HOUSE OF COMMONS

Scottish Affairs Committee

Oral evidence: Renewable energy sector in Scotland, HC 745

Monday 14 March 2016

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Written evidence from witnesses:

- Convention of Scottish Local Authorities

Watch the meeting

Members present: Pete Wishart (Chair), Mr David Anderson, Mr Christopher Chope, Margaret Ferrier, Mr Stephen Hepburn and Chris Law.

Questions 111-175

Examination of Witnesses

Witnesses: **Councillor James Stockan**, Chair, Development Infrastructure Committee, Orkney Islands Council, **Lorna Richardson**, Policy Manager, Convention of Scottish Local Authorities, and **Felix Wight**, Development Manager, Community Energy Scotland, gave evidence.

Q111 Chair: Could I welcome everybody to the Scottish Affairs Committee? This is our second visit to the Orkney Islands as part of our inquiry and report into Government policy announcements on renewable energy. We are very grateful that so many have come along. This is a Westminster Select Committee, so I would ask that you all respect that and make sure that there are no contributions from the floor in any of our proceedings this afternoon. I am sure we will have no problems at all when it comes to compliance with that. This is part of the Scottish Affairs Committee's promise and obligation to try to take this Committee to as many different parts of Scotland as possible. We have been to most of the major cities around Scotland and this is the first trip of the new Committee to the island communities, so we are really pleased that we have been able to share this Committee session with you today. We are grateful that so many people have come along today.

My name is Pete Wishart. I am the Chair of the Committee and my colleagues represent the rest of the Committee. We have our first three witnesses to give us evidence. We will perhaps start these proceedings by asking who you are, who you represent and for any brief opening statement, if you do have one. The other thing is that these things in front of you, if you press the big button the red light will go on. That shows that you can be heard and the cameras will be able to follow you. This is being live streamed and will be available as an archive at the end of the session. We will perhaps start with you, Ms Richardson.

Lorna Richardson: Thank you. I am Lorna Richardson. I am Policy Manager for Waste Carbon and Climate Change at COSLA, the Confederation of Scottish Local Authorities. COSLA is the representative voice of the majority of Scottish councils and we exist to promote and protect the interests of councils in Scotland and of the people and communities that they serve.

I am not going to make any opening remarks because I am going to leave that to Councillor James Stockan.

Councillor Stockan: I am Councillor James Stockan. I am the Chair of the Development Infrastructure Committee at Orkney Islands Council. I am standing in at late notice for Councillor Stephen Hagan, who is the Chair of this Committee at COSLA. I am going to try my hardest to keep my comments to a COSLA perspective, but I will find it very difficult not to stray into the Orkney-specific issues today, which I am very well versed in. As an opening statement, we are very keen that we see renewable energy in this part as a significant opportunity for socioeconomic benefit for employment. Not only that but very much to alleviate fuel poverty, which we have massive issues with on the periphery of Scotland and we know that this is one of the best opportunities we have to combat that, fire-with-fire, with opportunities to make that improvement.

Beyond that, we see it as a key component for Scotland to set targets for carbon reduction, which is very important. That also has long-term benefits. I am trying to catch up with these notes as I go here. Market uncertainty is one of the big issues that we would like to address here. We feel that it is very difficult, particularly in remote rural areas, when you start to build an industry and then the rug is pulled from underneath you with policy not being long-term and sufficient to allow opportunity for investment. That is one of our major things that we are quite concerned about in this part of the world.

The other thing is we feel that community-led projects are so beneficial, when communities take hold of things for themselves and have that buy-in and that unique position where everybody can be part of something, where they get the benefit but they are also prepared to get involved. We think that is good for wellbeing and all the other parts of life that make local communities work, particularly in these remote areas.

Q112 Chair: We are very grateful to you, Councillor Stockan, for stepping in at not quite the last possible moment but we are grateful for your attendance here today, particularly with some of your knowledge of local issues. Mr Wight?

Felix Wight: Hello. My name is Felix Wight. I am the Head of Development at Community Energy Scotland. Community Energy Scotland is a Scottish charity that works to help Scottish communities take advantage of the opportunities offered by renewable energy to increase their wealth, resilience and confidence. I would echo the opening remarks of Councillor Stockan. We would welcome the opportunity to respond to questions relating specifically to the impact of the drastic changes to UK subsidy support on community projects in Scotland, but also the challenges relating to existing grid infrastructure and how that is impacting on community energy projects as well in the course of the session today.

Q113 Chair: I am grateful to all of you for your very short opening statements. The things that you raised in your opening statements are the very issues we want to cover in terms of this session this afternoon. Could we start by getting all of you to respond with your assessment of the size and the scale of the community and locally owned renewable installations in Scotland, and how much of Scotland's energy do these schemes produce?

Felix Wight: I would be happy to say something on that. As I am sure you are aware, in Scotland there is a community and local energy target. That combines a number of elements within local ownership, not just community. The 500 megawatt target set by the Scottish Government has been met. The question now is: what next? We would certainly be in favour of increasing the ambition of that target. We would also be in favour of having more of a focus on specifically a community component, which at the moment accounts for about 15% of the target as a whole. We would like to see that increase to 20% as a minimum, which would relate to about 200 megawatts of capacity. I believe the figures are being updated by the Energy Savings Trust at the moment but, extrapolating a bit from the 2015 figures, community energy as a whole in Scotland is probably up to about 70 megawatts. That represents the majority of installed capacity in the UK, so that is testament to the support from the Scottish Government to date. The future generating potential is very much reliant on what measures are put in place now to ensure the continued development of that sector. While that figure represents a great success, it is also more than the megawatts—just in numbers—because if you treat that just as electricity generating capacity you are significantly undervaluing what that means in terms of community benefit. To put that into context, a commercial development, if it was currently being built under the Scottish Government best practice, would pay about £5,000 per megawatt of stored capacity. What we find in general is that the projects that we are involved with deliver benefits of about £100,000 per megawatt of installed capacity. As Councillor Stockan was saying, that is the difference that community ownership makes: active participation and risk sharing rather than just receiving a benefit. For that to continue to be possible things need to change, in terms of the policy support coming from the UK Government.

Q114 Chair: Thank you. I suppose most of these small schemes come COSLA's way, Councillor Stockan, given that it is the responsibility of the local authorities to approve any of them below 50 megawatts, so do you have a sense of the scale of the size of the sector? Is there any sense that you have about the model of ownership, about who owns some of the smaller community-based schemes?

Councillor Stockan: We have a lot of examples here locally of small community-based schemes, on different scales, from a small community group putting up a 6 kilowatt turbine to other people putting up something more in the order of 1.5 megawatts to 2 megawatts. We have the whole range here and have seen how it works. There have been opportunities throughout Scotland but the uptake has not been quite as strong as it has here. Wherever they are, there are huge benefits to the local community. We would say it is a local determination, so local members do have the opportunity to see that the thing is situated in the right place for the whole community—it is not just for the applicant—to make the thing work best.

Lorna Richardson: I would fully support those comments. For our members and for local authorities across Scotland, what we see is community-owned schemes and community-owned assets are a very important way of empowering local communities and enabling them to become self-sufficient and sustainable. Obviously, by their very nature, these kinds of community organisations and community groups do not have the deep financial pockets and the same risk profiles that more commercial developers would have, so in many circumstances it is harder for them to bring these projects to fruition. This is a theme that is going to come through throughout this session: local authorities and community groups would welcome greater certainty around the whole area of energy policy across the UK, to help them plan their investments and to understand the commercial and financial arrangements they will have to put in place in order to make these benefits self-sustaining and of benefit to the community.

Q115 Chair: We certainly want to cover issues to do with certainty and some of the recent Government policy announcements we have had in the course of the past few months but, before we do that, I would like to try to get the shape and a sense of the size of the sector. I don't know who could answer this one for me. The community and locally owned renewables schemes provide a considerably higher proportion of Scotland's renewable heat compared to renewable electricity. Is there any particular reason for that?

Felix Wight: I think that relates to the legacy of support for heat projects in Scotland under the CARES scheme—going back—and prior to that the SERHI scheme, which was very focused on heat projects. There is strong support for biomass projects, given the resource in Scotland. In fact larger-scale renewable energy generation for community projects is a bit more recent and has mostly been driven by the introduction of the feed-in tariff, so I think electricity generation will catch up and exceed; in fact, according to our figures, it has done so already.

Q116 Chair: Could you give a sense of how much that is catching up and how much has been brought on tap when it comes to electricity?

Felix Wight: Of the 70 megawatt figure I referred to earlier—which is an estimate because the figures have not been published yet—approximately 20 megawatts would relate to heat and 50 megawatts to electricity generation. It has already exceeded, as far as we are aware.

Q117 Mr Anderson: Mr Wight, the figures you are quoting is £100,000 for community development. In the note we have it says, "A typical 0.9 megawatt wind turbine in community ownership will generate the same level of net income as a 50 megawatt wind farm". I am not saying it is not true, but some people might question it. Do you have any evidence so that, if we take this back to people who are sceptical, we can show there is empirical evidence for that?

Felix Wight: Yes. I think the strongest evidence is that all of the large-scale electricity generating projects in community ownership in Scotland have been supported by loan funding from commercial banks, such as Triodos Bank and the Co-operative Bank, or through community share offers. It is only possible to make those sorts of investments if there is confidence in the revenue that is coming. We could also evidence that, retrospectively, based on the published accounts of what are mostly registered charities. A lot of the information is available and we would be happy to provide it.

Chair: That would be helpful if you could give a note to the Committee about those figures you quoted.

Q118 Mr Chope: We heard informally this morning, from somebody called Robert Leslie from THAW, that in Orkney 63% of the population are still living in fuel poverty. One of the reasons that they are living in fuel poverty is that the costs of the electricity that they consume is higher than it should be, if one takes into account that Orkney is self-sufficient in energy. What are Scottish local authorities and others doing to protect and help the consumer in Orkney?

Councillor Stockan: I suppose I need to answer that question. What has become very evident very recently is the 2% premium that we pay in the whole Highlands and Islands area for our electricity compared with elsewhere. That is a legacy from when the grid was built, because it was quite expensive to build a grid in this area. What we find now is we are generating electricity here and the generator gets no more for generating here than anywhere else in Scotland, but the transmission and the distribution company, or whoever puts it to the consumer, still gets that premium. There is something very far wrong and inequitable in that situation. Now that Orkney produces more electricity than it uses from renewable sources it does seem wrong that that legacy still exists. What we are doing is looking at this in the round, because it has only come to the surface recently that this is the case, and I think that collectively—with your help—we need to address that.

