerth:** Building on what we've already discussed today, will you be seeking ministerial contacts with the Republic of Ireland in order to discuss collaborations on using the fact that Wales and Ireland are part of one route in order to maximise benefits?

[146] **Edwina Hart:** Well, I think it's important, as I answered the Chair. I think, as a result of the discussion we've had today, we'll obviously be doing it, and my senior official will be there. It's the Ocean Energy Europe, isn't it, that's being held in Dublin next week. So, that's quite important. Interestingly enough, isn't it the Morlais project that's being presented there, I think?

[147] **Rhun ap Iorwerth:** They will be there. Yes.

[148] **Edwina Hart:** They're definitely presenting there. We're also as well very keen, I think, to carry on those discussions. I've also had very good discussions with the Commission as well, because Péter—

10:45

[149] **Mr Griffiths:** Balázs.

[150] **Edwina Hart:** —was over and he's the corridor co-ordinator. We certainly want to directly speak to the Commission a lot more, and officials

are doing that, because I think it's important that we get on with the motorways of the sea that the Chair referred to, which was organised by the Commission, to take work forward on that agenda. I'd be more than happy to give the committee an update by the end of the year about the discussions that are going on.

[151] **Rhun ap Iorwerth:** Again, on that cross-Irish sea collaboration—

[152] **William Graham:** Very short, please; you've had a lot of questions.

[153] **Rhun ap Iorwerth:** Yes, very short. It was interesting that the chief executive of the Dublin Port Company was unaware, or hadn't thought about how he could collaborate with Wales on the development of the link road into Holyhead port—

[154] **Edwina Hart:** Oh, yes—

[155] **Rhun ap Iorwerth:** So, obviously, the committee would be very interested to see the Minister engaging with that.

[156] **Edwina Hart:** There's a lot of willingness in Ireland to engage in a lot of issues, because they're even more remote to Europe than us. So, I think it's quite important.

[157] **William Graham:** Eluned and then Joyce.

[158] **Eluned Parrott:** Thank you. Looking back at the opportunity for making freight transport and service transport to our ports more effective, clearly the electrification of the main line to Swansea provides opportunities, and, as you say, further west, perhaps, towards Milford Haven and that port there, but as you know, Minister, the national transport finance plan omits the Vale of Glamorgan line from the timetable for electrification of the Valleys lines, and it is the relief route for the main line. So, how can you guarantee for freight carriers continuity of service, seven days a week, if the relief route isn't going to be electrified on the same timetable?

[159] **Edwina Hart:** Well, the point is that I have already indicated to you that I'm re-establishing the freight group, and I'd be more than happy for them to pick up the points on that. As you know, we're currently mapping the metro across the piece. We've indicated where we're going and we might go further in the future, and we've got some proposals that we're obviously

looking at currently, discussing with those who might want to bid for doing the work et cetera. I'd be delighted to update you in due course when these other areas will be dealt with.

[160] **William Graham:** Joyce.

[161] **Joyce Watson:** I'm the voice from the west, Minister, as you'd expect. We talked about building infrastructure and connectivity, and I would like to ask you, Minister, whether you support the dualling of the A40 and whether there is dialogue—

[162] **Edwina Hart:** Yes, there is.

[163] **Joyce Watson:** —and I understand financial holdbacks are within that, but I've always supported it and I get a feeling that you are like-minded.

[164] **Edwina Hart:** In terms of the A40, I see that as being key, actually, to going west. The improvements that we've made on the A40 have been broadly welcomed already, and I think there are more improvements to come. It's quite difficult, in terms of the geography, to deal with some of these issues with the road, and very expensive, but I think we've got to have a long-term aim, having that element of connectivity and particularly dealing with those issues. You're right: we've got to look as well at rail links, as you looked at as well, so I think it's important that we do look at west Wales in that light.

[165] **Joyce Watson:** Thank you.

[166] **William Graham:** Eluned.

[167] **Eluned Parrott:** Thank you. Looking to the economic areas that have the potential to benefit from the marine economy, one we haven't talked about yet is the potential for research and development, particularly the development, perhaps, of working with business and our universities. What support for the marine economy do you envisage being delivered through the 'Science for Wales' strategy?

[168] **Edwina Hart:** I think the 'Science for Wales' strategy is extremely important for us in terms of the delivery in a lot of key areas. You've only got to look at the contributions made on the energy agenda as well in terms of what we're doing. I have discussed with the chief scientific adviser that it

would be good to actually have one of the stars or some grouping with the university as part of how we could attract in to undertake some of this work, because these people we're attracting into other areas have really made a difference—it's startling, even, in world terms, that people know they're in Wales and they're collaborating. So, as far as I'm concerned, I think it's very strategic. When we look at the low carbon—it has been very good, we find, as the Welsh Government, and we've got other research clusters, AquaWales and things like that, and resilient coasts, so we are moving in on that agenda quite well, looking at ecosystems and looking at reducing the risk of disease transmission. So, there's a lot of stuff already going on in the 'Science for Wales' strategy and marine energy.

[169] **Eluned Parrott:** There are a couple of places in Wales already where we have real strength—

[170] **Edwina Hart:** Absolutely.

[171] **Eluned Parrott:** —in terms of engineering. Here in Swansea, the new second campus, clearly, has an engineering department built for purpose. In Cardiff University, you have an existing marine environment engineering centre and Professor Roger Falconer. There are places that have the capacity, I think, to take forward this agenda, and yet we see—. Not wishing to be obsessed with Ireland, but they've just invested tens of millions of pounds into a marine energy research centre in Cork, using European investment to create a centre that is a first in the world, as we are told. Is there a danger that Welsh HEIs actually could be left behind because we haven't been quick enough off the mark here to make sure that the facilities are coming to Wales?

[172] **Edwina Hart:** I don't think we've been left behind on this agenda at all. I think there is the appropriate dialogue and discussion between HEIs and the chief scientific adviser. There's always somebody that'll be first. It would be nice, sometimes, when we're first on something in Wales, if people could remind the world of that, and that's quite important, because there'll always be somebody who'll be thinking about this agenda. But we are very minded to carry on and work very hard on this agenda. We have engagement with Ireland and higher education, so we've got an excellent engagement already on this particular agenda.

[173] It might be useful, Chair, because I know the committee will probably, in due course, do a very limited number of inquiries in the future as we move

to the period of the elections—. I don't know if it will be helpful at all if you wanted the chief scientific adviser and some representatives from HE to come along to talk about the very interesting opportunities there are for research linking et cetera.

[174] **William Graham:** That's most helpful, Minister. We've already programmed the chief scientific adviser on your previous advice to come in on the—

[175] **Edwina Hart:** I think that one might be very useful, because she understands fully the strands, and the support from the HE sector, and you can see the work that is being undertaken. I appreciate that people sometimes want more formalisation of things in the development of a centre or being seen, but I think the CSA would be best placed to advise.

[176] **Eluned Parrott:** Can I ask, in terms of support that the Welsh Government and your department is providing—? Clearly, we have a number of opportunities through European funds to develop these routes, for example potentially there are structural funds and there are Horizon 2020 bids that we could make and, for major investments in research centres, clearly there are, you know, opportunities for those institutions to borrow—from Swansea—to the EIB or other institutions. What is the Welsh Government doing to encourage those in this particular area of academic research to work with, for example, contacts through our INTERREG links with Ireland or the Atlantic area to develop the kind of cross-regional partnerships that will mean that a Horizon 2020 bid is more likely to be successful? It's that partnership brokering that can be really, really difficult, and yet it is absolutely critical to us being successful in these kinds of bids.

[177] **Edwina Hart:** In terms of Horizon 2020, obviously the chief scientific adviser's been engaged. Jane Hutt has responsibility, as you know, for the European structural programmes, and I know that all that discussion and dialogue is taking place. I think you're absolutely right about having the key partnerships in place and, sometimes, those partnerships are, of course, across national boundaries, and that, actually, makes them more powerful in terms of what you're going to undertake. We've got a lot of work going on in my department on other aspects of it, and we've got partnerships within Europe and elsewhere—partnerships with the Massachusetts Institute of Technology—to transform particular agendas. So, that is something that is at the core of the workings within Government.

[178] **Eluned Parrott:** Actually, Minister, those cross-national partnerships are essential. You cannot bid for Horizon 2020 funding without having an international partnership within Europe. Clearly, many of those research centres, through the reputation that they already have, have the opportunity to broker those partnerships, but you need business involvement as well. When we look at the centre that we have in Brussels, while there's an HE representation there, there is not a representation for business there. Is there more that we can be doing in Brussels to make sure that businesses are at the heart of what we're working with to make sure that that circle is squared, that we have those links in place and that they are working co-operatively towards these Horizon 2020 bids?

[179] **Edwina Hart:** I can assure you that we do have the links in place. It might not be on this element that you're discussing with me now, but there are other projects going on where we have the European partners to be able to bid for Horizon 2020 funds. There's good engagement and dialogue with industry, and with key partners as well, which are involved in some of these bids. And I think, as some of these bids, hopefully, come to fruition, you will see as a committee that there is work being undertaken. But there is always, as usual, more work to do.

[180] **William Graham:** Thank you. Oscar.

[181] **Mohammad Asghar:** Thank you very much, Chair. It's only just on the record, Minister, when we went to Ireland recently, we noted that they scanned the seabed, through their university co-operation, from Ireland to Canada, and also they've got a very huge part of the land under the seabed in the Atlantic ocean, which they are going to scan for marine knowledge and the marine economy, or marine benefits or whatever. Are there any such plans in the Welsh Assembly Government, or with the university, to do it?

[182] **Mr Griffiths:** We already have the marine renewable energy strategic framework, which has done exactly that around Wales and the Irish sea, which has mapped where there's potential for the different types of devices, and that is a real incentive to draw business in to actually see there's a viable capacity there for delivering particularly tidal range and tidal stream devices. And that's ongoing.

[183] **Mohammad Asghar:** Will you be able to give us some, you know, output or result or—?