Felix Wight: The situation you describe at face value is ridiculous, and I think that most people in Orkney are aware of that, if you have to pay up to 19 pence per kilowatt hour for your peak electricity. It is the consequence of an existing regulatory system infrastructure that did not have distributed renewable energy in mind when it was designed. The main factor that is missing is a lack of competition in the electricity supply market. It is very difficult, because Ofgem previously created new rules for electricity supply that limits the number of tariffs they can offer, so what we want for Orkney is an Orkney tariff, based on locally produced renewable energy being sold to local people for heat and power, at an affordable rate. To find a supplier who is able to do that, or in whose interests it is to do that, is quite challenging. One of the things that we are asking for, from a UK Government perspective, is to help support new entrants, small electricity suppliers and local authorities, to enter the market and also to have a review of the way that the use of infrastructure is charged. Again, at face value, if you are generating electricity locally and supplying it locally, there should be a smaller proportion of the network charges payable for that. In fact we experience the opposite. We have to pay for everything across the whole of the UK.

Q119 Mr Chope: Following up on that, have you been getting help in this campaign from Scottish local authorities from beyond Orkney? Secondly, have you produced any documentation that this Committee might be able to have to help us if we think this is an important issue? Are people in Orkney incensed that Orkney being self-sufficient in energy have been told that quite a lot of the energy it is producing cannot be used, and meanwhile people are being overcharged? Normally, in a situation where the supply of a commodity is in excess of the demand then the price of that commodity falls. Why is a stronger, more consistent line not being taken to seek some real reform in this? Because then Orkney could be in the situation like, for example, communities living close to nuclear power stations in

France, where they get much cheaper electricity as a reward, in a sense, for producing the electricity in the local plant.

Councillor Stockan: We have been singularly unsuccessful in changing any regulation. That is the big issue that we do have. None of the regulation fits what we are doing here now, and if you were to be able to change some of these smaller grids you would change the usage. Far more people would switch to electricity because it is a renewable source. You have to remember that the fossil fuels we take into these remote areas cost much more than anywhere else in the country as well. You would benefit both if some of these regulations could be changed.

Lorna Richardson: I would add that fuel poverty is probably an issue that affects many local authorities and not just Orkney, although Orkney seems to have the vast majority of it at the moment. Fuel poverty is also very much an inner-city centre problem. I would absolutely agree with the points made earlier about needing to be able to have the ability to create tariffs that are more reflective of local energy generation. Certainly, at COSLA, it is a key point of principle with us that local renewable energy should be used as close to its point of generation as possible, and that the people who are living next to that renewable generation should receive the benefit of that. At the moment, given the way that the grid is set up and the way that the regulatory regime is put together, it is very difficult to make that happen.

There is work taking place to look at how you can create different kinds of tariffs. Say you live in a tower block with a wind turbine and some solar panels on top, how could you create some tariffs that would allow the residents of that tower block to benefit from the renewable energy that is being generated locally? At the moment there is no clarity around how you can make that happen and I would say that, yes, it is something that we would argue for. I would also agree with Councillor Stockan's point that, up to this point, we have been unsuccessful in being able to get traction with making those calls.

Q120 Mr Chope: Far be it from me to say that we are here to help you, but the Government is accountable to Parliament and, in a sense, it is for parliamentarians to express their strong dissatisfaction with anomalies such as the ones we have just been discussing. That is why I am seeking your help to provide us with the evidence to enable us to make the case on this.

Councillor Stockan: On a political level, I have written to Amber Rudd and been rebuffed. I have written to Andrea Leadsom and not got a meeting and it has been kicked into the long grass. If we cannot speak to these people from the remote areas, we have no chance of changing any of this regulation, because they don't get a chance to hear the specifics of our dilemmas.

Mr Chope: Can you let us have copies of those letters please?

Councillor Stockan: I can indeed.

Chair: Margaret Ferrier has a supplementary question before I bring you in, Mr Wight. The scope of this inquiry was to look at the recent announcements on Government policy and its impact on the confidence in the renewables sector. This is an issue that interests the Committee, as you have heard from the questions from Mr Chope, so we would be particularly interested in hearing any further evidence and maybe even the correspondence that you have sent to Ministers, Councillor Stockan, if you have done that. It does strike us as absurd that we have self-sufficiency here but we have this level of fuel poverty. Margaret Ferrier has a supplementary.

Q121 Margaret Ferrier: It is a very quick question. Have you made representation to your own local MP?

Councillor Stockan: I have indeed.

Q122 Margaret Ferrier: Could you elaborate on what came out of that, without making it too political?

Councillor Stockan: It is difficult without making it too political. I do believe that the people in the political system do know where we stand and we need a broader group of people to speak to them. We know that people are busy but we need to be heard to make the best of this situation, and I am sure that our local MP would fully support us on that position.

Chair: I am sure that is certain. Thank you for that. I am going to leave that for now, unless anybody else has any particular question they would like to raise with the panel. I do not know if Christopher Chope has a further question for us.

Q123 Mr Chope: The other question that I was given notice of needing to ask was about the community energy benefits. You have these schemes where indirectly by investing in renewable projects communities are able to get benefits. It seems as though that is very much based upon them getting all the rewards. Can you say where you think the balance of risk should fall? We have seen what has happened recently with the plummeting price of oil. If local communities were going to be suffering as a result of that, because of the contractual arrangements into which they had entered, then there will be a lot of people complaining. I wonder whether your enthusiasm for these community investments was based upon an analysis of proper risk and reward, or whether you really just want to get the cream.

Felix Wight: We very much want the cream, but we understand that you have to invest in a means of production to secure that. The discussion we were having just previously was exactly about risk and reward. At the moment we are taking risk to develop projects, but we are not getting the full reward because of the market structure. The produce is being discounted. To keep the dairy analogy, it is very much like farmers in the current battle with milk prices. They are at a disadvantage because of market asymmetry between them as producers and the distributors and large-scale suppliers. That has not been remedied to date. We have also written to Amber Rudd. It is not just a Scottish issue and that is a point I want to emphasise. We work very closely with Community Energy England and Community Energy Wales. There is an issue across the UK, in terms of small-scale generators not getting the full value of their generation and, likewise, the response has been fairly muted.

To answer your specific point about business models and risk, take as an example the projects that have been developed in Orkney, which are wholly in community ownership although the local authorities have shown a lot of initiative by investing themselves in schemes and joint ventures. In terms of projects with wholly community ownership, the model is based around that of a trust. In terms of who benefits, the project vehicle is working on behalf of the community as a whole, regardless of whether individuals have invested or not. The finance is raised as a loan through commercial lenders, as I mentioned before. Ultimately it is the lenders who assess the risk and bankability of the project.

In terms of what you were saying about the current climate and whether projects would still go ahead, precisely why we are here today is to say that projects are less likely to proceed because of the combination of subsidies being pulled away without there being the market reform that we need to add value. As things stand, yes, we will see a reduction in projects going ahead.

I could clarify in written correspondence, with a bit more information on the business models, but to make one small point: certainly people investing directly does add value to a scheme as a whole because, prima facie, that means local money is being used rather than commercial debt. Where that is possible that is something we certainly support, but we do not think that should be the only model used because, if people are not able to invest, that means you cannot have community-led projects. That is why we support a mix of social investment, commercial lending and things like community share offers and crowdfunding.

Q124 Margaret Ferrier: My first question is to Lorna. Local authorities are responsible for approving small-scale renewable energy installations under 50 megawatts. Therefore, in line with high level policy guidance set out by the Scottish Government, do you feel that the planning framework and guidance you get from the Scottish Government meets the needs of local authorities?

Lorna Richardson: I have to caveat this by saying that I do not deal with planning in my team—we have somebody else—so what I say here is slightly second-hand. I would start by saying that the very essence of the planning system is about local democracy. It is about local communities making decisions that affect them and doing that in a fully informed way. The framework within that decision-making process is the Local Development Plan, which is in turn informed by the advice and guidance that is given by the Scottish Government. Again with the caveat that it is not my area, there are clearly some frustrations around the planning system as a whole, and the way in which it operates between local and national Government. I am not going to go into that here. I think that does extend to some of the issues around renewable energy. Again—and I do apologise because I am going to keep coming back to this—the more clarity and the more specific guidance and advice that we can have around our energy policy as a whole, our energy strategy, and how we want to achieve the ends that we have in mind, will help with local planning decisions.

Q125 Margaret Ferrier: Can I ask Felix, on the other side of the debate, how well does the planning system work for community groups who want to invest in renewable installations?

Felix Wight: For a long time it was very difficult for planning officers to recognise the added value of community ownership in the planning process. In the most recent Scottish planning policy additional wording has been put in that says quite clearly that community ownership, and the socioeconomic benefit it can provide, can be taken into account as a material consideration. The Chief Planner has recently written to local authority heads of planning to emphasise that, but I think we are still looking for a bit more clarity in the guidance as to exactly what level of weight that is given. It feels like if you have a local authority where planners are generally minded not to approve onshore wind, for example, it is not very clear that they will put that much weight on the community ownership social benefit side of things if they are not minded to. That could lead to quite an inconsistent approach, so the principle is there but we would like to see more detailed guidance.

Q126 Margaret Ferrier: Do you feel there is any reason that they don't take note of that, quite high up the priority list, that it is going to benefit the community?

Felix Wight: On the one hand it is something that needs to be evidenced, and the process of evidencing that is not always straightforward. It can be seen as a less tangible thing than visual impact, for example. Without commenting on specific cases, it is quite clear that some local authorities have fairly critical positions towards onshore wind, and they have not felt the community benefit outweighs that. Certainly what you see in more remote areas is a better striking of that balance.

Q127 Margaret Ferrier: I have another question for Lorna. We have received submissions from several individuals who object to the deployment of onshore wind farms, so how do the views of residents inform planning decisions, and is there any information on the level of public support for the deployment of renewable technology locally to them?

Lorna Richardson: I would come back to my previous answer, which is that planning decisions are made within the context of the local planning framework and the Local Development Plan. Within that, yes, obviously representation from the local community is part of the decision-making process. Again, everything has to be done on a case-by-case basis. It is very difficult to make some overarching point of principle that would apply everywhere. Again, all I would say is that planning is the very essence of local democracy, and that is the task that planners are faced with. Having said that, the Local Development Plan is created through the democratic process, so people do have an opportunity as that plan is put together to put their views forward, but ultimately, yes, planners have to make a decision as we have just talked about: it is a balance between what has been decided in the Local Development Plan and the assessment of the benefits of the infrastructure against the impact on the local community. They come to a decision along those lines.