[184] **Edwina Hart:** Would you like a paper on it, Chair?

[185] **William Graham:** That would be immensely helpful. Thank you very much, Minister. Jeff.

[186] **Jeff Cuthbert:** Thank you. It's absolutely clear, I think, to all of us that the potential for the benefit of the Welsh economy of developing fully tidal energy and the other aspects of the marine economy is huge. The investment in research and skills training all depends upon clear decisions. You mentioned earlier your frustration at the UK Government, which is a key partner with us in many of these things, not being able to agree a strike price. Do you feel that, without that type of clear commitment and support, there is a grave risk to our programmes and our plans in terms of the marine economy?

[187] **Edwina Hart:** Well, there will be on the tidal lagoon. There's no doubt in my mind, and I think they've said it publicly, that they need to know what the strike price is. I know the strike price is absolutely mouth-watering, even compared to the nuclear strike price on Hinkley, but if we are to be serious about our commitments internationally in terms of what we're producing on energy, we've got to do something about this, and we do have the ability in Wales, with things like the tidal lagoon and exciting projects in north Wales, to actually deliver on the energy agenda. So, we desperately need that strike price. I've obviously engaged with the UK Government on this. I've had regular discussions with Lord Bourne in the particular department, and we will be continuing to press this issue on behalf of the tidal lagoon.

[188] **William Graham:** Thank you, Minister. We will hear from them later today, so your comments are most valid. Could I ask you what progress has been made with regard to TEN-T and the identification of Liverpool rather than any Welsh port?

[189] **Edwina Hart:** TEN-T has been quite a difficult discussion, I think, for us, I would say, Rhodri—

[190] **Mr Griffiths:** It has been.

[191] **Edwina Hart:** —in terms of what has been agreed, what hasn't been agreed, and where we are. When we met the Commission, they told us to actually continue to press very much for the appropriate work to be undertaken and the appropriate discussions within the European Union. I

think that's what we've continued to do, Rhodri.

[192] **Mr Griffiths:** Yes, and I think it's useful to note that some of our ports are on the motorways of the sea core network and comprehensive network, so there is a potential for us to do work with, particularly, Ireland to maximise—I think it was between £500 million and £900 million that's been dedicated to that fund, so I think that's something we're really keen to develop, particularly with Ireland.

[193] **Edwina Hart:** And we will actually be asking the Irish to help to lobby on some of these issues, because they've made it absolutely clear to us that they see their strategic links into us, in terms of what they're doing on that particular network.

[194] **William Graham:** Rhun, a very short one.

[195] **Rhun ap Iorwerth:** Yes, a very short one on motorways of the sea. There seems to be some misunderstanding with people who've given evidence to our committee about what opportunities there are through motorways of the sea—people thinking that it's money for routes, still, when actually it's about infrastructure. Are you concerned that perhaps Government hasn't been able to communicate—?

[196] **William Graham:** I think the Minister has already answered that question.

[197] **Edwina Hart:** My concern always is that when we do give information out, people don't necessarily take it in in terms of their understanding, but of course we'd been more than happy to have further discussions and dialogue with anybody on this particular agenda, because if you're saying there are problems, we need to address them.

[198] **William Graham:** Quite so. Minister, you commented earlier on compensation for motorway works. I have to say, in a previous life, when the prospect of a motorway connection was envisaged, most of the landowners around were highly delighted, so I'd imagine you will be taking into account a certain amount of betterment when you come to assess compensation for your imaginative scheme for the motorway.

[199] **Edwina Hart:** Yes. Can I say on that you're absolutely correct? There are a lot of businesses across the UK, and others, who would be absolutely

delighted if there was a motorway, because then they could ask for a link into it, a junction.

[200] **William Graham:** Quite so. Thank you very much for your attendance today, Minister—much obliged.

[201] **Edwina Hart:** Thank you very much indeed.

[202] **William Graham:** Okay. We'll have a break for five minutes now, please.

*Gohiriwyd y cyfarfod rhwng 10:59 ac 11:09.
The meeting adjourned between 10:59 and 11:09.*

Ymchwiliad i Botensial yr Economi Forol yng Nghymru Inquiry into the Potential of the Maritime Economy in Wales

[203] **William Graham:** Welcome to Dr Masters. Thank you very much for joining us today. Can I just remind you that the microphone will come on automatically? We'll go to our first question, from Joyce Watson.

[204] **Joyce Watson:** Good morning. I would like to ask you for your views on the opportunities to develop the maritime economy in Wales, including through strategic projects like the tidal lagoon, which I know you're very aware of, and the two developments sites for marine energy off the coast of Pembrokeshire and also Anglesey.

[205] **Dr Masters:** Okay, thank you. The topic we've been talking about today has got quite a lot of different elements to it. Some of the European documents and thinking are around the marine and maritime sectors—maritime being ports, shipping and logistics, and marine being everything else, which includes marine energy and aquaculture, but also things like blue biotechnology and deep sea mining and these other areas that are very much in the future as well. I think there are some real opportunities to generate an awful lot of energy from the seas around Wales, both tidal streams in Anglesey and then the wave projects off Pembrokeshire—there's some tidal stream work there as well—and also the tidal range in Swansea bay. I think one of the things to realise is that the companies that are proposing the technologies are, if you like, the pinnacle—the very top—of a very long and complex supply chain, and it's really important to try and get that pinnacle technology in some way to stay in Wales, so that the rest of the value behind that comes back through. So, it's really positive the support we've had for

the tidal lagoon, but also people like Tidal Energy Ltd in Cardiff and Marine Power Systems here in Swansea.

[206] **Joyce Watson:** So, what do you see is the role of the universities in helping to achieve those things you've just outlined?

[207] **Dr Masters:** Okay, so we've been researching this area since about 2001 in my own team in Swansea, and our role is really to provide that scientific certainty. There's a real danger of technologies, perhaps, that aren't mature and are not being thought about being proposed, and I get my fair share of those every day. But, what you need is that good science base in which to build the good businesses. We're talking about new technologies—things that are, in some senses, easy to do, but, in some senses, very difficult, and it's that attention to detail. So, from an engineering perspective, it's making sure we've got some certainty about the way in which the engineering will work when we go into these very harsh environments that are offshore.

[208] There's also a role for the universities on the environmental impact assessment and environmental survey as well, which my colleagues are looking at.

[209] **Joyce Watson:** I was going to ask about the environmental impact, and you say that there's research ongoing. How do you think that ought to be assessed, and how do you think it ought to be used in helping to determine where we go, quite frankly?

[210] **Dr Masters:** Okay, so in terms of the environmental assessment and environmental permitting and planning—and we've talked a bit this morning about planning processes—it would be very helpful with the lack of data, because there are very few tidal devices, very few wave devices and no tidal lagoons in the sea at all, so we have no evidence base. So, a very sensible way forward is to deploy a monitor approach, where technologies are deployed at sea at an appropriate scale and then the university input is to help in the monitoring process to understand what those first projects are doing to provide the evidence base, and you can then manage impacts or lack of impacts going forward, based on that evidence.

[211] So, I think there's a real concern about some of the environmental legislation and the way it's worded, in that you need to have evidence before you make a decision. In the case where there's no evidence, the default is to

say ‘no’, and we really need to stop doing that; we need to say, ‘Let’s deploy; we’ll do some very good monitoring; we’ll put some high-quality instruments in; we’ll understand what’s going on with the technology; and then, on the back of that, we can modify our approach and we can manage whatever comes out of that process’.

[212] **Joyce Watson:** Okay.

[213] **William Graham:** Jeff.

[214] **Jeff Cuthbert:** Thank you. I was very interested in those opening responses. I assume that it’s also the role of higher education in terms of futureproofing, by which I mean we’re aware of current technologies across the world—you’ve just alluded to a few of them—and some of the practical difficulties in terms of getting a good evidence base, but, presumably, or rather as a question, do you try to identify the likely technologies of the future, and, indeed, contribute to their development?

[215] **Dr Masters:** Yes. So, across the Welsh universities, there are engineering research teams—both my team and also at Cardiff, and others—that are looking at the new technologies. I think the realisation should be that a new device will look probably very much like an existing device—there won’t be something that’s radically different from some of the ideas that we’ve seen already. A modern motor car looks like Henry Ford’s Model T in a lot of ways. [*Laughter.*] In a lot of ways, you know, the basic concept is the same, but the technology development has happened sequentially underneath that.

11:15

[216] In wave and tidal, our first challenge is making the technology work reliably at sea, and that is as much a research effort as it is a product development effort. And then, secondly, we need to take cost out. So, the first stage is to get reliable kit that works, that generates electricity, and then, secondly, we can say, ‘Well, how can we do this more cheaply?’, and it will probably, on the outside and to the layman, look very much the same in 20 years’ time, but the cost base will be significantly different.

[217] **William Graham:** Thank you. Eluned.

[218] **Eluned Parrott:** Thank you. Earlier on, we were talking about Ireland’s

impressive 'Harnessing Our Ocean Wealth' strategy. You reference, in your paper, Scotland's budget for the marine economy. I'm wondering if you can tell us what your view is, really, on the strategic development process in terms of Wales's approach to the seas, and whether we are where we need to be at this point in time.

[219] **Dr Masters:** I think all the strategies are there, and having recently reorganised NRW, I think that's a really good step, so I wouldn't want to take the marine planning elements back out again. So, let's leave NRW where they are. I think it is coming together. Probably some sort of blue-growth strategy would be helpful, but I can see it's the barriers that are the issues rather than the lack of policy. So, barriers like planning and permitting, like coastal grid connections, those are the things that are more of an issue than having the right policies. It would be helpful, I think, to have some more staff on the ground in particular areas, particularly with the planning and licensing teams, both on the licensing and on the science sides. I think that would be helpful within Government, and this new marine energy Wales unit within Government is helpful. Again, I think that needs to be adequately resourced to make the opportunities. And then, of course, there are the silos. If we think about aquaculture, we have a limited aquaculture industry in Wales, so there's a real opportunity there. We're doing a project with Cork, in Ireland, at the moment, looking at blue growth and looking at combining technologies. I have my own suspicions about individual single platforms with lots of technology attached, but regional clustering, sharing of skills, sharing of equipment, sharing of resources, so you can service both marine energy and aquaculture, and other activities, I think that's quite helpful. I suppose you probably do need a strategy to do that, but I don't think we have to wait for a strategy in order to start on some of these elements of the different barriers that are in place to some of the technology.

[220] **Eluned Parrott:** So, in terms of the silos, clearly, stapling a number of technologies together in one project is possibly a difficulty, but, if you look at the lagoon proposal here in Swansea, there's a technological and energy-generation prospect there, but there's also prospect for tourism, and they sit in different departmental responsibilities in the Welsh Government, they are likely to sit in different departments in our higher education institutions, in our local authorities and, basically, any public authority or body that has an interest. What can we do to get over that? Because, at the moment, clearly, there is a danger that, if we're facing inwards, we're not necessarily seeing the opportunities that could grow out of it.

[221] **Dr Masters:** Yes, I would agree. I think it's just making people aware of the opportunities at some level. There's been a lot of work identifying barriers in the various sectors, and some of the issues, and that's been done at European level and also at UK level, and if we can just tick some of those barriers off in Wales and say, 'All right, we're going to try and deal with this one; we're going to deal with coastal grid connection', for example, 'Let's do some proactive work around that area'. So, for example, for the demos down in Pembrokeshire—you're going to be hearing from Marine Energy Pembrokeshire next—they need to run a grid cable for 100 MW from something like 14 km offshore into a substation, probably in Pembroke, and, if we know the area, there's some beautiful countryside and farmland, and other developers, on the shore side of that project, so there's onshore planning as well as offshore planning, and it's those types of joined-up things. Well, let's start dealing with that cable corridor as an example. So, it's the foresight to know, 'Well, here is a barrier; here is an issue. Let's start developing that'.

[222] As another one, the wave resource, for example, off Pembrokeshire: up until 12 months ago, there were not any state-of-the-art measurements of waves in Pembrokeshire—in the whole of south Wales. If we're going to try and build a wave energy industry but we have no wave climate data, that's not a good project. So, we used some of the money we received from WEFO, under the Low Carbon Research Institute, to deploy a wave rider buoy. We probably need another one, but we now at least have one years' worth of high-quality data from that wave rider. It's having that foresight to start ticking the problems off before they become barriers to commercial development.

[223] **Eluned Parrott:** Okay. Clearly, we have the Welsh marine spatial plan, which is being developed at the moment. Do you feel confident that that document is going to bring together the kind of holistic approach that we really do need if we're going to overcome these barriers that have fallen between silos, like the difference between onshore and offshore planning?

[224] **Dr Masters:** I think so, yes. One of the things to realise, though, is that some of the energy projects, lagoons excepted, can be quite small and take up a small amount of sea. I suppose it's similar to some of the community-based wind projects that fall outside of the big blocks of opportunity. So, I think, yes, it's right, and yes we should have the demo zones in place, but we shouldn't exclude the opportunity to build small projects that take up a relatively small amount of sea and which can co-exist alongside other

activity. So, if we have a zone that is designated for something else and somebody says, 'Well, actually, I've got a nice, neat tidal technology that could go in there', I think we should allow those opportunities for the smaller scale projects to be deployed.

[225] **Eluned Parrott:** Thank you.

[226] **William Graham:** Rhun.

[227] **Rhun ap Iorwerth:** Could you give us your analysis of the support and prominence, if you like, given to marine research, the importance of it, the investment in it, by both Welsh Government and from within the HE sector itself?

[228] **Dr Masters:** I think, up until this point, it's not been a key large area. We obviously have health and manufacturing and—I'll remember what the third one is—life sciences as the key areas within the science policy, and that's appropriate. Energy is a big sector in a whole. Marine energy is quite small niche by comparison. So, there is recognition of the area within Wales. There is recognition at Government level. The energy adviser to Welsh Government is very supportive of what we're doing. But, again, we're a relatively small team of people compared to other research areas within Wales, for example. So, we clustered all of the activity under the LCRI marine project, which we ran successfully for the last five years, and now the core parts of that team are part of the national research network, and we have a cluster within the national research network. So, we have some activity. It could obviously be bigger, but it's quite a small research area globally.

[229] **Rhun ap Iorwerth:** Is that lack of capacity that you have at Swansea or perhaps wider in Wales holding back the potential for real excellence in research?

[230] **Dr Masters:** I think the research we're doing is excellent. I'm a member of the UK Centre for Marine Energy Research, so we're aware of what our colleagues are doing across the country. I believe the work we're doing is up there with the rest of the world. It would be nice if there was more of it and we were in slightly more specialist areas, as well as the ones we're doing at the moment, of course. So, yes, more research would be great.

[231] **Rhun ap Iorwerth:** And if you were able to design and were able to have a shopping list, would it stem from more money into research, or is

there more to it than that? What would be the ideal set of circumstances to allow excellence to really be achieved?

[232] **Dr Masters:** I think long-term research is driven by the core academic lecturing professors' team within a university and it would be good to grow that area with more permanent academic leaders. We're opening today our new campus. We have a coastal wave flume, which we've built, which we have in our lab, which is very exciting. We have room for other rigs and other equipment. We have room for more staff and more postdocs. So, there's an opportunity to add to the very specialist areas we're got already with perhaps some other areas of expertise alongside.

[233] **Rhun ap Iorwerth:** We're aware, as a committee, through evidence that we've taken, that there is perhaps more investment going on in other countries—in the Republic of Ireland and with Scotland certainly being seen as a leader. The further ahead they get through increased investment, does that then make it more and more difficult to build that capacity in Wales and for Wales and research in Wales to compete?

[234] **Dr Masters:** Yes, I think it does. Well, this whole sector was effectively started by the research team at Edinburgh university. Their research group is probably bigger than the entire research capacity in Wales, in Edinburgh university itself. So, I think there is an argument for more people here. If we're going to make this a significant part of our economy, I think we do need more academic staff to help deliver that.

[235] **Rhun ap Iorwerth:** Obviously, there'll be research that can be contributed from Wales to a larger global project, but is there a danger that there comes a point in time where we can bid farewell to any ambitions we have to be genuine leaders in marine research?

[236] **Dr Masters:** I think only if we walk away from where we are now. I think the only direction really is upwards with what we're doing. The research we have, remember, is based on the capacity of the engineering departments that it sits within. So, both Swansea and Cardiff are top 10 for engineering in the UK, and we have strong teams and strong support from my colleagues. So, if I have a materials engineering problem, I've got a team of materials engineers I can call upon. If it's a computational modelling issue, we've got world-class computational people. So, I can go and find academic partners. So, you build that strength within the wider context of a strong college of engineering.

[237] **Rhun ap Iorwerth:** And, presumably, collaboration between different institutions in Wales—

[238] **Dr Masters:** Of course, yes.

[239] **Rhun ap Iorwerth:** —might include SEACAMS, which just happens to be in my constituency, and is vital if we're to have a thing called 'Welsh excellence in marine energy research'.

[240] **Dr Masters:** Just on the subject of SEACAMS, the proposed SEACAMS 2 project has an element within that of coastal engineering, and my colleagues at Swansea are involved in that area, and they're going to be looking in particular at things like sediment transport around Swansea bay in and around a potential lagoon project. So, within SEACAMS 2, there is an element of very close collaboration between the biologists and the engineers, both in north Wales and in south Wales. So, that's a really positive example of this working. We'd like to do something similar on the technology side as well.

[241] **Rhun ap Iorwerth:** Thank you.

[242] **William Graham:** On that point, Dr Masters, when we were in Dublin, they were making the point, just as you do, that it was necessary to engage all sorts of specialisms and to work outside that as well—for example, you will need, at certain parts, at the end of a project, to engage with lawyers—and that we should develop that expertise in Wales. Would you endorse that?

[243] **Dr Masters:** Yes, I think so. As the sector matures from simply technology development into an industry sector, again, you have to come across all these other elements—the socioeconomics, the lawyers, the legal issues, the business side, logistics. It's quite interesting that what started as technology companies are now evolving into manufacturing businesses that have logistical issues and transport issues and maintenance issues. So, I suppose you can look at the way wind has gone—. Wind has gone from relatively small technology companies into quite global businesses, and that's the scale of the opportunity we're talking about—people like Vestas going from a company that made tractor gearboxes into a global multinational selling wind turbines around the world. You know, that's the scale of the opportunity. And so, I think you're going to need different skills as the sector matures. But the sector's not going to mature until we get projects under way, and we're not going to get projects until we deal with the

barriers. So, you can have the vision, but we've really got to start dealing with getting some kit in the water.

[244] **William Graham:** Thank you. Joyce.

[245] **Joyce Watson:** Of course, one of the barriers is always finance. So, you say in your paper that Welsh structural funds could be used or should be used to support earlier stage technology. Do you want to add any further comments to this?

[246] **Dr Masters:** Yes. The structural funds at the moment, I think, are being spent in the right places. They're being spent on infrastructure for the deployment zones, and they're being spent on very good quality technology projects. There's a danger that, in five years' time, when we want the next generation of technology, that technology won't exist in Wales, unless we're starting to do the underlying development. And, as well as the fundamental research that we're doing under the UK science base, the LCRI marine project, which we've just finished, was engaging with businesses to help them develop technology.

11:30

[247] We need to remember that research is what you do now to answer the question that you'll have in five years' time. The questions that the businesses have now are very immediate and very—. You know, they have cash flow, and they've got to get kit working. But in five years' time they'll have a different question, at which point, hopefully, a PhD student will have been working on that in the background somewhere. So, I really feel that we need to continue investment in projects that are applied research, working with Welsh companies, solving those next-stage problems, and that's something that we are ready and willing to do.