Q128 Margaret Ferrier: I have one final question. We understand that there are instances where local authorities have had to spend large sums of money defending planning decisions that have been unfavourable to developers of renewable installations, so do you think that it is a big issue for local authorities?

Lorna Richardson: I think Councillor Stockan might want to enlarge on that, but, yes, there are concerns around the number of appeals that are made, and then the cost to local authorities having to defend those positions. I would say, by extension, also the number of appeals that are then granted.

Councillor Stockan: It is important that we have a very clear long-term energy policy for us to develop plans because they do not happen at the same time. You have to make sure that your Local Development Plan knows where you are going with these policies, because you know what is going to come forward. They need to marry together some way to make sure that we can deliver the best, so that we don't end up in areas of conflict. If it is clear at the start, it is clearer all the way through the process, and developers and local authorities will know, because we have to keep these decisions local because it is the local people who are affected.

Q129 Chair: From most of the evidence we have seen there is widespread support for renewable schemes in Scotland—even that the overall majority are in favour of onshore wind—but we still see lots of opposition to local schemes that do develop some sort of traction when they are going through the planning process. Is there no way that we could streamline the process a bit more to ensure that planning applications that do seem to meet the requirements from the local plan could be effected a bit more easily and conveniently?

Councillor Stockan: If you take it from a developer's point of view.

Felix Wight: We recognise there are a lot of different competing interests that need to be reconciled through the planning process, so I don't think it is ever going to be easy. I would echo the councillor's comments about long-term planning. If you look at the example of Denmark, they instituted a 20% minimum ownership requirement on commercial wind development. That sent a very clear message about what they are expecting of developers in terms of the level of local participation and benefits. They have also kept a much more stable incentives framework for them to develop within, which is fair. It is unfair to be asking developers to provide a certain level of community benefit participation when they have high levels of policy risk as well.

On the other hand, if there isn't community benefit participation there are going to be objections in some instances. Unfortunately, the way that the policy has developed in the UK, it has been very much focused on the incentives framework without linking that back to the planning framework. That is what we are belatedly trying to do now. We certainly support the Scottish Government's emphasis on expecting participation and high level community benefit. We believe that if you do it right it does streamline the planning process. I don't think there are any quick wins if you don't consult with the community and subsequently get objections.

Q130 Chris Law: Following on from that, do you have some concrete examples of that kind of community participation and streamlining of planning here in Orkney and, if so, could we get sight of it?

Felix Wight: I probably would not be best placed to comment on Orkney. I could provide evidence of other schemes where, for example, there have been joint ventures between commercial developers and community groups and the planning process has gone through very quickly with very low levels of objection. What I can say is that all of the community energy schemes that we have been involved with have been consented.

Chris Law: A good strike rate.

Councillor Stockan: I think that they can co-exist, but they have to be done sensitively and sensibly. If you take those things together that is what planning is about. The thing is someone who wants to develop does it because they have land or they have money or whatever. It is maybe not the very best place to have the scheme in your area. I think that is where we need to work together more cleverly to make sure that you get the best result, so that you can keep the aesthetic. We don't want to industrialise the Highlands and Islands but we do want to get the maximum benefit by having the best schemes in the best locations to get the best return to the investor, but also for the community.

Q131 Mr Anderson: We heard this morning when we visited the turbine centre at Hammars Hill about the potential for exporting electricity from this part of the world but, whether it is being exported to the mainland or between the islands, we understand there are huge issues about the capacity of the grid. Can you tell us what this means for the viability of the local schemes?

Councillor Stockan: We have a long-term issue, which is that we do not have an electricity cable big enough to take exported energy from here. We do want to cover in Orkney. We have covered a lot of our electricity usage, but that is not our energy usage. We have a lot more to do and a lot more opportunity, but, beyond that, we do see this tremendous wind resource, wave resource, tidal resource, and as these things develop we would like to use them for the national benefit, so we need to have a route out so that we can start to deliver what we can produce. Most of the regulation that is in place militates against us. We need to make sure that we can break some of that, by getting the support in the right place at the right time, to make sure we can deliver. What is our aspiration? It is not to have something massive here but it is to start off and make sure that we can deliver. That is why we have been involved in the inter-governmental working group to try to get cables to the different island groups.

Q132 Mr Anderson: We have been led to believe that there are ongoing discussions—as you have just mentioned—between yourselves, the Scottish Minister for Business and the Secretary of State. Is there any progress in those discussions?

Councillor Stockan: I thought there was. We had nice warm words, and we meet quite regularly and people say very nice things, but we were waiting for our Island CfD, which has been promised for a long time. Europe have called for that to come in but the UK Government have not yet put in the case. Until we get that case put in, and are given the rubber stamp by Europe, we will not get anywhere. This is a huge disappointment to us because all our future confidence hangs on this, and we will lose some of the things we already have if somebody does not do something very quickly for us on this score.

Q133 Mr Anderson: When you say you have been waiting a long time, Councillor, what do you mean by "a long time"?

Councillor Stockan: We have been working on this for, what, seven or more years?

Mr Anderson: Ridiculous.

Q134 Chair: We had a round-table with some of the stakeholders just before lunchtime and we were told that a figure £200 million would be the cost of connecting to the grid from the islands. Is that a figure that you recognise?

Councillor Stockan: It is in that ballpark. We don't know because people keep changing the rules and prices keep going up. If you have a situation where whoever does put it in is only allowed to make 6% profit on putting it in, the cost will go up because the 6% also goes up.

Q135 Chair: Could you give this Committee some sort of sense of what the public would gain if there was a public investment of £200 million? Could you suggest the sort of things? It would obviously benefit the community here and the projects that you have. Is there a general Scottish good or a UK good that would be achieved by securing this connection?

Councillor Stockan: The connection to come here I would say needs to have a degree kept aside for the marine technologies as they develop. That is the most important thing. We need to have an allocation that is underwritten by somebody to make sure that the confidence can be kept in that sector until it becomes commercialised. You need space for a raise and taking things to the next step to keep the confidence. That is not an Orkney or a Scottish or a UK benefit. That is something that would benefit the world if we can make sure we can capture something from the marine and convert it into useful energy from the resource that we have here. In Orkney we have a resource that is second to none and it is only right to do things in the right place, but the benefits we would have if we could put a cable in, in the right way, is that we could have much more local investment. The local authority would be very interested to lead into this so that we can socialise the costs, so we can alleviate the fuel poverty, so we can look at a number of other things. All these things could combine into something that is quite unique.

Felix Wight: One specific example: I can tell you that, as of today, the community generating projects in Scotland and Orkney that are operational, but not able to operate to at full capacity because of the grid restrictions, are losing in the order of £1 million to £1.5 million a year. That is wind turbines that are built that could be producing more but are not. The perversity of it is that—as the councillor says—Orkney has one of the best wind resources. If you are looking at value for money this is a great place to make electricity full stop. It is an even better place to make renewable electricity, but we are not being able to realise that potential because of the limitation of the infrastructure. The point I would emphasise is that the approach that we have been forced into, for the last seven years, has resulted in missed opportunities and piecemeal development, which ends up being more expensive. If we had just gone down the route of planning for the future and building the infrastructure that was required seven years ago, the cost of generation, the cost of subsequent projects, would have been a lot lower. This lack of clarity, which is macro, is not just about the infrastructure, it is also about the incentives. We need both. We are not going to build the infrastructure without the incentives being in place. That combined lack of clarity just pushes up costs.

Q136 Mr Anderson: Just to be clear, if this was built—let us use the figure of £200 million—that would be about £3 per head for everybody living in the United Kingdom, but there would be a benefit to the whole of the United Kingdom because you could transmit electricity to the rest of the nations. Have you any idea how much you could do and do you think there would be big resistance if people said, "Wait a minute, we do not want to industrialise the whole of the Orkney Islands"? Is there a balance that could be struck that could make a big contribution for people to make an argument—let's put the cards on the table—so if developers will not put the money down, we could say, as a nation, we should invest in this in the way we are investing tens of billions of pounds in new train projects for the benefit of the whole country officially? Surely this would work the other way around.

Councillor Stockan: I think it is a drop in the ocean for marine, if you pardon the pun. I think for a very small contribution the UK could get a huge amount of benefit. We are leading the world at the moment in marine renewable, the investigations and the schemes that are coming forward, but we could easily lose that. We led the world in wind in the 1980s but we dropped the ball. For a very small amount of money, the UK could keep at the forefront. There is much more that we can do. It would be a number of years before we got a cable here if you were to come and say "Yes" to us today, but there is a lot of the stuff we can do within the constraints if we had a pot of money that we could benefit everybody in the UK with through energy storage and other energy usage. This is a very good test-bed to try so many things for the nation, and I think it is something that should be looked at to see if we can make progress on that.

Q137 Chair: We were at one of the windfarms this morning in Hammars Hill, which we were fascinated to see. One of the features about today, of course, was that it was not producing any energy, and this is obviously one of the major issues when it comes to renewables, particularly onshore wind, where there are intermittency issues. Orkney today is highly dependent upon the national grid supplying its energy requirements. Is there anything that you have observed that would be able to deal with some of the difficulties around intermittency, particularly any innovations or any progress that has been made on storage? Obviously, if there was effective storage in place just now, you would not be dependent upon the national grid supply. I don't know whether any of you have any views that could help this Committee out about where we are in dealing with some of the intermittency issues, and where we are in terms of making progress and solving some of the storage.

Felix Wight: The first point to emphasise is that nearly all generators—renewable or fossil based connected to the national grid—experience some degree of intermittency. If you look at a gas plant, its output goes up and down as it follows demand. The national grid is very used to dealing with this. The additional management cost of that, with the current levels of renewable penetration, is pretty small.

In terms of looking to a more renewable future, with high levels of penetration, then, yes, it becomes more of an issue. We are not there yet. In terms of what can be done to manage that, it goes right back to the conversation we were having previously around the energy market because there are lots of things that can be done, if you send a price signal, to either manage demand or build storage or make generation more controllable. In fact, a lot of those things are already happening in Orkney. For example, the issues that we have already touched on in terms of there being surplus generation, there is already work under way to pilot—I emphasise pilot and it is very much dependent on Scottish Government funding at the moment—additional controls in people's houses, so that they can use surplus electricity for affordable heat when it is available. That is a brilliant way of dealing with the variability of wind while creating a local benefit.

There is also already battery storage installed in Orkney. I have to emphasise that battery storage is still high cost and you are only ever going to use that, at least in the near to medium term, for managing the very small variations in intermittency rather than day to day or weekly variations.

The last point to make is—the councillor has touched on it already—that at the European Marine Energy Centre site, they are already in the process of building out a hydrogen electrolyser, which will be able to convert surplus renewable generation from wind and marine sources into a new fuel, which can be used subsequently for electricity generation or for transport.

The future is very much achievable and it is very much about tying together energy generation when it is available with different types of energy use, not just electricity but heat and transport. That is technically possible. We are already demonstrating that. But if it is going to happen UK-wide then we need the market framework and incentives to make that happen.

Q138 Mr Hepburn: You raised some concerns about the change in the subsidy regime, which you say could have an effect on those renewable schemes that have already been planned by local authorities and, indeed, invested in by local authorities. Could you give us some information on them and possibly an idea of the cost involved?

Lorna Richardson: Yes. Obviously, a thing that has really concerned our members has been this idea that you have got so far down the development process and then suddenly the subsidy regime has changed. Just to give you a couple of examples, I think they will be okay with me sharing this. They sent me the information so I am sure it is fine. Fife Council's executive committee has recently decided to close all of the remaining onshore wind projects that are still in the development phase due to the increased risk in subsidy changes. That is not just about the actual subsidy changes, but the uncertainty around what will still continue to happen in the future. They have decided that it is just not worth the risk profile to go ahead. They have built a handful of small turbines, less than 15 kilowatts, and they are about to complete the only significant turbine, 500 kilowatts, that they were able to get through the process in time, but every other project has been cancelled. They estimate that that has been about half a million pounds' worth of public funds that has been spent during the development feasibility stage that is essentially lost to the public purse. You can say that is just one example, but you can see that it has had an impact.

Again, whereas before councils and community groups might have thought about the kinds of projects that they could do, now the ongoing uncertainty means they are so confused by the subsidy changes and by the uncertainty in the market that they are not willing to approach it at all. In these times, we cannot spend public money on outcomes that we are not sure will happen.

Q139 Mr Hepburn: Thanks. I think you might have answered my next question, which was basically what policy changes would you like to see that would have a positive effect on the sector?

Lorna Richardson: Yes, and I think I have said it a couple of times.

Mr Hepburn: More certainty.

Lorna Richardson: Yes. From COSLA and from the local government perspective, what we would like is a very clear UK-wide and, by extension, Scottish strategy on what our energy policy is. What mix of generation do we see in the future? What timescales do we have attached to that mix? Then what incentives and what frameworks do we need to put in place in order to encourage that mix to happen? At the moment, we just do not have that clarity. As we have said on several occasions, once you have clarity people can start to make plans and we can go ahead with development. What we would like to see is an understanding of what our intentions are, what our targets are, with regards to energy generation and then what mix of subsidies and other incentives and market interventions will be in place in order to give the market confidence that they can go ahead and build these assets.

Q140 Chair: Before we move on, could you give a bit more detail about the particular difficulty in going through the planning process just now? Is it all about the withdrawal of ROCs for schemes that are all halfway through the planning process? What is it? We are having a bit of difficulty understanding exactly what the problem is when it comes to these changes in policy.

Lorna Richardson: Okay. For the Fife example—and again this is second-hand information so I apologise if there are any gaps—when they built the commercial model, which stacked up and gave the evidence behind the benefits of building this asset, that was based on the existing FITs or the FIT scheme at the time. That is what gave them the confidence to think that it is worthwhile doing this, that when this asset is up and running it will be commercially viable. They understood the payback period and they understood the benefits. Because of the time that it takes to get any of these schemes through—and I am sure both Felix and Councillor Stockan can provide far more information on that than I can—it does take time. It is just one of those things. Because of the time it takes to secure the land, to get planning permission, to get developers on board, then these projects just had not reached a stage where they were far enough advanced that they could continue and the commercial case no longer stacked up, so they had to be abandoned.

Q141 Chair: Do you have any sense of how many episodes or incidents there are of this going through the planning process? How many are in difficulty? How many might we lose?

Lorna Richardson: I don't know, to be honest.

Chair: Felix, do you have any idea?

Felix Wight: In terms of new projects, know from speaking to a distribution network operator, they have seen a 90% reduction in new connection requests.

Chair: 90%?

Felix Wight: 90%. That gives an idea of the scale of the impact. The specific issue you are asking about in terms of the Renewables Obligation was the fact that when the UK Government made an announcement that the RO was going to close, there was not a clear plan in place to explain to developers who would be affected by that depending on their state of development. All this policy seems to have been made up on the hoof and retrospectively and there is still, as of today, a lack of clarity as to exactly what you have to do to be eligible. In some circumstances it is clear, but there are a number of instances—where you have had a planning application repealed and then subsequently approved, for example, or if your financial closure has been delayed—where there are a lot of grey areas and it has just been done back to front. That should have been part of the policy announcement rather than following it.

There are two other areas. In terms of changes to the subsidy support it is important to see this in the round. There is the feed-in tariff itself. The tariff levels have been cut much more drastically than anyone thought, but there is also the risk of them being cut further.

Again, this is the point. It is not just that we are down to low numbers; it is that they might go even lower. They might go down to zero. They already have gone down to zero for some technologies.

Thirdly, this is not often talked about but has had a major impact: the climate change levy, which previously provided support to about £5 per megawatt hour of generation, which has been removed not just from projects in development but from operational projects. Even though it is in a way the smallest subsidy, that principle is what has created such a huge amount of uncertainty because these are projects that are built, are paying loans, and 5% of their revenue stream has disappeared on the basis of what was previously thought to be a Government guarantee. Just to rub salt in the wound, the levy is still being attracted; it is just that it is not being used for renewable energy development. Again, to go back to the point about the impact on consumers, there has been no change in the cost to consumers but the support has been removed from renewable energy development, which does not feel reasonable. It feels purely political.

Q142 Chair: Earlier today at the round-table it was raised about what are the key energy policies for the current UK Government and the general feeling was it was pro-nuclear, pro-fracking and anti-renewable, and that was largely led by oil companies. Would each of you agree with that proposition?

Felix Wight: Speaking for Community Energy, the UK Government launched in 2014 a community energy strategy, so there has been in the last couple of years quite a lot of talk about community energy. So far what has been delivered in practice has been a series of stabs in the back. There is no evidence that we have seen to show that the UK Government are committed to creating a supportive policy framework for community energy development. All the actions so far to date have been to undermine community energy development. You can draw your own conclusions as to what their priorities are elsewhere, but certainly community energy does not appear to be one that it delivers on.

Councillor Stockan: I would say that we need an energy mix. Nobody would say one energy solution is going to sort out our long-term needs, but I think that there has been a cut-off for what I would see as the thing that is going to last the longest, which must be renewables. There seems to be a U-turn taken by some of the decisions with very little clarity as to where we are going, and the uncertainty in strategic policy is the thing that is the problem, I would say. We need to get back to supporting things in the longer term.

Lorna Richardson: Yes, I would support those statements.

Chair: We only have a few minutes left. I know that Stephen Hepburn has a question.

Q143 Mr Hepburn: How would you compare the approach of the UK Government to that of the Scottish Government?

Felix Wight: I could say something briefly, which is that the Scottish Government have shown really consistent support for community energy development. It has recognised the importance of the renewable energy opportunity being something that is shared with the people in Scotland in general and it has provided the financial support to make sure that most communities have that opportunity. Again, while there has been talk along those lines from the UK Government, so far it has not been delivered and it has not been delivered consistently. It is hard to judge what Scottish energy policy would be because most of the levers are not at their disposal, but we see a much more co-ordinated approach. We see the integration of heat, transport, electricity. We see the intention for long-term thinking.

Councillor Stockan: Can I answer? I think that there has been tremendous support from the Scottish Government because they see that we have the resource here and the resource, even the wind resource, is greater than any transmission loss you would get for getting the energy transported as far as it needs to be. Therefore, that is what we expect. Our disappointment is the fact that things seem to be moving under our feet. We would like to see the same consistency elsewhere.

Q144 Mr Hepburn: The final question, Chairman: needless to say you believe the 500 megawatt limit should be raised for renewables?

Felix Wight: The 500 megawatt target for community and local energy?

Mr Stephen Hepburn: Yes.

Felix Wight: It has been met so—

Mr Hepburn: Yes, but you think it should be raised?

Felix Wight: We have already raised it. It is whether the Scottish Government will match it with a more ambitious target, which we believe should be made.

Q145 Chair: Lastly, this inquiry was set up on the back of the recent policy announcements from the UK Government, particularly with what it has committed in Renewables Obligation for onshore wind. Is there anything that you have observed or detected among the recent raft of announcements from the Department of Energy and Climate Change or the change of policy that you feel will be of benefit to community renewable schemes?

Felix Wight: It would have been good to have this question in advance because I need to think.

Chair: I am guessing from this hesitance that it does not trip off the tongue.

Felix Wight: Nothing springs to mind. Again, of the intentions stated in the community energy strategy, there are certainly ideas of merit there and there has been discussion of looking at electricity supply and local supply. We have not seen it implemented, so to date from a Scottish community perspective, no, I cannot see evidence of constructive policy.

Councillor Stockan: From an Islands perspective, we were quite delighted that the Islands' CfD seemed to still be live in all the statements that have been made, but the actions behind it do not seem to live up to those statements. Our hope was then that that was going to be delivered quickly and effectively, but it has not come all the way through the process yet and we look for it to be coming through.

Q146 Chair: Lastly, I suppose, the one word that seems to have characterised most of the evidence sessions we have had and most of the written submissions we have received is the word "uncertainty". If there was one thing that you had at your disposal to take us from where we are just now to introduce a degree of certainty into the sector, is there anything that you could suggest to this Committee could be done?

Felix Wight: We would very much like to see a proper budget allocation for the feed-in tariff, which would allow small-scale projects to continue to be developed. At the moment, the tariff levels and the level of uncertainty mean that that is not going to happen. I certainly echo the desire to see the commitment for an Islands contract for difference delivered. That will make a very real difference to Islands renewable energy projects of larger scale.