[248] **Joyce Watson:** And a part of that, of course, is participation in Horizon 2020. Have you got anything further to add?

[249] **Dr Masters:** We are partners in Horizon projects, led through our partners at Cork in their new facility on the waterfront there, and that's quite exciting. There are some projects specifically for ocean energy under the Horizon round, which is great, but actually it's probably going to be quite tough in order to secure funds from those specific rounds. There are more projects, more developers, more technology, more universities involved than

that funding will actually work for. So, I think it's going to be quite difficult funding to access. So, at one level, there's convincing Europe that this is a credible sector and that they need to spend a greater proportion of the Horizon budget on ocean energy. When you compare it to other industry sectors, the hydrogen research programme is much bigger, for example. So, we just need to be aware that, yes, we will bid and, yes, we will be part of the teams, but the likelihood of getting that money is actually quite tough because of the number of other technologies and companies involved. So, actually, the message back to Europe is, yes, there should be more of this type of funding for these types of projects.

[250] **Joyce Watson:** Have you made any of those representations back to Europe? Who do you think ought to be making those messages?

[251] **Dr Masters:** Well, the Ocean Energy Europe trade body are obviously talking on behalf of the developers, so that's quite useful. I think, also, it should be done at some sort of national level as well, to say, 'Well, actually, this is a credible sector and, yes, Horizon should do more with it'.

[252] **Joyce Watson:** Okay. Finally, because the obvious final question is: do you feel that the Welsh Government is giving this the priority that you would hope it would give it?

[253] **Dr Masters:** Possibly. It would be nice to see more resources in the Welsh Higher Education Brussels unit. They're a good team. They're very good people, but their role is very much signposting the opportunities, whereas it may be more appropriate to have additional people within that team to actually go and fight for money on behalf of the higher education sector, and perhaps also for Welsh businesses as well. You go to European meetings and you find somebody—. There is a port cluster in Portugal, and they have a member of staff based permanently in Brussels, bidding for money and getting involved in projects. As ports, they've decided that they've got enough opportunities, and they have somebody based there. If you compare the size of that one small cluster compared to Wales as a country and how much ambition we have for Horizon, how many people do we actually have in Brussels working on our behalf?

[254] **William Graham:** Thank you. Jeff.

[255] **Jeff Cuthbert:** Thank you, Chair, and thank you, Dr Masters, for what you've said so far. Clearly, the marine energy sector holds massive

opportunities for Wales and the Welsh economy, and we want to maximise the number of jobs that it can create. What is the role, then, of higher education in terms of helping to identify the current and future skills needs, and this links into the futureproofing question that I asked you earlier? What is your relationship like with further education and, indeed, employers that could well be investing in the energy sector, and do you work together to help identify skills at all levels that will be required to make it a real success in Wales? As a consequence of that, do you feel that there are specific skills gaps at any particular level at the moment?

[256] **Mr Masters:** Thank you. Obviously, my area is within a university context, so I know more about skills at the highest level. My other job is that I look after the mechanical engineering programmes at Swansea, and so we're very much aware of the skills. We have a very high employability rate in terms of outcomes for our students; so, lots of our students get jobs. I think, in the energy sector as a whole, there is a lack of mechanical engineers, electrical engineers and other people generally—engineering graduates. So, there are some really positive things about STEM outreach in schools and the BLOODHOUND project, which we're part of, to really—

[257] **Jeff Cuthbert:** Ah, that's where we first met. Yes.

[258] **Mr Masters:** —try and encourage youngsters into science and engineering. So, in general, yes, within the energy sector, and the marine energy sector in particular, we probably do need more mechanical engineers. There's the heavy electrical side, there's quite a lot of—. You know, electrical engineering is difficult to recruit into and often that's into electronic and computational, rather than the heavy engineering you need in power stations and switchgear and that type of thing. So, there's a skills gap there.

[259] As a university, we're working on foundation degrees with the further education colleges; we have two or three of those under way already with Pembrokeshire, Gower College and Neath Port Talbot; so, those are successful and running. I think there are some funding questions over those schemes, but, hopefully, we'll resolve those, and we've got two or three others that are in development. So, I think we're playing our part in that role, both at foundation degree and degree level. We're hoping, as well—. We have the materials and manufacturing academy, which is an EngD programme at the highest level, so that's a four-year industrial PhD-type project, and we're working with businesses on that one. We'd like to get some marine energy projects under that academy programme, and I'm talking to some of the

Welsh developers about that. So, there are opportunities. I think we just need to keep saying to people that engineering and energy is a good place to go for a career, and our young people need to be excited and enthused about that.

[260] **Jeff Cuthbert:** If I may—.

[261] **William Graham:** Yes, please.

[262] **Jeff Cuthbert:** Earlier presentations from local government referred us to the regional learning partnerships that exist. I take it that you and Swansea University are involved in those partnerships. I trust that you are. Perhaps you could say whether the partnerships are aware—because the impression we got back is that there was a little bit of a gap in their knowledge—of the skill needs in this particular sector. So, to what degree are you engaging in that partnership? Also, to what degree do the private firms that seek to invest in the development of marine energy—to what extent are they collaborating with you so that bespoke courses can be arranged and they are telling you, as well, what they think the skill needs are?

[263] **Mr Masters:** Marine energy, as we've already discussed, is a sector without a revenue stream, at the moment. So, this is all very much a future business we're discussing here. If you put it into the context of energy, I think the skill needs there are very well known—we know about needing wind turbine service technicians; we know we need fitters, et cetera, in the power stations. So, if you said, 'Well, this is just a sub-sector of energy', I think the answer is quite easy, and then people say, 'Oh right. Well, we know what sort of skills the energy sector needs'. We've done some skills and training analysis at the highest level for MSc, professional development, and it's very much about awareness raising—understanding how the technology works and understanding the environmental and legislative problems so that you can then apply your own business into this sector.

[264] So, it's not necessarily a skills need, it's helping people to realise that they've got skills that they can bring to this, at some levels, and with lots of the supply chain, locally. Marine Energy Pembrokeshire, for example, have been doing that in the Pembrokeshire region to try and do that skills need and are matching up the skills. The energy island programme in Anglesey is also doing something similar. So, simply, they're the same skills that you might need to do any other energy project; it just happens to be wet.

[265] **Jeff Cuthbert:** Okay. So, are you saying it's mainly an issue of contextualising the existing skills to a different environment?

[266] **Dr Masters:** I think so, yes. Yes. But there's an obvious gap in STEM skills full stop in Wales, generally, and then the niche application to marine energy just makes that worse.

[267] **Jeff Cuthbert:** Okay. That's interesting. All right. Thank you.

[268] **William Graham:** Dr Masters, how about your specific comments on communication and awareness—engaging communities in development of these new industries?

[269] **Dr Masters:** Engaging communities—I think every time we talk to communities they're very positive, but most people you talk to have no idea. They don't know what it is and they don't understand. It takes quite a long time to work out the difference between a tidal-range project like a lagoon, and a tidal-stream project like Tidal Energy Ltd are building. I refer to underwater windmills and then people kind of get the idea a bit more. Then, understanding what a wave machine is—people really do scratch their heads. So, there's simply an awareness in society that this is an opportunity, that it exists. So, we do quite a lot of work—I go and talk to the professional engineering institutes occasionally, we go into schools, and we went to the Royal Society summer exhibition a couple of years ago and we talked about what we do in this sector. So, there's not really an awareness generally. I think the lagoon has really, locally, made a big difference in terms of awareness raising and then, from that, comes the question of, 'Well, how can I get involved?' Through the Low Carbon Research Institute, we worked with over 100 businesses at different levels. Some of those simply came to our conference, they found out about the different low carbon technologies, and some of those we had a much more meaningful relationship with. So, I think we need more of that type of activity in future.

[270] **William Graham:** So, have you any specific suggestions both for Welsh Government and the United Kingdom Government, even for the European union generally, to raise awareness of these vital new industries?

[271] **Dr Masters:** I think it's simply just getting on with it. [*Laughter.*] You know, let's build something. The Tidal Energy Ltd unit on the dockside in Pembrokeshire is definitely a talking point. It is a big bit of steel with a yellow propeller on top of it. If you see a picture of it, people say, 'Well,

what's that? What does it do? How does it work?' So, I think building these projects is the key message here.

[272] **William Graham:** So, nothing succeeds like success, then.

[273] **Dr Masters:** No.

[274] **William Graham:** Thank you. Oscar.

[275] **Mohammad Asghar:** Thank you very much, Chair, and thank you, Dr Masters. My question is on access to data in the marine economy. How important is this issue of consenting and licensing procedures for economic activities in the marine environment in south-west Wales?

[276] **Dr Masters:** There's a question about data, but then there's a second question about what you do with them, and I could hand you a hard drive full of sound recordings from Ramsey sound; it wouldn't be very useful. Our subsequent map of where the porpoise might be is probably more useful to you. So, there are raw data and then there are processed data, and then there's the actual intelligence you need when a scientist has analysed those data. So, at different levels, there are different things, and we need to manage expectations of a) what universities can deliver, but also what companies themselves are prepared to share. Data gathering is expensive and difficult, and people are very reluctant to share the data they've got offshore. That's, perhaps, something that needs to change slightly, and it can be—. We can put some sort of drivers and priorities around some of the grant funding that we receive that data are made available in appropriate formats and in an appropriate way. That would be very helpful, I think.

[277] The other issue is that most of the data are actually—you need somebody to interpret them. So, in a sense, we need the capacity. So, this is coming back to this applied research capacity. We need the capacity in the science community to work alongside business to make those data available to them in an appropriate way—appropriately processed and appropriate information on the back of it. Does that answer the question?

[278] **Mohammad Asghar:** Also, what actions can be taken to encourage the sharing of non-commercially sensitive marine data in Wales?