Chair: Any last words from either Councillor Stockan or Ms Richardson? Well, other than that, thank you ever so much. That was a really helpful session and we are grateful to you, Councillor Stockan, for stepping in at the last minute and giving us that evidence. If there is anything further, of course, that you feel that we have missed out or we have not covered, please write to this Committee and it will be received in written evidence, which will help us shape our report. Other than that, thank you very much for your attendance this afternoon.

Examination of Witnesses

Witnesses: **Ian Johnstone**, Senior Consultant, Aquatera, **Alistair Gray**, Chairman, Hammars Hill Energy, and **Neil Kermode**, Managing Director, European Marine Energy Centre, gave evidence.

Q147 Chair: Thank you ever so much. Welcome, gentlemen. I feel like we have seen you all before this morning, but it is great to have you all back for this formal evidence session. I know some of the themes and discussions and conversations we will have maybe touched on before, but for the formal session where we can take a proper minute of this, if you do not mind we might want to retouch on some of the things that we have had conversations earlier this morning. Just for the record—if we go from left to right—tell me who you are and who you represent, and if there is any initial statement you would like to make to this Committee. I will remind you, although you probably saw it from the earlier panel, it is the big button here you press when you respond. We will start with you, Mr Kermode.

Neil Kermode: Good afternoon. First of all, thank you very much indeed for the opportunity to come and speak today and for you to come and listen to what we are saying. We recognise London is a very long way away from the centre of marine renewables and we really do appreciate your coming up to hear what is going on here.

We run the world-leading test centre for wave and tidal energy and we have had 16 technologies from nine different countries all testing here in Orkney. This really is the centre of where it is all happening. Being so close to the epicentre of all this activity, we see the scale of the global opportunity that marine renewables presents for the UK as a whole, for Scotland and specifically for Orkney. We are very concerned that quite often there is a disconnection of policy activities and a failure to recognise that today we are at 404 parts per million CO_2 level. It has gone up four parts in the last 12 months and 450 is reckoned to be the threshold at which we will see 2 degrees climate change rise, so we have a catastrophic risk facing us of 2 degrees climate change rise and we are not necessarily seeing the same clarity of policy that we would like to see that would encourage marine renewables. We are finding some of the policy landscape very confusing, and I can go into that in more detail if that is helpful later.

Chair: Thank you for that. Mr Gray, we have already shared the trip to a windfarm with you this morning, so just for the record please say who you are and who you represent.

Alistair Gray: Thank you, Chairman. My name is Alistair Gray. I am chairman of Hammars Hill Energy, a local windfarm. I am also a non-executive director of EMEC and professionally I am a chartered accountant. I specialise to some extent in project finance, so I deal with a lot of renewable projects, funding of renewable projects, not just Orkney based but throughout the UK. I have a level of expertise in wind but I have also dealt a lot with solar projects and also hydro projects.

Chair: Mr Johnstone?

Ian Johnstone: Thank you. My name is Ian Johnstone. I work for a local renewable energy consultancy here in Stromness, but today I am here representing OREF, which is the Orkney Renewable Energy Forum. It is a membership organisation that comes together to look after the interests of local energy companies, local energy producers and people locally who are interested in renewable energy.

We feel that Orkney is at the forefront, as Neil has already suggested, of marine renewables, but Orkney has also embraced renewables in general completely. I think it is partly to do with our island culture and our reliance on each other. We work as a community together to make sure things work and we have embraced renewables as a way forward for that. The forum tries to gather these views together and tries to help influence policy or tries to make comment on policy, so we very much welcome the chance the Committee has come here to listen to what we have to say.

Q148 Chair: I am grateful to all three of you. I was just coming to that. This is the first question I was going to ask, which was what underlies the dynamic growth of the scene in the renewable sector in Orkney. We know you have the resource, maybe not today, and you have the climate—again, perhaps not today—and we know there has been phenomenal growth and you have been successful in developing the sector here. Maybe in replying to this you could identify any Government levers or specific policies, which you have observed from the UK or Scottish Government, which have assisted and enabled you to get to where you are today in terms of being world-class marine and also self-sufficient when it comes to renewables.

Ian Johnstone: Just going back on what I said before, because we are an island community and we work together as a community to make things happen, I think that is a good success. We have the resource and we recognised a long time ago that the resource is here. We have wind, wave and tidal that you heard from earlier. Although you did not see much wind blowing today, the tide is still going in and out every six hours so there is a lot of power there. If you were up on the west coast you maybe did not get a chance yesterday, but there was a fair sea running even though there is no wind, so for the wave side of things, things are still going on. We have an incredible resource. We have a resource of people as well because we have been involved in it for a long time. When ICIT, the building that you are living in just now in the university, came here and started to promote marine energy, we have started to see a number of companies develop, so we have a clustering effect in Orkney that I think does that well and makes that happen. A number of the people were represented this morning, but that was only a fraction of the number of people who are involved.

All of these things have helped with the success of the projects. The Government have been supportive and the siting of EMEC here, which a lot of people worked on really hard to make sure it came to Orkney because there were a lot of other places it would have gone, has been a great success and a tremendous advantage to us. There is no doubt about it that the subsidy regimes, the ROCs regimes and the FITs regimes have all helped, but the problem we are having now is that that is becoming shaky. The confidence has been lost in some of these issues. Subsidies have been pulled out from underneath people's feet, as you have heard from what Felix was saying earlier, and that has made confidence in the sector start to be doubted. We need some long-term certainty. People's jobs rely on it. The students that are in the room here at the moment you will see are all seeing this as a career and that is definitely becoming more suspect. As I think you heard this morning from one of the lecturers, there would have been a lot more students here this year sitting in on your Committee if there was not that uncertainty in what was going on in the industry at the moment.

Q149 Chair: Would any other of the gentlemen like to reply, again thinking about useful Government levers and helpful policies that have helped to develop and grow the sector here?

Alistair Gray: I think past Government policies have been critical to getting the industry to the level it is at now within Orkney, particularly so perhaps in terms of the marine development, which is really at an early stage of commercialisation. I guess we must remember that that was not a Scottish Government initiative; that was an initiative that came out of Westminster for the establishment of the marine test bed technologies here. I guess the danger to some extent with this uncertainty that we are seeing in current Government policy and the lack of clarity is we are almost back to exactly what happened with the wind industry, where Burgar Hill in Orkney was used as the test bed for the early stage prototype development of the wind industry and there were technical issues. The Government of the day lost interest, lost its nerve, did not continue with the investment and we then lost that investment to essentially Scandinavia and the region has picked up the mantle and really developed the wind industry to a very high level, invested in the technology and manufacturing plant and are now world leaders. So, I guess, as was said in the first session, this uncertainty and lack of clarity in terms of policy is undermining the whole sector.

Neil Kermode: I completely echo the points made earlier but rather than go through it again I would also add a further thing, namely that during the last years of the last war there was vision shown about the electrification of the Highlands and the acquisition of power from hydro, principally by Tom Johnson and others. That then led to the development of the National Grid and frankly we would not be doing marine renewables here had there not been the vision to lay cables to Orkney sometime after the cables were laid up to Dounreay.

The point is there was a policy decision to build a National Grid in order to make sure that Britain remained competitive, because it had a chronically unreliable power system at the end of the Second World War and we have benefited directly from some of those investments some years later. I think that is the lesson to take away from this, in that investments made now will pay back in due course and nobody at that time envisaged there was going to be such a thing as marine energy. But here we are with 250 or so jobs in this fairly remote community, working principally because there was that investment.

Q150 Chair: One of the reasons this Committee wanted to come to these islands was of course because of your self-sufficiency when it comes to renewables and the incredible things you can do with marine. It has been described as world-class, a living laboratory, which is some of the words that were used in the round-table that we had this morning. We have heard in the round-table and again from the first panel about the constraints of the grid about how to get this excess of energy across to the mainland. Is there any way that any of you see to get beyond this and resolve this issue? Perhaps you could talk a little bit about what the rest of Scotland are capable of benefiting from if we are able to secure this line and get some of this power off. I do not know who gave you the figure of 200 million but it is a figure that you recognise and whether that is accurate. What do we get if we were to get this line to Orkney?

Neil Kermode: If we pick up on the £200 million figure for a start, that was based around some work I think that SSE did a little while ago about the first of two phases to bring cables when there was a proposal to put a lot of marine work sites in the Firth some years ago. That was about a 180 megawatt cable. The thing to bear in mind is that the potential for Orkney is probably at least 10 times that as well, so the £200 million would get you the first 180 megawatts and then thereafter, assuming marine succeeds, there will be further cable to be built so I do not think 200 million is job done but it gets you a good way down the road.

In terms of what else, the benefits that will be seen, already we are seeing benefits in the UK from the fact that we are doing even the limited amount of work we have achieved on marine renewables so far. Companies, like Aquaterra and others, are working around the world employed on contracts, doing work, bringing money back. So, that is a definite benefit. The scale of the win that could be achieved if we could get marine renewables away and make it work, according to the Carbon Trust they estimate that one fifth of the UK's electricity could be supplied from marine renewables if we get this to work.

In terms of delivery that is about comparable to what nuclear is doing today. It is carbon-free, there is little or no decommission costs, we have security of supply, sovereignty over the resources and this technology will have to be deployed in remote areas, so we will see remote areas benefiting directly from this economic activity, just in the same way that these areas benefited when the road infrastructure was put in under Telford's direction back in the 1800s. That is the way. It will enable economic activity in these remote and often difficult areas and produces a carbon-free electricity source.

Alistair Gray: In terms of the wind sector, picking that up, the resources we have here in Orkney does allow us to generate a much higher capacity than perhaps the south of England in terms of wind generation and that brings down the unit cost of electricity. We at Hammers Hill are currently on a levelised cost of electricity of £57 a megawatt, and that is not that much more expensive than gas generation so that is an interesting number. Could it become subsidy-free? Yes, I think it can become subsidy-free. Not quite there yet but it is pretty close and certainly, compared to perhaps new nuclear, it is a lot less expensive.

Q151 Mr Anderson: What do you mean by "levelised"? It sounds almost like a politician's term.

Alistair Gray: It is really an economic calculation of the cost of generating that electricity in terms of the investment and the cost of the capital to develop wind power, for instance, and the subsidies that the wind farm achieves, so if you add all that up you can work out the levelised cost of electricity. Last year for our particular wind farm it was £57 a megawatt.

Q152 Chair: Could you give the Committee the comparison of the costs per megawatt of nuclear, renewable and gas? What are the figures relating to these?

Neil Kermode: The only one I am holding in my head I think Hinkley is struck at £93 a megawatt hour. Onshore wind is generally quoted at £80 a megawatt hour.

Ian Johnstone: It was quoted this morning at just about 100 for offshore wind.

Neil Kermode: The only thing I would also say is that you then get into the fossil generators but they are not paying for their waste disposal costs, what they are doing to the atmosphere.

Chair: That is really helpful.

Q153 Mr Chope: This active network management system we heard about is run by Scottish and Southern Energy Power Distribution. Is there a problem in relation to then effectively having a monopoly? As I understand it, as somebody said at the round-table earlier, there is a 6% maximum return that can be made on additional investment in an interconnector cable, which obviously in terms of the returns that you can get on alternative investment is pretty low in the scale of things. Who is determining that 6% maximum return?

Alistair Gray: My understanding—and I am not an expert on that—is that is established between Ofgem and National Grid, so a district, a DNO, a district network operator, is only allowed to make a certain return on an investment and that is regulated under the Electricity Act, so I think that is where that number comes from.

Q154 Mr Chope: Scottish and Southern Energy Power Distribution seem to be pretty laid back about wanting to do anything about improving this interconnector. Do you think there is something to be said for opening that up to competition, because it might well be that a consortium of people in Orkney would be able to get together with other investors and put in a rival interconnector?

Ian Johnstone: With the uncertainty in the market that would be hard for people to come together to try to do. There has been some thought, so it is not that it is not there, but it comes down to the uncertainty and Ofgem rules are so complex. When you start scratching the surface of how to understand how grid works on a technical basis it gets very, very difficult and there are so many rules and regulations that it becomes very hard.

One of the things we have been fighting for a long time in Orkney to get the grid here is to try to work with Ofgem. I was previously in the same role that Councillor Stockan is in. We met with Ofgem and National Grid. SSE and all the operators came here and then we went to London and had a meeting with them to try to resolve some of these issues with everybody round the table. I think that was five years ago, and we are still no further ahead than we were when we were trying to do that.

As I think somebody mentioned earlier, they kind of show nice words and warm feelings but the actual complex dealings with grid is really hard. One thing I think the Committee could suggest to the Government—and I suggested this this morning as well—is look at Ofgem's remit and try to make sure that Ofgem has some understanding of island issues and where we are in islands. There is a consultation that came out this morning from the Scottish Government looking at island-proofing of regulations. I definitely think that that is something the UK needs to start doing. The Government could be passing it on to people, like Ofgem, to say that, "Your regulations must be island-proofed". After all these years, Ofgem do recognise there is an issue in the islands but that is as far as it goes. They recognise it as an issue but they have not come out and fixed anything, as far as I am aware.

Q155 Mr Chope: Councillor Stockan suggested that in any new interconnector there should be special space for the energy generated from marine technology. Has Ofgem shown any interest in that or have Scottish and Southern Energy shown any interest in giving a special role for developing marine technology?

Ian Johnstone: No. To my knowledge, I think the only way that has been recognised is that they have said in the previous CfD rounds that they did recognise that some of that would be for marine. We are all waiting to hear what the new CfD rounds will come out with and whether that will be—

Neil Kermode: Just on that, we have not seen any encouragement that they would hypothecate a piece of capacity for marine. We are trying to do something strategically about that, because we see that as a strategic investment because marine renewables could be a strategic industry that the UK sees value in supporting, but at the moment they do not seem to be particularly interested. We have seen it in evidence of other things. For example, communications is an issue here in the county, and trying to get good fibre connections is very important. We cannot even persuade the SSE people to put fibre into the new power cables when they lay them so they could do two jobs at once, so trying to hypothecate space for marine is going to be quite a stretch.

Ian Johnstone: Just coming back, the other thing we have to remember is that the cable across the Firth is not paid for by the public purse. The developers underwrite the cable until it is built and then, once it is built, the transmission operators—like Alistair here—have to pay tenuous charges on the charges on the cable, so this is not a generous public thing that we all need to pay for. This comes from the transmission operators who have to pay that. In Orkney it is somewhere around £100 a megawatt whereas in Caithness, which is only eight miles away, it is about £20 a megawatt. You can see the difference of that is they are paying for the cable across the Firth. The cable is paid for. It is just Ofgem allowing the cable to be built.

Alistair Gray: The charging structure I think would be a useful point to make. The charging structure, in terms of the use of the National Grid is set between National Grid and Ofgem. We have a ridiculous situation that if I was a wind generator in London then my charges would be a credit, so I would not pay to use the network. The network would pay me to put my power into the network. Because we are at the end of the grid, the charges in the Northern Isles here would be among the most expensive in the UK because it is based upon distance basically from London.

Q156 Mr Chope: Perhaps in due course we will get some evidence from Ofgem on. We have had some evidence already about this issue of electricity storage. What do you think about the future here? Do you think this could be transformational or not?

Ian Johnstone: Yes, I do think so. Like I say, we have been working for a long time to try to come up with a grid and it is still not happening for us, so we have to look at storage. I think nationally people are recognising that storage is a real issue. You heard this morning from some of our members that were talking about small scale storage. I know that Neil could maybe talk about EMEC and the hydrolyser that they are producing, and there are a number of other projects that are being looked at in Orkney at the moment on storage issues.

We mentioned before this idea of Orkney being a living laboratory to be able to show the rest of the country what we could do. If we could create a storage test facility at EMEC, or something like that, where we could start seeing how we could integrate renewables and storage to balance the whole grid, I think that would be a real advantage.

Neil Kermode: We have started some work on storage, principally because we do not have the capacity to get all the power away from the island where we have the tidal test sets. We are building a 0.5 megawatt electrolyser. The box has been built and kitted out in Sheffield and, by September this year, we should have it all up and operating. That is going to produce hydrogen and we are working with Community Energy Scotland to use that innovative scheme to help power the ferries at night.

We are trying to find ways to soak up energy and use it in different ways, but the point is that if you don’t just think you have to produce electricity and then consume it at exactly the same moment, and you put a buffer in there in some way, that completely changes the electricity market. My understanding at the moment is that the electricity market does not value storage. We need to find a way that we do value storage because there are things to be done. You either shift from times of plenty, you harvest electricity when you can and put it in store and use it when you need to, or alternatively you transform it from electricity into something else that you can then use to your benefit at a later date. It brings time into the equation, so finding a way to encourage storage is critically important.

Q157 Mr Chope: Through a price mechanism you are saying?

Neil Kermode: Yes, there would need to be some price mechanism. I am not an expert in how that would work, but my understanding is that at the moment storage is not valued and it is very difficult for somebody to have a particular value for storage that they do build. That therefore means the investments are difficult to justify.

Q158 Chair: I am quite interested in this idea there is no value in storage. It is not the first time we have heard that in the evidence. Surely, if we solved the storage issues, we would get round some of the difficulties like today intermittency when you are relying on the National Grid coming in. Surely we must be doing all we can to encourage Government to invest in this, to look at this and try to come up with some sort of solution that will get round the real difficulties of intermittency.

Neil Kermode: Yes, there are others who are better placed to be able to explain exactly what the details are and why storage is not valued at the moment. I am sure we can signpost reports or find people who can speak to that.

Chair: That is something we would like to explore a bit further to see what there is, in terms of investment and resources dealing with some of the storage issues.

Q159 Chris Law: Just to touch on that before I come on to my own questions, I met recently with Babcock who are looking at a town that is being built in Japan right now where every household is going to have its own storage facility for any excess energy it produces.

I want to turn to energy policy in the UK and then more in detail to renewables, but earlier today I was hearing about energy policy in the UK, how it has significantly changed in the last year and, particularly, the focus has been on funding nuclear energy and fracking or extraction of shale gas at the price and cost towards renewable energy. I want to know if the panel share that view, and if you feel that perhaps it is oil companies that are really at the forefront of lobbying the UK Government at the expense of renewables.

Neil Kermode: Even being in the industry I think we would say that we find policy at the moment very confusing. We have heard encouraging noises about wanting to be green and all the rest of it, but there is a huge amount of uncertainty that has been generated by a number of announcements that have been made of late, which have had the effect of undermining confidence. We hear that from investors continuously. The effect of undermining that confidence is that they therefore see risk and, if there is risk, they therefore have to price that risk. That therefore means the cost of capital increases, so the projects that we are seeing around, the cost of those has been increased directly by uncertainty.

Looking across the piece we do seem to have a confused picture. Oil and gas we know that we cannot burn all the oil and gas that we have identified in the ground at the moment, but the Government has just encouraged that by setting up the new regulatory body, which is tasked with maximising economic recovery of oil. We know that the tax breaks for decommissioning for oil and gas companies are worth about £9 billion a year. With shale gas the head of National Grid—Steve Holliday I think it is—mentioned last week that the most optimistic predictions for shale gas would deliver something like 10% of what the UK uses on a cold winter’s day, so it is somewhat of an irrelevance as opposed to being substantive.

Nuclear is clearly looking shaky at the moment, CCS has been killed off, solar FITs have been chopped, onshore wind has been discouraged, hydro is very effective but it is also struggling and, from my point of view, we therefore have to worry whether wave and tidal is next. That effect is then permeating with the confidence that some people are expressing, even in renewables, and if we do put that at risk I think that would be reckless.

Alistair Gray: Can I add to that? I don’t think there is any uncertainty over Government energy policy at the moment. Energy policy is set by Westminster and the policy is absolutely clear, as published in the 2015 Energy Act. That Act had three main sections and it was an investment in nuclear, an investment in shale gas and a retraction of renewables so, as far as I am concerned, the energy policy is very clear.

In terms of renewables, what has happened is DECC has issued a raft of consultations in terms of the changes in renewable support, bringing forward the closure of the Renewables Obligation from 2017 to 2016, which has been a complete shambles. There is still no clarity in terms of the legislation. We still do not know what the grace periods are, despite the fact that this effectively came into effect from 16 February but there is no policy direction. I do think the overall strategy is clear but some of the detailed policy—particularly the detailed policy associated with the subsidy regime for renewables—is a complete and absolute shambles at the moment.