11:45

[279] **Dr Masters:** Okay, so if somebody has paid £100,000 for a dataset and you ask to share it with their competitors, I think there's got to be some sort of commercial arrangement to do that. As an example of how difficult it is, we took two research vessels to Ramsey Sound. I arrived on the third day, and, talking to the skipper, he says, 'Well, I don't know when high tide is. It's not the time it says on the chart'. These are very aggressive, very nasty environments. It says 'Do not navigate through this area' on the chart for a reason, and that's exactly where we want to go, and we want to try and do difficult engineering in the most aggressive environment. So, even putting a sensor down, you don't know if you're going to get it back again, and that's a £40,000 piece of equipment. So, there are challenges.

[280] **Mohammad Asghar:** The thing is, can you get some EU funding for that sort of information?

[281] **Dr Masters:** Of course, yes, and I think the SEACAMS 2 project is exactly trying to gain some of that information.

[282] **Mohammad Asghar:** Thank you.

[283] **Joyce Watson:** If we're looking at data—and I presume that's sound you were talking about—how reliable are they for the long term? How do you make the data in terms of sea energy reliable in the long term when we're talking about changes within the climate that then equally effect changes within the sea itself?

[284] **Dr Masters:** So, climate change will make differences. It will increase storm events' likelihood, and it will also change tidal heights. The timescales for which those changes are going to happen are probably longer than the timescales that the marine energy projects that we're talking about are working to. So, in the shorter term, it's not necessarily an issue. Again, if we are going down a deploy-and-monitor route, additional data would be collected once devices are in the water. So, you continue to do repeat surveys of whatever aspect you're interested in, whether that's currents or sediment transport or position of sandbanks or acoustic surveys for marine mammals or some other element. You don't just go once; you need several pieces of data over quite a long period of time. There's some interesting work about how much data you need to try and get natural variation as opposed to effects of marine energy installations. So, the Strangford Lough experience—which is where there's a 1.2 MW tidal device, in Northern Ireland; it's really worth going to look at—they did three years of seal monitoring, and, over

those three years, they couldn't get a statistically robust pattern in order that, once the device went in, they could see any changes. So, it's quite difficult, actually, to try and get information out of data when you've got the natural variability. You then try and make a licensing decision based on data that has uncertainty in it, and it's very difficult. So, it's back to, 'Let's deploy and monitor and look for changes' rather than anything else.

[285] **Joyce Watson:** Okay.

[286] **William Graham:** Rhun.

[287] **Rhun ap Iorwerth:** A couple of questions arising from that. Firstly, I'm glad you mentioned that SEACAMS 2 wants to do precisely what we were talking about there, which is to map the Welsh marine environment in a way, as I understand it, that would set Wales apart from other potential marine environments in Europe in that it would be a first of its kind in having a full map, if you like, of data.

[288] **Dr Masters:** Can I answer that one to start with?

[289] **Rhun ap Iorwerth:** Yes, why not?

[290] **Dr Masters:** I think there are data for data's sake and there are data to inform consenting. So, I think we need to ensure that the data that are collected are relevant for the consenting process and are exactly what the licensing bodies need. Mapping the whole of the Welsh coastline is not as important as having repeat mapping of the two demo zones, for example, so we need to concentrate that on the areas where we need to make licensing decisions.

[291] **Rhun ap Iorwerth:** The purpose of what they want to do, then, is to make it easier for people thinking about making commercial investments in knowing they don't have to make the investment in the data—there'll be additional data they'll need, but there'll be a fairly substantial basic dataset available to them. SEACAMS 2 is having to put up a real fight to get the finance that it needs. How crucial is it that this is seen as a key element of the commercialisation of our marine environment, that we do everything possible through data collection, for example, to make it easier for people to choose Wales over, perhaps, other places?

[292] **Dr Masters:** I think it comes back to this licensing and consenting

barrier we talked about. We need to be able to consent projects easily, otherwise we're just talking about this industry. So, we need to do that, and you can consent based on good information. So, yes.

[293] **Rhun ap Iorwerth:** Secondly, on the barriers, you've talked about the need for cabling in Pembrokeshire, and exactly the same is true for the demonstration zone off the west coast of Anglesey. It's great that the demonstration zone is there; how crucial is it that Government then realises that it needs to put real effort and finance to turning what is still just a potential resource into something that's usable, by ensuring that the help is given to find finance or that direct finance is given to make sure that that electricity can be connected to the grid? Otherwise, it's useless.

[294] **Dr Masters:** Of course, the difficulties in north Wales are that it's a tidal site, which is a difficult place to put cables in. There are some technical issues, which are manageable, but they cost money to do. So, it's not going to be a cheap process. I'm just encouraged by the Marine Energy Pembrokeshire working group, which happens every quarter in Cardiff. People fly in from around the world to be at that meeting, because they know that Wales is going to have cables in the water. So, there's a real incentive. There aren't any other projects. Okay, there are some off Portugal—Portugal have a cable in the water; there's Wave Hub, just to the south of us, which is almost full. I think that infrastructure is one of the key things that we need. We've already talked about strike price; so, confidence about strike price, cables in the water, and confidence about planning, and we can go. It's an industry waiting to start, really.

[295] **Rhun ap Iorwerth:** Thank you.

[296] **William Graham:** One item that we discussed with Rhodri Glyn Thomas in terms of his proposal there, and it's something that's raised, I think, with Members individually, but particularly more recently—. Wales is full of failed energy projects, really, isn't it, of one kind or another? What considerations would you have given to restitution at the end of a time when these projects probably have expired?

[297] **Dr Masters:** Okay, so most wave devices, particularly those deployed offshore, will be simply on a mooring, so restitution's relatively straightforward for those. Tidal devices have a range of foundation systems, and it's likely that the restitution process will be the same as for offshore wind—cutting off the tower at seabed level, if it's based on a tower. I think

also, because these are artificial reef effects, they create an ecosystem over a period of time. So, there will be marine growth on these structures, and also with the fact that there is going to be no fishing activity around the seabed close to them, you will actually, probably, build a reasonably good benthic community around the devices. So, actually, restitution is probably not an issue, particularly, around those types of technology. For tidal stream, they're in very fast-flowing water, where there's very little sediment. It's mostly a hard-rock seabed, and so it's going to be very easy to deal with the issues on a hard-rock-type seabed. For the lagoon technologies, well, we're talking about a 120-year life on those. I think, after a 120-year life, we'll want to patch it up and keep going. Nobody talks about decommissioning hydroelectric plants that are now 100 years old. So, these are long-term electricity-generating assets for a low-carbon future.

[298] **William Graham:** Thank you very much, Dr Masters, for your most interesting answers to our questions today and for your attendance at our committee. We're much obliged to you. Thank you.

[299] So, Dr Masters was all that stood between us and lunch. At 12:00 we have lunch, and I invite members of the public to join us for a brief lunch outside.

*Gohiriwyd y cyfarfod rhwng 11:54 a 12:30.
The meeting adjourned between 11:54 and 12:30.*

Ymchwiliad i Botensial yr Economi Forol yng Nghymru Inquiry into the Potential of the Maritime Economy in Wales

[300] **William Graham:** Good afternoon, and welcome to our continuing interest in the potential of the maritime economy of Wales. We're grateful to our guests this afternoon. Could you please give your names and titles for the record to begin with?

[301] **Mr Jones:** David Jones. I'm the project director at Marine Energy Pembrokeshire.

[302] **Mr Jenkins:** Prynawn da. Ioan **Mr Jenkins:** Good afternoon. Ioan Jenkins, cyfarwyddwr datblygu, Tidal Jenkins, development director, Tidal Lagoon Power. Lagoon Power.

[303] **Mr Hillier:** Prynawn da. Graham Hillier, director for development

services at Tidal Lagoon Power.

[304] **William Graham:** Thank you very much. Just to remind you, there's no need to touch the microphones; they'll come on automatically. Okay? We're going to start, then, with our first question from Eluned Parrott.

[305] **Eluned Parrott:** Thank you. Clearly, there's a lot of interest and excitement around the potential for marine energy generation at the moment. I wonder if you can, for each of the two projects, give me an idea of what you estimate the economic value to be for Wales in terms of jobs and wealth generated, and how you're coming to those estimates.

[306] **Mr Jenkins:** Do you want to pick up on that first, then I'll—

[307] **Mr Jones:** Yes. I think, probably, from a wave and tidal stream perspective—and I'll let Iwan and Graham pick up on tidal lagoon—I'd probably lean on the Regeneris Consulting report that Welsh Government commissioned themselves. There were some estimates in there, and I think from an industry perspective it has been backed up as a good report and a good estimate. I'll read those off here because I've got them; 300 MW in marine energy could basically mean £300 million of GVA for Wales and 8,500 person years of employment during development and installation. Then, from an operational phase, £7.8 million in GVA and 180 jobs in the long term. I think, as well, we did a report at the end of 2014 just to—. We felt, perhaps, as an industry that there wasn't an appreciation of the positive impact on jobs and growth that the sector was already having in Wales, because if you count devices in the water, we haven't got any, but the sector has already contributed over £34.5 million to Wales and is already having a positive impact on jobs and growth. And we'd expect that to increase significantly over the next few years.

[308] **Mr Jenkins:** So, I suppose if you consider our ambition, our ambition is obviously that the Swansea bay tidal lagoon will be the first of its kind in the world. But that lagoon is effectively a trigger for, certainly, another five within the UK that we're looking at, with international opportunities. Currently we have staff in France and we have interest from India, South Korea and China. We have an international director supporting those requests from those countries. But, back in 2013 relating to Swansea bay tidal lagoon, we commissioned a study with Cardiff Business School and Professor Max Munday, who was leading that. In terms of construction, he said that, at peak construction, we'd be employing in the region of 1,850

people. To operate and maintain the lagoon, there would be approximately 60 permanent jobs. And to support the tens of thousands of people from the tourist element coming to the lagoon, then Professor Max Munday considered that 90 people would be required to support those people. But if we were to look at— So, Max didn't look at the supply chain as a whole—we only asked him to look at the construction of the lagoon. What he also said in that report was to expect between 70,000 and 100,000 visitors a year, spending between £1.7 million and £2.1 million.

[309] In addition to those six lagoons, we then commissioned a study in July 2014 by the Centre for Economics and Business Research, and what they said was that, during peak construction, we'd require about 71,000 people, and recognising the significant export potential, because fundamentally what our business is looking to do is to develop a new hydro business within the UK, centred here within Wales and probably within the Swansea bay city region.

[310] But, again, that report only considered those direct jobs for construction—those 71,000 jobs. It didn't look into those jobs that were in the supply chain. Economists would throw different numbers at this, but I think you can comfortably say that where there's one direct job, there are five indirect jobs. So, the work that we've been doing, with the support of Welsh Government, is to do more accurate labour forecasting in terms of not only what is required for the Swansea bay tidal lagoon, but then for those other five lagoons that we're looking to build within the UK, and, sitting below that and within that, a skills analysis of those skills that we'll require to enable us to fill those jobs and to deliver on our ambition, which is to develop this new industry within the UK.

[311] **Eluned Parrott:** Clearly, the potential is absolutely extraordinary in terms of the potential for wealth generation, within Wales and elsewhere, but how ready are we to take advantage of that? How mature is the industry in and of itself in Wales by comparison to other parts of the world?

[312] **Mr Jenkins:** Do you want to pick that up first?

[313] **Mr Jones:** Yes. Again, I'll probably relate my answers to wave and tidal stream. I mentioned the £34 million—and-a-bit previously. For tidal stream, already, Welsh supply chain was involved in about 50 per cent of that, and for wave, which has significantly less input, it was at 60 per cent. So, I think there is work to do on the supply chain. I know Tidal Lagoon have done a lot of work around that area, but I think that, for wave and tidal stream, there's

quite a lot of skills and gap analysis and things that we could be doing in that area.

[314] **Mr Jenkins:** I suppose our journey started, now, probably two and a half years ago, and the start of that journey was to understand what the potential tier 1 contractors would be looking for in terms of capacity and capability. So, our approach to that, I think, was perhaps a little different from what's been done in the past. We wanted that to be industry led, so we helped put together the independent tidal lagoon advisory group, which is chaired by Roger Evans MBE, who is MD of Schaeffler UK. On that group, we have a number of predominantly south Wales industrialists. Using their expertise and knowledge, we were very quickly able to understand what the Welsh supply chain could do and couldn't do, and it's regrettable in many ways that we've lost many of the capabilities that, probably 30 years ago, we had, and those relating to heavy industry. So, we've lost the casting, we've lost the forging, we've lost the big machining, we've lost the capability to manufacture high voltage switchgear and transformers, but, fortunately, within the UK context, we were able to find companies that are still able to deliver that. And remember, our ambition is to deliver this new industry for the UK. So, you will still have many, many companies—Sheffield Forgemasters, Davy Markham. You have companies in the north-east and Teesside that are able to help us to deliver this ambition.

[315] So, the foundation is there, but the challenge for us is to increase that capability. Within Wales, we still have some companies that can do heavy fabricating, welding and painting, and they're spread across south Wales, predominantly within Carmarthenshire and Pembrokeshire. It was really unfortunate, what recently happened at Mabey Bridge in Chepstow. We'd been working closely with Mabey Bridge, as had other tier 1s.

[316] So, our journey has been fairly extensive, but I think the first thing that we needed to do after putting the industry advisory group together—. What they help us to do is they are a critical friend. So, they not only help us deliver our ambition of building this new industry within Wales, but they also challenge us in terms of that promise that we made, to spend 50 per cent of this within Wales—at least, for Swansea bay tidal lagoon. But where they also helped us was with those tier 1 contractors who are new to the UK. So, we'll use Andritz Hydro, for example. We were able to use the expertise that that tidal lagoon industry advisory group had to speak to those tier 1s, to showcase what Welsh business can do, what UK business can do, and to convince them that Wales and UK really can do this—to effectively have

confidence in the Welsh and the UK supply chain and move from those suppliers that they currently have in mainland Europe and Asia. And, I suppose, one of the things that we have to have is that we have to excite Welsh and UK businesses to be a part of this, because, without that excitement and that ambition to be a part of the new industry, it's not going to happen.

[317] So, back in August, we held three awareness sessions—one at the Liberty, one at the Scarlets, and one in Pembrokeshire—and they were a sell-out, probably to the point where we had to restrict it to one person per company. Through that, we had about 500 companies who had been interested in being a part of this potential supply chain. So, we have the excitement, we have the ambition of those companies to be a part of that supply chain, and with the expertise of the tidal lagoon industry advisory group, then we'll feel well placed to enable us to build that capability and capacity.

[318] **Eluned Parrott:** Just very briefly, to you and the tidal lagoon, do you feel confident that you will hit that 50 per cent spend within Wales? To Pembrokeshire, might I ask: do you have a similar kind of target for the spend that you're likely to have in Wales? We recognise how fortunate we are to have two companies that are so firmly embedded, but the question is: how long-lasting will that be and will those benefits be felt locally?

[319] **Mr Jones:** As Marine Energy Pembrokeshire, we're not a developer ourselves, but we have a lot of developers in our working group, if you like, and the interest in Wales has grown so significantly that, in our working group meetings in Cardiff, we've had technology developers from Australia, America, Sweden, Scotland and Ireland. So, there's a real interest now, driven by structural funding, which is a real advantage. I can only gauge on what technology developers say, and they say that they would look for a minimum of 50 per cent Welsh supply chain through their project plans. Whether we, as a nation, can actually hold them to that remains to be seen. But they are the ambitions, I think, and to get into the structural funding programme, then, you know, they have to have a real strong emphasis on jobs and growth for Wales. I think that's really, really important, because I guess the big prize here as well for wave and tidal stream is—for those exportable knowledge and skills, if we can learn with the industry in Wales—to export them worldwide. I think that's one of the real prizes.

[320] **Mr Jenkins:** In terms of us, I make it my business to know who the tier

1 contractors are speaking to. I have the tier 1 contractors on one shoulder and I have the supply chain on the other shoulder. I'm fairly confident that all those in tier 1 are doing what they've promised us that they will do, which is to consider those Welsh companies and UK companies. So, that's happening. Am I confident that we're going to hit the 50 per cent? Yes, I am confident. But the biggest challenge will come when we will move on to full scale lagoons. This one in Swansea is £1.1 billion; future lagoons will be 10 times bigger. We're talking £4 billion, £5 billion or £6 billion. So, the challenge we have then is to increase the capacity and the capability of that supply chain, look to bring new entrants into that marketplace and support them into that marketplace. But, ultimately, we need Welsh and UK businesses to grow to enable us to hit that 50 per cent and more as we progress. Then, when we start exporting these component parts and that knowledge overseas, I think it's at that time we can safely pat ourselves on the back and say, 'Okay, we achieved that'.

[321] **Jeff Cuthbert:** Chair, with your permission, this is the right place for me to bring in my main question here. You've talked about 71,000 involved in the construction and then ongoing jobs within the energy-generation industry, and, indeed, even exporting that knowledge. So, the question is about skills. Do you feel confident that, at all relevant levels, there is sufficient expertise and knowledge out there? In terms of identifying current skills and skills for the foreseeable future, what is your relationship like with higher education, other learning establishments and further education? Is there a good collaboration in terms of joint working? I'll pause at that point, if I may.

[322] **Mr Jenkins:** Okay. Do you want to say anything on that one first?

[323] **Mr Jones:** I'll pick up after you.

[324] **Mr Jenkins:** Okay. So, our ambition is that Wales becomes a global leader in tidal lagoon technology, manufacture and construction. When I stated earlier the labour forecasting we're doing, sitting within that are those skills requirements to enable us to fill those positions, not only for Swansea bay, but for those lagoons thereafter, and internationally—not only in terms of construction, but in terms of the supply chains. So, that's manufacturing, assembly and hospitality. The relationships with HE, FE and training providers in general is very, very positive. Sitting just below that tidal lagoon industry advisory group, we have a dedicated skills and training forum. Again, that's chaired by Roger Evans, and on that, we have representatives

from HE and FE. But there's unquestionably a challenge for us all, given the scale of this opportunity. Then, we have to work together to ensure that we maximise this opportunity for Wales, moving forward. We already have an education officer working throughout Swansea bay, working in schools and FE and HE. When we understand what the skills and training requirements are, then we can move these young people into that skills and training arena. Then, coming out of that, we can provide them with sustainable employment for 10, 15, 20 years or more.

12:45

[325] **Jeff Cuthbert:** If I may—. I appreciate others may—. On that point, I think that's very good. I'm very, very keen to promote the notion of engineering as a career through the STEM subjects amongst those who are still in school, and I applaud you for that. But, at this moment, are you comfortable that there isn't a significant skills gap, in terms of what you need, or do you feel that there are matters yet to be addressed in order for this to fully roll out?

[326] **Mr Jenkins:** I'll be able to answer that question better probably Christmas time, when we've done that analysis in terms of labour forecasting, and those roles relating to those, and therefore the skills and training.

[327] **Jeff Cuthbert:** We can all go your house for Christmas dinner then, can we?

[328] **Mr Jenkins:** By all means. My wife's a great cook. [*Laughter.*] But what we're proactively doing is working within those schools, and FE and HE. At the moment, we're laying the foundations so that when we fully understand what we need, we can deliver. But my view is quite clear: given the opportunity, given the number of people we need, given that some of this is new to the UK—we just don't do some of this—then, what I'd be confident of telling you is that, in terms of construction, manufacturing and assembly, we need lots more people with lots more skills. Do I think that the appetite is there from FE and HE? Absolutely, I do. But it's going to take an all-Wales approach to enable us to maximise this opportunity.

[329] **Jeff Cuthbert:** Okay. Thank you.