Ian Johnstone: I do not have too much to add to what my colleagues have said. Our company works around the world and in any country you go to in the world if you mention marine renewables, and somebody is involved in marine renewables, they know where Orkney is. We are an island of 20,000 people. They know where Scotland is and they know that Scotland has driven that policy. We do a number of studies for countries where we compare policy in Scotland to policy in their own country to see how they can get to where we have got to. What we find now is that when they say, "Well, what about the UK Government? What is going on with the UK?" we have to say, "It is going". These guys are all looking us who are leading the way. So, South American countries, we work in Japan, Philippines, Indonesia and these are the countries we have been to recently, and all of these are still looking to us. That is not going to last much longer if we carry on the way we are at the moment and show that kind of uncertainty. We are leading the world at the moment but we are not going to be for much longer.

Q160 Chris Law: Following on from that point, as you said Scotland is a world leader for renewables but we have a UK policy that seems to be completely opposed to that. This may be taking a leap in the dark but would you recommend that energy policy be fully devolved to Scotland?

Ian Johnstone: With the support the Scottish Government has shown us I think that would be a good thing, personally. That is a personal view. I cannot say that is a no review because you have just thrown the question at me.

Alistair Gray: Yes, I would agree with that. It would be nice to have some clarity and some support for the sector and to remove that uncertainty because, without a doubt, it is the uncertainty at the moment that is undermining confidence to invest. I am involved in projects throughout the UK, and I have seen over the last six months, particularly, there are developers that are pulling out of the sector wholesale. They are closing down their operations completely. A wind developer I know well, based in London, had 15 active projects on the go of which 80% were in Scotland. They have closed them all down, apart from one, because of the uncertainty in the regime.

Neil Kermode: I would say competition is very healthy, and we certainly saw that some marine energy companies that had left the UK came back to the UK because they saw that Scottish marine as very attractive. There was something of a bidding war that broke out between Holyrood and Westminster and, at a time when DECC was saying it was impossible to pay multiple ROCs or five ROCs for marine, Scotland found a way to do it. Then in due course Westminster has followed suit, so I would not want to step into the political arena and say where it should be but as long as we are bidding upwards and not bidding downwards that is what I would encourage.

One thing that would be useful is if we could understand in a little bit more detail where these policy drivers are, and the Levy Control Framework is something that has been routinely quoted as saying, “We had to cut renewables because the framework was bust” or “The figures did not work”. DECC has consistently refused to publish it and that is certainly an issue and we are looking forward to seeing it. I understand it is likely now to be around the Budget, but the Levy Control Framework is something that will at least explain the working and, once you understand the working, you can then predict what is going and, therefore, you can take judgments as to whether it is time to invest. That is a piece of certainty that is certainly not there at the moment.

Q161 Chair: This Committee is certainly hoping to speak to the Minister, particularly on the levy and also for the next round of auctions for Contracts for Difference to see if we can secure that certainty. I am interested in the response that you gave here, because it does seem like the latest raft of policy announcements from the UK has had almost what you could describe as a catastrophic effect on confidence in the sector. Any Government must be aware of the impact of the changes of its policy. What I think we need to explore and discover is: is evidence getting back to the Government yet that this is having a profound impact and effect on confidence in the sector? It is disturbing to hear that people are pulling out of Scotland because of the lack of certainty here. Has this been communicated effectively to Ministers from the sector? Does it need us to make sure the Government are hearing that loud and clear? What are you doing to stress that this is having a big impact on the sector here?

Ian Johnstone: We have tried to evidence this and we evidenced it to Highlands and Islands Enterprise, our local development agency, through a letter from OREF. The chairman of OREF wrote a combined letter to them highlighting some of the issues. We don’t always just highlight the issues. We also try to look for solutions, and we came up with some solutions about how we might keep the industry going. I presented to you this morning the audit that was done for OREF on the energy situation in Orkney, and this is the policy document with some of the issues; this is the solution. The solutions are twice as thick as the issues, so we come up with our own solutions and I think that is important. We are not just asking Government to do things. We are asking Government to work with us to make these things happen.

Q162 Mr Chope: On that point, you say you think all energy policy should be devolved to Scotland. Are you looking at that just from your perspective or including the oil and gas industry? Do you think the oil and gas industry would really wish to be on its own at the present time?

Ian Johnstone: I think that is becoming a bigger political question and I need to be careful because I am representing OREF. I have my own very particular views but the issues I have tried to express—and I think a number of our members expressed this morning—the frustrations with things like Ofgem and the frustrations with the lack of clarity. We have had a lot of support from the Scottish Government. They seem to understand. Obviously, it is in their interest, they see that they are world leaders—Scotland is still a world leader with a policy, with the way it is going and the resource that we have—so I think that is far as I will go.

Alistair Gray: I am certainly not interested in making a political statement at all about this and I am certainly not having a go at Westminster by any means. We are in a situation at the moment with the subsidy regime. There are two types of subsidy that is given to the sector at the moment. One is the Feed-in Tariff and the other is the Renewables Obligation, the ROCs regime. The people that get subsidy from the Feed-in Tariff that is guaranteed for 20 years and it is inflation-linked. There is a link to RPI and it bears no relationship to any market forces whatsoever.

The Renewables Obligation is a different matter. The Renewables Obligation is paid at a much lower level but it is market-driven, so 50% of your income under the Renewables Obligation comes from the power market, from the wholesale power price. This morning the UK power price was £31.80 a megawatt, so that is the brown power price, which is 40% less than it was a year ago. We are in a situation at the moment with the laws of economics, supply and demand, that the UK power market is flooded with gas. It is flooded with oil, all of which is really cheap. It is primarily the gas price that influences the wholesale cost of electricity because most of the generation these days from gas generation. Consequently the market price is very low. That market price, if you are within the Renewables Obligation regime, you are affected by that market price, because 50% of your income comes from the actual power price or it is influenced through your power purchase agreement. You may have contracted that for three years, or five years, or 12 months, or whatever, but projects within the Renewables Obligation regime, there is almost ‘a perfect storm’ at the moment because the numbers of these projects that might be renewing their power purchase agreements are suddenly facing a 40% drop in the power price.

Chair: Thank you. We will leave that one there. Chris, did you have a last supplementary?

Q163 Chris Law: I wanted to turn it on its head and look at it optimistically. Should the UK Government change their energy policy on the publication of a report, would some of the projects have been halted, or cancelled, or stopped until the money is invested, would they be able to recover, or would we lose a significant amount regardless?

Neil Kermode: I would say that you will recover some elements, but you will not recover all of them in the short term, because confidence is extremely fragile. Having undermined it in many ways, some people will have been caught and, having been burnt like that, they will keep away from it for a while. Certainly, establishing confidence and having something that is dependable is absolutely critical, and that is a long-term objective. That should be an objective beyond an individual Parliament. That should be an objective for the nation in perpetuity. You cannot operate without a stable regulatory regime, and confidence that this is worth doing. I would say that anything you can do that means that there is clarity of purpose that we are going to get on top of carbon and drive it down, no matter what, is critically important because the alternative is pretty terrifying.

Chair: We will have to move on from there, if that is all right.

Q164 Margaret Ferrier: Just before I start, we heard this morning that obviously Orkney is ahead of the game and is seen as a shining light, I think it was described as. But obviously now you are exporting your expertise, and it is other countries that are going to benefit from this expertise rather than the UK. Certainly as a member of this Committee—and I cannot speak for every member—I would like to say that I will certainly be voicing my concerns when I go back down to Westminster. I am sure the whole Committee will do that, because it is very sad that you are ahead of the game one minute and then people lose confidence in it.

That is the way forward, renewables, not going back the way. I think we need some visionary Ministers down at Westminster. On to my questions, which again are about planning. First, we have received written evidence from a number of individuals who have concerns about the level of deployment of onshore wind technology in Scotland. It has raised issues about the cost to consumers of renewable energy and harm to the environment caused by some renewable technology as well. How would you respond to these concerns? That is to the whole panel.

Neil Kermode: In terms of the cost to the consumer, I will deal with that piece first. I was looking at SSE's bills. The breakdown of the bills basically is that about 9% of the consumer's bills is due to environmental and green activities. That is about £94 to £95 a year. At the moment we are all spending around about £100 a year in dealing with nuclear waste. The scale of what we are doing with the green levies is quite small compared with the other costs that are there. In terms of the antagonism shown towards renewables on occasions, I think that is vocal rather than actual on many occasions. Studies have been done. There was the wave 15 report produced by DECC in December last year: 76% of people are shown to be in favour of renewables and 5% against. That is 66% in favour of onshore wind, 73% in favour of offshore wind, wave, tidal, solar and all the rest of it, shale 23%, and nuclear 36%. I think what we hear quite often is vociferous and vocal opposition, as opposed to it being a true public opposition. It is something of a surprise when a publicity campaign was funded by DECC to encourage people to accept shale gas, when I am yet to hear the same sort of thing happen for renewables.

Alistair Gray: In terms of the wind sector, the visual impact is important and the way in which a site is designed is critical. There has to be a high level of community engagement and community consultation. That is an important part of it. Certainly the Orkney landscape could not take 500 megawatts of wind turbine, it just couldn't. I think most of us would agree that there is a balance to be struck. There is opportunity to build more but only more in the right location and in the right environmental conditions, in terms of bird strikes and all these other environmental issues.

Ian Johnstone: Yes. I don't have much more to add. A number of our members are wind developers, and we do see that there is still potential in Orkney to have more, certainly not 500 megawatts but, as part of the energy mix within the islands, to make the whole thing work. Yes, there are people who are vociferous against it. You get that everywhere. You are all politicians, and I was a local politician, and it is always the vocal minority that make the biggest noise. You have to remember that there is a huge silent majority, quite often, that are not quite the same, and they understand. Neil was talking earlier about the parts per million of carbon. We have to do something about it. People have to understand that we are destroying our planet, slowly but surely, and we have to find a way out. They compare us against oil all the time whereas oil is a finite resource and is full of carbon. It is not correct. All of us have to have a way of making this work. Orkney is doing its best, 107% of our electricity demand is coming from renewables at the moment. Okay, there are intermittency issues that you have noticed today but we have solutions to fix that.

Q165 Margaret Ferrier: Thank you very much. As Alistair said, I think it is about finding the right place to site them as well, and community engagement is very, very important. I had a local farmer in my constituency wanting to put up a wind turbine, and the planning was not guaranteed at all, and it was because the local community were so vocal in saying it was the wrong place. They did not want it there. It so happened that the planning was rejected. You have to weigh up against the siting of it and any other issues that the local people have.