[330] **Mr Jones:** I guess, from a wave and tidal stream perspective, if you

speak to developers, there are a lot of transferrable skills in Wales at the moment at that level that could deliver now. Our links to HE through the Low Carbon Research Institute and SEACAMS and some of the Welsh research projects—there are really good links there. Where we link in with further education would be locally with Pembrokeshire College, for example. We've helped them recently with what would be needed in the sector. You mentioned STEM skills, and tomorrow, actually, we've got 140 local school kids coming out with us as part of the Welsh baccalaureate. So, we're going to introduce them to Tidal Energy Ltd and some of the marine mammal observers and some of the jobs that are required in there. So, yes, we're starting to make those links now. But, as loan said, I think there's more work to be done.

[331] **William Graham:** Joyce, would you like to go on to your main questions?

[332] **Joyce Watson:** Yes. I'm particularly interested in construction. I'm a founding member and chair of the all-party group on construction. The question I have to you is that when you're going out to schools, you don't miss the 50 per cent of the population that are currently not employed in construction—and that is women, mostly. Are you advising people who go out to schools on how to break down the barriers that currently exist, I believe, mostly through the information or misinformation about the construction industry and what it really means, and the job opportunities, so that this is fed into the female population that is currently missing, so that they do take full advantage of what is a really exciting prospect at a really exciting time for them?

[333] **Mr Jenkins:** I would like to think that, yes, we very much support and work with STEM. The education resource that we take out to schools at secondary level is used within the Welsh baccalaureate. We have several female engineers in our office, and we introduce those to the young people within not only secondary schools but primary schools as well. It was unfortunate that—. Quite recently, we did appoint a new education officer, who was an engineer by trade, but, unfortunately, she chose a different opportunity. But, yes, it's very much one of our focuses, not only in terms of those young people in schools—primary and secondary schools—to excite girls and women to become a part of this industry. We are now looking to extend that to include NEETs. We have some workshops on, I believe, the twenty-eighth of this month, where we're going to try and start engaging with those who are not in education or training. The recipe is the same: it's

about inspiring them, it's about exciting them, and it's about working with them to enable them to get the right skills so that they can get on the right sustainable career path for the future.

[334] **Joyce Watson:** Okay. That's all good news and I look forward to inviting you to our next all-party group meeting very soon. I'm going to go back to my question. Have you finished, Jeff?

[335] **Jeff Cuthbert:** Yes.

[336] **Joyce Watson:** Yes. I want, really, to understand your views on the strategic approach to marine energy and the maritime economy in Wales, and whether you feel that the Welsh Government's approach is what you would expect, and how it compares to, maybe, Ireland, the UK or anybody else that you meet along the way.

[337] **Mr Jones:** I think I mentioned in my written response that we've taken an evidence-based approach thus far, looking at the resource first in particular, and then looking at the Halcrow study, which looked at the infrastructure, and the Regeneris report that I mentioned, looking at jobs and growth. Because we have tidal lagoons proposed, we have €100 million of structural funding, we've got demonstration zones and we've got four seabed agreements in place, I think our policy as far as marine energy goes is a bit light at the moment and I think it could be improved. I mentioned that to the Minister for Economy, Science and Transport at an 'Energy Wales' delivery group, and she put together an industry-led task and finish group to help support that, so we welcome that approach. So, it's an evidence-based approach thus far, but I just think, with the potential now and with the interest in Wales, now is the time to tighten up and come up with a 'We're here now, this is where we'd like to be, and this is how we're going to get there'. I think that approach is a little bit light in our policy at the moment.

[338] **Mr Hillier:** Could I just help to answer Joyce's questions from a tidal lagoon perspective, because there are a couple of points I would like to add to David's? I think it's clear that lots of recent activity is happening in Wales on the strategic approach, which is great news. The preparation of a national marine plan is part and parcel of that. But I do think that there's a need not just to keep up the momentum on that, but to also focus on how we can integrate the various different policy areas that need to be covered through such an integrated policy.

[339] You mentioned other parts of the UK. I am aware of a blue-growth plan in Ireland. Scotland have developed a national marine plan, fairly recently launched. England is pursuing a slightly different, more regional-based model. So, I think that, with the work that Welsh Government has initiated, there's every opportunity, really, for Wales to take a strong lead on this and to develop best practice across this front, but it really does need that momentum to be rejuvenated, I would suggest.

[340] **Joyce Watson:** Thank you.

[341] **Mr Jenkins:** Perhaps I can pick up on what Graham and David have just said. It's encouraging that, recently, Welsh Government has put together the marine energy task and finish group, and that group met for the second time a couple of weeks ago, and, similarly, the marine energy programme board. So, I think that Welsh Government is now placing those foundations in place to take full advantage of what, I think, we're all looking to deliver for Wales. So, I think, in terms of strategy, that's a good move.

[342] **William Graham:** Thank you. Rhun.

<p>[343] Rhun ap Iorwerth: Prynawn da i chi, foneddigion. Yn symud ymlaen o'r fan yna, tybed a allaf i ofyn i chi grynhoi beth rydych chi'n meddwl ydy'r prif rwystrau—y prif <i>barriers</i>—yn erbyn datblygu ynni môr yng Nghymru, o ran agwedd, polisi, cyllid a rheoleiddio ar lefel Cymru a lefel Brydeinig. Mae'n bosib y byddwch chi isio cynnwys diffyg strategaeth bendant yn hynny, ond gorwch o allan os gallwch chi.</p>	<p>Rhun ap Iorwerth: Good afternoon, gentlemen. Moving on from there, I wonder whether I could ask you to summarise what you feel the main barriers are to the development of marine energy in Wales, in terms of attitude, policy, finance and regulation at a Wales level and at a British level. You may want to include the lack of a definitive strategy in that, but please open it out if you can.</p>
--	--

[344] **Mr Jones:** Yes. I think we've probably covered the lack of policy and the steps and the move to overcome that and take an industry lead, which we really, really welcome. As for barriers, I can probably pick up on a couple of them. Probably consenting and licensing is one of those, and we have a consenting sub-group, which the Welsh Government are involved with, and so are Natural Resources Wales—so, the marine licensing team and the advisory arm—and we sit around at a meeting and try and go through some of the issues and barriers. Again, that's really positive. Also, probably quite

unique from a UK perspective is to have those open and frank discussions with the advisory and marine licensing team. I think that one of the things that the Welsh Government could do—and it's been done in Scotland—is to allow NRW to take a bit more risk with the consenting process. Scotland have done that, and they're firmly behind the sector. They've put in a pretty strong deploy, monitor and survey policy, which allows Marine Scotland to take a bit more of a risk-based approach with their consenting process. So, I think that's something that we could look at, whether the Environment Bill or something along those lines is an approach to take that forward.

[345] As for supply chain skills, I think we've talked about that. I think we could probably do more with our links into the EU and Ocean Energy Europe. As a nation, I know some marine energy members, as far as developers go, are members of that group already, but I think that's something that we could strengthen as a Government and a nation.

[346] We've talked about policy. So, I think there are a few barriers to overcome. I think there's work that we could do in collaboration to try and overcome those barriers. They're not unique to Wales; they're unique, I think, across the sector in the UK and some of the other countries as well. I don't know if anyone's got anything to add to that.

[347] **Mr Hillier:** Yes, I think I can help answer Rhun's question. I think the strategic policy approach that we touched on just earlier is key to this. Essentially, with tidal lagoons and tidal range, it would be helpful if that was covered by some sort of policy framework. I think that integrating of the strategies that we referred to earlier would help with that, particularly when you think about energy and climate change having synergistic benefits with one another in the marine context. I think, in terms of the consenting, I agree with everything that David said about that. It is a fairly complex consenting regime, and that adds some cost, and there's an opportunity, I think, to simplify that and to seek improvements, to reduce some of the uncertainty around the time lag, if nothing else, on things like marine licensing, and providing the regulators with the right level of resource to be able to respond to what will be a growing need for their response on that.

[348] I think, lastly, around the funding, you mentioned access to some of the EU funds and helping to secure it. That, too, can be a bit of a minefield unless people are well geared up and have teams of people who aren't familiar with that process. So, perhaps some support around accessing EU funds would be good.

[349] **Rhun ap Iorwerth:** What about the issue of, on the attitude front as much as policy front, some recent decisions by UK Government and difficulties that are being caused by that?

[350] **Mr Hillier:** Yes, I think that we have to remember, particularly from our experience, that we're looking at a first of a kind, and it's being developed in advance perhaps of some of these policy frameworks. In an ideal world they would be there and it would be an easier process. So, we're forging away a new process in tandem with some of those policies being developed, but, clearly, we're very keen that some of those uncertainties are resolved as quickly as possible, because what we see, really, here is that with the right policy framework and some of the decisions being made on the first of the lagoons in Swansea, there's a whole new industry waiting. It's ready to go, and it would be a real shame if Wales were to miss out on what is a golden opportunity in Wales to capitalise on that industry.

[351] **Mr Jones:** Can I just add one more point to that? I think, as a country, Wales could probably take advantage of perhaps some of the mixed messages that are coming from Westminster and just state clearly that Wales is open for business on that front, and that we have all of this structural funding in place to drive the sector forward. So, some strong messages at ministerial level in some of the UK conferences and things like that would be really, really useful, I think.

13:00

[352] **Rhun ap Iorwerth:** You make that point in your written submission to us as well. It has come to the committee's attention that, perhaps, Welsh Government has missed an opportunity to have a Minister speaking at the ocean energy conference in Dublin next week. Is that a good example of an opportunity that you would like to see Welsh Government grasping with both hands in order to show the world, and Governments at ministerial level, that Wales wants to be a player?

[353] **Mr Jones:** Yes, I think that probably is an opportunity missed. I think we've probably spent the last six years going to UK conferences—marine energy, specifically—and quite often it feels a little bit like 'the Scotland show', because Fergus Ewing is there every single time giving some clear, strong messages about how Scotland supports that. I think it feels really positive. In the industry, there have been some bumps along the road, but it

feels really positive in Wales generally because of the momentum in tidal lagoons, and I mentioned the structural funding and the demonstration zones and all of this interest. So, it's quite a positive story we've got to tell at the moment, and I think, yes, it should be told at EU, UK and worldwide levels.