I think you have answered my next question, you seem to have a higher level of engagement with people in Orkney and, as you say, the community has bought into renewables. My last questions is about planning framework and supporting the deployment of renewables technology. Do you feel there are any issues with the planning permission, the planning route? It is a similar question to what I asked the previous panel. Again, to all the panel members.

Alistair Gray: I could certainly foresee that there is an issue forthcoming in terms of: at the moment planning permission only lasts for three years. From my understanding, that is set by Scottish Government. It is not an Orkney planning issue; it is a Scottish Government issue. We know, as we talked this morning, that potentially our new cable to Orkney is not going to be here until 2022 or 2023, so that is seven years from here. You cannot apply for CfD unless you have planning permission. If I go for planning permission this year for a project that will only last three years. In that window, the cable is not going to arrive for seven years, so I would have to renew the planning every three years. There is a bit of a disconnect in terms of the planning approval process, which is set by the Scottish Government at the moment, and island-proofing that planning approval process that would be required to justify the investment of developer investment seven years ahead of delivery of a grid.

Ian Johnstone: Yes. One thing that may be worth mentioning, and certainly it is something that is mentioned to us—again, as I say, we go around the world a wee bit—is the planning policy as far as marine projects are concerned. Marine Scotland is the one place that you go through. The Scottish Government took the plan to have one regulating authority for the marine project. That is seen around the world as a very good thing. A number of other areas have various different departments that they have to get different permissions for and different licences from, and that slows the process down and makes things difficult. That is one small point I will mention.

Q166 Mr Anderson: This is for Neil. We learnt this morning that despite the fact that this country led the way in terms of wind technology that, ultimately, Alistair and his colleagues have had to turn to the Germans for getting the equipment. Is that likely to happen if and when the tidal stuff starts moving forward, or do you see the possibility to have at least a British-based, if not necessarily a Scottish-based industry building machines for the future?

Neil Kermode: There are several bits about any marine project. There is the consenting and applying for things, and getting the regulatory processes right, the sort of stuff that Ian’s company does. There is then the building of the machines. There is then the operating of the machines, and then finally decommissioning, but, as I said, the decommissioning is pretty insignificant. The building of the machines: they generally tend to be quite big and bulky bits of kit and I think it is almost inevitable that there will be some sort of fabrication or some assembly activity near the site where they are going to be deployed. Whether they will be British companies building those machines, I am not sure. I doubt it somehow. We have already seen a couple of majors exit the market with this. I think the manufacturing of it may be UK, but it is touch and go. I absolutely know that the maintenance and the operational maintenance of this stuff will have to be done by the people who are near the water in which these things are situated. I am absolutely sure there is an operation of maintenance activity that will go on and be enduring. I think we can absolutely get our claws into that; the same with the deployment, the licensing and the planning side of things. Manufacturing: British industrial policy does not fill me with hope.

Q167 Mr Anderson: Who is doing it out in the world now then?

Neil Kermode: At the moment we have seen people from nine different countries come and test here. There were a couple of Scottish companies, one of whom went bust just over a year ago, another one is in administration at the moment, a couple of others are at a smaller scale. We saw Tidal Generation Limited bought by Rolls-Royce and then sold to Alstom. We have seen items moved around a little bit in the corporate portfolios. We are seeing France make some very strong moves. They have both strong grid and also a lot of overseas territories that are going to distinctly benefit from tidal energy. We are seeing other countries make some very strong plays. I have to say that, at the moment, people are still coming to talk to us because we are the ones who know how to build test centres, we are the ones who know how to get the consents and we are very much in a go-to place. I think it is up to us to keep at that, and that will be driven by home market. Whether it says, "Made in Birmingham" on the side of the machine or whether it says, "Made in Burma", I don't know.

Ian Johnstone: Can I just say there is a local company, of course. There is Scotrenewables, who have a tidal device. Their device is being built at the moment in Harland and Wolff. The co-founder of that is a local guy that went through Herriot Watt University few years ago. Also, we have manufactured a wave device. You can still see some of them. They are not hugely successful but we did have a manufacturing base in Stromness here for one of the projects. It is not to say it cannot happen. I do agree with Neil about the majority of the ones we have seen before. The Scottish Government, and to a certain extent the UK Government, have been pretty active in trying to encourage the construction in some of the bigger plants, and these are ex-naval yards and so forth. Obviously the ship building industry can feed into that, I am sure, on a Scottish scale, and probably a national scale as well. We do have the expertise, it is just encouraging it to happen.

Q168 Mr Anderson: Yes. So it is not the fact we could not do it? We have the skills, we have the technology, and it is probably the will, but also the finance?

Ian Johnstone: Yes.

Neil Kermode: Yes.

Q169 Mr Anderson: Last one from me then, probably. Alistair, when you spoke before about the energy statement last year, the 2015 Energy Bill, you were right. What it said is we are going to have double spending on energy innovation and bring down the cost of decarbonisation. One of the ways that the Government are saying they are going to do that is by investing new technology in Hinkley Point, which will reduce the carbonisation. Do you think that will get in the way of the sort of technology that you are involved in, that Neil is involved in, making progress?

Alistair Gray: I do not think it will get in the way, particularly in terms of nuclear as a sector, because I do think within the UK we have to have a mix of energy, whether that is from gas generation, nuclear generation, or renewable generation. We have a baseload requirement that has to come from reliable resources. We have to have a mix of technologies. I would be very surprised if Hinkley Point was delivered on time and on budget. It is a huge investment, enormously risky, I would imagine, on behalf of the Government. I think they have guaranteed £95 per megawatt of power for 30 to 35 years, so it is a very expensive project. EDF are clearly already having second thoughts about the investment themselves anyway. Let us wait and see.

Q170 Mr Anderson: To all of you: do you think the Governments need to take a more active role in supporting new low-carbon technology?

Neil Kermode: Yes. We do not have an alternative, because the alternative is simply unthinkable. If we end up with the sort of climate change that we are likely to see it is going to be catastrophic. It is going to simply dwarf anything that we have been experiencing today. It is absolutely the Government's role.

Q171 Chair: Thank you for that. This Committee are obviously keen to come to Orkney, particularly EMEC, which we are now going to visit once we have completed these final questions. There are a number of places that we could have possibly have gone. Do you work across island communities when it comes to this thing, and is there a commonality of interests and issues? We have Shetland to the north, we have the Western Isles, and we know that they all have their particular concerns when it comes to good connection and getting renewables on tap. Is there a forum that you get together, and is there, first, commonality of interests and concerns across the island communities?

Alistair Gray: I think there definitely is a commonality of interests and concerns. I have come across, absolutely, Western Isles developers, funders, and Shetland guys as well, and their main concern, certainly at the moment, is grid, exactly like ours. Certainly their other main concern is the lack of clarity on CfD, because they cannot justify the investment in grid if they have no—

Q172 Chair: Just so we do not lose this, you talked about a possible CfD auction for Orkney. Is that the same for the rest of the isles, or is this a special case?

Alistair Gray: Yes, and islands.

Neil Kermode: It is islands. It is islands.

Q173 Chair: All the islands; that is how it is going to work?

Alistair Gray: Yes. Within the CfD framework there were always different pots for different technologies. Pot one was awarded for existing, mature technologies, like wind. Pot two was for the more developing technologies, offshore wind and marine renewables. Kind of included within the pot to allocation was a thing called remote island CfD. That is what has been going through the European Parliament for approval.

Q174 Chair: We are very much looking forward to seeing EMEC when we are done, is there anything that you can think of that the UK Government could do to further assist the development of this? Is it the Science and Technology Committee that suggested that this was put in place and was secured? Given that we have heard quite a lot about this being world class and as an emerging and new technology, what more do you think could be done to support and enable it?

Neil Kermode: I think making sure that there is clarity throughout the Government that we need to make this thing happen. It is recognising the economic value that this will have. Although I have been banging on the carbon side of things, it always surprises me that we do not recognise that this innovation will create something where there will be tax taken. This will be a new industry that will support a huge amount of activity, and if it is ours we will licence this overseas and keep repatriating wealth, as we have done through a lot of British history. I think it is about trying to polarise the Government and/or pass a Government behind this and make it a major press and a programme to realise that this is value that is going to be created in the long term by sticking with marine. It is not just purely an environmental issue. This is fundamentally something that can support the economy, and it gets you the environmental outcome, and it even improves Britain's reach.

Q175 Chair: I suppose going back we remember all the 1970s and 1980s developments, and the "Local Hero" film, when it came to the possibility and potential of tidal and wave. Is there any reason why we have lost that, where we have started to look into this as a way forward, and all of a sudden it was left, and now we are back to where we are?

Neil Kermode: I think historians have to look back at the changing Government policy that happened at the time, because at the time we had Berger Hill going on, there was a big flurry of activity, in my recollection, that was really driven by the first oil crunch when we realised that we were really vulnerable and if somebody turned the oil taps up we would be up the creek. At the moment 60% of our gas is imported, and we are in that same place, but nobody has leaned on the taps at the moment. I am quite sure that if we did have that same sort of shock we would run around in circles trying to find a way to fix it. It would make far more sense if we make sensible investments to actively design a new energy system now while we have the luxury and the time to do it, rather than doing it in the cold and the dark.

Ian Johnstone: Can I just add a couple of points on the last two points you have made? First, as far as the three islands working together, in my previous job, the same job that Councillor Stockan has now, we met five energy ministers at a UK level in different guises, and three of those times we went combined together with the other island groups to try to hone the point that we needed cables and we needed clarity from Ofgem. A lot of the points we have said today, we had them then. We do work together on that. As far as what we could do to support EMEC, it is very difficult for Neil to say, being the managing director of EMEC, what they could do, but I do think the idea of Orkney as a living laboratory, or EMEC being able to test the storage issues that could come from that, that could be a real advantage to the whole country. It would be a great advantage to our community, that would be great for Scotland, but equally I think it would be good for the United Kingdom. You will probably hear when you go to EMEC how many people come there just to see what is going on, as you are today. It is in probably 300 or 400 a year that come to see that, and these are from all over the world. That is a huge advantage, and if we could get the storage thing cracked, then that would make a big difference.

Chair: We are very, very grateful for that. It has been fascinating, our day here, just listening to some of the issues and concerns, and what you have all done in terms of having produced a world-class industry here. We are really grateful for your evidence. If there is anything further—again, as we said to the previous panel—that we have maybe overlooked and not emphasised enough, please give us any further evidence in the form of a written submission. It has been great.