[354] **Rhun ap Iorwerth:** You've mentioned how Government has actually responded to some of your suggestions. The task and finish group came about because of pressure from the industry itself. In general, where you can highlight barriers, are you seeing enough prioritisation by Welsh Government in trying to overcome those?

[355] **Mr Jones:** It feels like there's definitely been a ramp up in momentum probably within the last year. So, yes, I do feel we're moving forward, but you speak to industry and, of course, industry will say, 'We'd like to do more.' I think that's quite common.

[356] **Mr Jenkins:** In terms of the industry, as I said earlier, with the formation of the task and finish group, with the marine programme board, I'm having more confidence that Welsh Government is more focused on delivering what is a significant opportunity for Wales. I don't know about you, Graham, in terms of the consenting.

[357] **Mr Hillier:** Yes, definitely. The messages are starting to come together now, going back to that earlier point about integration as well, because there is no single technical solution to some of these things. But it does feel as though it's early days in terms of measuring how much progress we're now making in Wales.

[358] **Rhun ap Iorwerth:** So, we're getting to a position where we can actually think about seeing a Government putting a strategy together because the attitude's right?

[359] **Mr Jenkins:** Yes.

[360] **Mr Hillier:** Yes.

[361] **Rhun ap Iorwerth:** Okay. Thank you.

[362] **Mr Jenkins:** I think it's great that we're moving towards a strategy, but, obviously, we have to have the full weight of Wales plc to deliver that

strategy. We've got a great opportunity that we need to maximise.

[363] **Joyce Watson:** I want to explore—and you have, I know, briefly mentioned the challenges about accessing EU funding—whether you have any views on the existing support that is there and how we might better assist the small and medium-sized enterprises within Wales to access more of the European funding, especially if we are going to have this trickle-down effect of ensuring that everybody has an equal opportunity to gain from this.

[364] **Mr Jenkins:** Do you want to pick that up first?

[365] **Mr Jones:** Yes, I'll pick that up first. I think, first of all, we're incredibly lucky as we've had just over €100 million prioritised for marine energy, and that's important and that's the most, I believe, that all the member states have in the EU at the moment, which is driving quite a lot of interest our way. I think if you think about some of the larger—. I think the European Commission made an announcement yesterday that €16 billion was going to be put into Horizon 2020 for the next two years of research and development. I think those huge, large programmes—after talking to SMEs and developers, they feel that there probably could be a little bit more support there, I think, in overcoming some of the larger barriers to try and access some of that large funding, because you need pretty big teams to do that, and specialised teams as well. I think we could probably collaborate perhaps more with universities and put some more industry collaboration together to move forward with trying to access some of that large funding.

[366] **Joyce Watson:** So, have you made any of those representations or those thoughts known to Government when you've sat round the table with them in your various roles?

[367] **Mr Jones:** Yes, we have, and there are Horizon 2020 events and there is a Horizon 2020 support team as well. So, again, I think it's improving. I just think that, perhaps, some more targeting that will enable smaller SMEs to get together and look at these larger funding programmes would be of benefit.

[368] **Joyce Watson:** You talked about the importance of building teams and, of course, the one thing that would cement that all together is collaboration. So, there are opportunities, obviously, for local government, for Welsh universities and for business. So, how do you work collaboratively with other parts of society that will, hopefully, be bringing all this to the foreground?

[369] **Mr Jones:** I guess, from Marine Energy Pembrokeshire's point of view, collaboration is through everything that we do. As we've developed the network over the last few years, it's something that we don't realise until other developers come in and say that it's really refreshing to see that collaborative approach, where you can come to a meeting and get to speak to the Welsh European Funding Office, to Welsh Government, to NRW, to the Crown Estate and to lots of developers and share those kinds of interests. As far as the wider society, what were you exactly—?

[370] **Joyce Watson:** Well, I just meant anybody who isn't around the table who might feel that they ought to be, whether that's environmental groups or whether it's anybody in the third sector—anybody who would have a real interest and a possible gain from being involved.

[371] **Mr Jones:** I think anyone that approaches Marine Energy Pembrokeshire will assist in some kind of way. There's almost a balance to how big you let your working group become before you can actually deliver things as well, so there is that sort of balance, but we've recently been helping the Fishguard community approach on some advice where they were starting to think about community tidal turbines. So, yes, we get involved in that kind of advice giving, if you like, at that level.

[372] **Mr Jenkins:** In the context of our work, we have a dedicated engagement team and have had, based in Swansea, for probably three and a half years. The sole purpose of that engagement team is to engage with the community. The community could be either the sporting community, environmental groups, third sector groups or community organisations, whether they are groups or they are individuals. In all truth, I think that's probably set the foundation for the success that we've seen for that support in Swansea bay. Let's not forget that, during our formal public consultation, we sent out 197,000 newsletters and we had 19 events across the bay where over 1,000 people attended. Lots of questions were asked within that questionnaire, but one specifically that will stick in my mind for a long time, and that question related to, 'Now that you know more about the proposals for Swansea bay and associated facilities, are you in favour: yes, no or undecided?' And 86 per cent of people were in support at that time of us building the tidal lagoon here in Swansea bay. When you look at the ambition and when you look at what we're looking to bring to the area, irrespective of the economic opportunities—because, after all, this is a power station that we're looking to build adjacent to a city—I think people are hugely excited

about what we're looking to offer. They're looking forward to being able to walk on it, swim in it, cycle a bike around it and, indeed, fish off it. But I don't think people quite realise what opportunity, thereafter, that this first tidal lagoon in Swansea will bring. It really does—

[373] **William Graham:** I think there's an opportunity for you, Oscar, to ask your question now, please.

[374] **Mohammad Asghar:** Thank you, Chair. I think part of my question has been answered, Chair, but it is in relation to communication between the industry and the public. Is sufficient action and priority being given to this issue in Wales? What is the panel's view on the level of awareness of the opportunity that ocean energy offers, and what can local government, the Welsh Government or the National Assembly for Wales do for it?

[375] **Mr Jones:** Again, I think that's something that's improved significantly over the last few years—getting the communication and the messages out. I guess, from a community perspective, we are the third sector, if you like; we're a not-for-profit community interest company. So, yes, we often run events, as I mentioned, and from the tidal lagoon's perspective, there's real support, and it's similar for the wave and tidal sector, and tidal stream. Whenever you go out and have a community engagement day, there's always full support for the proposals. Again, I think there's probably, as far as communication goes, always more that we could do to get messages out, and clear, coherent messages. Again, I think it's something that, when we started going to talk about Marine Energy Pembrokeshire six years ago, we had to take a step back and start telling people about Wales, and I think that's improved greatly over the last few years.

[376] **Mohammad Asghar:** How do you address the potential concern around negative impacts on the marine and the wider natural environment in south-west Wales?

[377] **Mr Jones:** From a wave and tidal stream perspective, if you speak to local communities it feels like they don't—. At the moment, for the plans, for the tidal stream, the DeltaStream project in Ramsey, then the lack of visual impact and those kinds of things, there's generally support for those. As far as negative environmental impacts go, if you look at—we can't say in Wales at the moment, because we haven't got a device in the water; but if you look at Strangford Lough and places like that, there is proven to be minimal environmental impact, if that answers the question.

[378] **Mr Hillier:** I can add to that to help Mohammad's question. I think, again, looking at it from a tidal lagoon perspective, or a tidal range perspective, there's a phenomenal amount of research and investigation work that's already being carried out. I think the industry as a whole needs to maintain that stance to make sure that all the decisions are well informed by good science and evidence, working with universities—particularly in Wales as we have a good university base. I think the other thing that I would say is that loan mentioned the support for what is essentially a power station in Swansea bay, but if you look at our lagoon programme generally, and Tidal Lagoon Power's aspirations for that, it's more than just generating energy—it's a tidal lagoon, tidal energy generation company with an environmental conscience, and it wants to do the right thing. It doesn't want to be associated with negative impacts. So, one of the projects that has been initiated is called an ecosystems enhancement programme, which is looking to find ways in which we can invest to see overall net positives in ecosystems in the environment, on the back of the investment and growth opportunities that the lagoons bring.

[379] **William Graham:** A final question from me: do you think that ports have the correct understanding, connectivity and skill to service this new industry?

[380] **Mr Jones:** If I can speak from, probably, Milford Haven's perspective, because I guess that's the region that we're focused on, then yes, they've got a crucial role to play, and I think they absolutely realise that. We've been talking with them as well and just trying to think about our Welsh ports and their ability to service other parts of the UK that are developing marine energy. If you think about Wave Hub in Cornwall, then we're the same steaming distance from Falmouth, for example, which traditionally, you would think, would support that area, but you don't have to go around Land's End, which brings issues and challenges. So, yes, they have a huge role to play, and I think, if I can speak on behalf of the port, Milford Haven, they realise that, and they're fully supportive. I think, particularly with diversification and less of a reliance on traditional fossil fuels—the shutdown of Murco, and that kind of thing—that has really focused that.

[381] **William Graham:** Graham, any comment on ports?

[382] **Mr Hillier:** Well, in summary, I think the comment that I would offer is that we recognise that ports do need Welsh Government support, just to

ensure they're able to take on these new market opportunities. We think they're pretty diverse, but there's every opportunity for them to do so.

[383] **William Graham:** Great. Thank you very much for your attendance today and for your evidence. We're most grateful. A record will be published for you to comment on in due course. Thank you very much.

[384] **Mr Jones:** Thank you.

[385] **Mr Jenkins:** Thank you.

[386] **Mr Hillier:** Thanks for your time.

13:15

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

[387] **William Graham:** Just item 6 for Members, there are papers to note. If we could note those, please. Thank you very much. And now we're off to the Meridian Tower.

Daeth y cyfarfod i ben am 13:15.

The meeting ended at 13:15.