

Scottish Affairs Committee

Oral evidence: [Renewable energy in Scotland, HC 51](#)

Monday 12 July 2021

Ordered by the House of Commons to be published on 12 July 2021.

[Watch the meeting](#)

Members present: Pete Wishart (Chair); Mhairi Black; Deidre Brock; Wendy Chamberlain; Alberto Costa; Jon Cruddas; Sally-Ann Hart; John Lamont; Douglas Ross.

Questions 185 - 220

Witnesses

I: Rt Hon Anne-Marie Trevelyan MP, UK International Champion on Adaptation and Resilience for the COP26 Presidency and Minister for Energy, Clean Growth and Climate Change, Department for Business, Energy & Industrial Strategy; and John Waldron, Policy Lead for Renewable Electricity Futures, Department for Business, Energy & Industrial Strategy.



Examination of witnesses

Witnesses: Rt Hon Anne-Marie Trevelyan MP and John Waldron.

Q185 **Chair:** Welcome to the Scottish Affairs Committee and part of our inquiry into renewables in Scotland. We are delighted to be joined by the Minister, Anne-Marie Trevelyan. I will let her introduce herself and give anything by way of a short introductory statement. If you can, Minister, please introduce your colleague at the same time.

Thank you for your attendance a few weeks ago at our extended Scottish Affairs Committee when we were looking at preparations for COP 26. It is great to see you back again at Scottish Affairs. Minister, over to you.

Anne-Marie Trevelyan: Chair, thank you very much indeed for having me back. I am with you today and I have brought John Waldron, who is one of my team from renewables. Any difficult questions I will defer to him on the basis that I would much rather you have accurate and precise information. Hopefully, you will not tax us too hard in the meeting.

Renewables is a key part of my brief, but it is such an all-encompassing part of the challenge we as a nation are taking on now that we have net zero in law. Indeed, a few weeks ago, I put into law the Sixth Carbon Budget, which demands that we effectively speed up at least the supply side of our decarbonisation from 2050 to 2035. The renewables sector is a critical part of our ability to achieve that.

I am looking forward to having the opportunity to talk with you all today about Scotland's already substantial commitment and delivery into our renewables sector and also how it can continue to do so in the years ahead.

Q186 **Chair:** Thank you very much for that. We are all enjoying this inquiry. We particularly enjoyed a trip to Orkney, where we looked at some fantastic marine potential. We have a couple of questions for you about that trip and some of the things we explored and discovered.

First, I am interested to explore some of the relationship issues with Scottish Government colleagues. We know that we have distinct responsibilities in Scotland. Our approach, as I think everybody would conclude, is roughly joined up and similar in intention, particularly around net zero.

Could you talk a little bit about your working arrangement with Scottish Government colleagues and perhaps how initiatives are co-ordinated, and maybe touch on some of the funding-related issues on renewable energy?

Anne-Marie Trevelyan: We absolutely recognise the important role of all the devolved Administrations. Scotland is a substantial one of the three in contributing to the expansion of renewable power in the UK and we have a strong relationship.



HOUSE OF COMMONS

At an official level, my officials work closely with those both in the Scottish Government and in the Scotland Office to ensure that Scottish interests are reflected in our funding decisions and, indeed, in how we move forward together.

Scotland has benefited significantly from the Government's support for renewables. For instance, over a third of the projects supported by the Contracts for Difference scheme are in Scotland, which is amazing. More than 1,000 small-scale hydro installations are built into the feed-in tariff scheme, again the majority of them in Scotland. Scotland has great geology and geography to assist with the renewables sector. It has been a fantastic success story so far to see the commitment that developers and the Scottish Government have been able to make alongside the UK Government to progress that.

At a ministerial level, we work closely with the Scottish Government and the other devolved Administrations through existing forums. I host the net zero interministerial group and we meet on roughly a quarterly basis. We are trying to meet more often at the moment, despite the challenges of elections and diaries between all of us, because we feel that there is a pace to the net zero programme that we want to push on across the four nations as effectively as we can. We meet regularly and will be meeting again probably in August.

Q187 **Chair:** Talk us through a little bit more about how these would work in practice. There are different targets for net zero with the Scottish and UK Governments. Does that complicate matters at all, or can you easily and readily work through or around that if necessary? Talk a little bit about the differences in the timelines and how they are accommodated within how you work in your Department?

Anne-Marie Trevelyan: It is not a bad thing. We are all moving to net zero by 2050. That is a hard line, if you like, but it is how we get there. Clearly we do not know how far each technology will take us, or how new technologies we have not invented yet or have not commercialised yet will help to reach that goal. We have each set a climate goal at a national level, but the net zero for the Government, of course, is for the whole of the UK. It is incumbent on all four nations to come together and look within the detail of their own nation where they feel they can make progress.

A good example is the hydrogen challenge. We have set five gigawatts of hydrogen by 2030 as an initial start. Scotland has set a four-gigawatt challenge. It is fantastic if Scotland will do four out of five gigawatts. Awesome. But that says to me that Scotland can see a lot of potential and the opportunity to draw in investment and developers. We have seen an initial target. I will be thrilled if we smash that five gigawatts and we have 10 or 15 by then. Who knows? The technology is still in that demonstrator phase. We can see that target as achievable, but we hope, clearly, because hydrogen will be a key part of our solution for



HOUSE OF COMMONS

decarbonising, if Scotland's is four, then everyone else's together is even greater than five gigawatts.

Those targets at the moment are to help drive forward how we as Governments set financial support and regulatory frameworks and also drive industry to look to where those investments can most effectively go for them to be part of that solution. We are all driving this forward together and encouraging each other to find the most effective and impactful solutions, depending on each nation's particular offer.

Q188 Chair: You mentioned the fantastic renewable resource that we have in Scotland with the longest shoreline in Europe. Some of the most challenging weather conditions could be some of the most useful when it comes to renewables.

Could you talk a little bit about the UK Government's assessment of what we have in Scotland and what you are doing to support the development of a lot of these renewables? Is there an assessment of how much Scottish renewable energy can help to achieve the UK's net zero targets?

Anne-Marie Trevelyan: As you say, Chair, Scotland does have fantastic geography and weather patterns in terms of various wind and water resources and indeed, to a point, solar. Those wind resources particularly, which Scotland has harnessed from early on in the green industrial revolution, are fantastic to see.

If you look at the Contracts for Difference funding rounds and the way those have developed, a huge proportion in terms of the onshore wind of course went to Scotland. The Government centrally are both technology-agnostic and location-agnostic. We set the framework and we invite investors and the local planning environment to come together to put forward a proposition that works. The Contracts for Different framework, which underpins the ability for developers to make those hefty investments in renewables, reaches widely across all the sectors. The Scottish opportunities have been well taken up to date and I hope will continue to be.

Q189 John Lamont: Good afternoon, Minister and Mr Waldron as well. I want to ask about the CfD funding and how it is being used to meet the renewable energy commitments, particularly to align with the net zero targets, and a bit more detail on what you have already been saying, please, Minister.

Anne-Marie Trevelyan: Allocation round 3, in 2019, was the largest auction we had held. There were nearly six gigawatts of capacity awarded to a range of renewable technologies, including almost 750 megawatts of offshore and remote island wind deployed in Scotland, which is fantastic.

In the next round, AR4, which will open in December, we are aiming to, hopefully, double the amount of renewables. It will be open to established technologies, including once again onshore wind, for which the majority of known projects are located in Scotland. We have a



reasonable expectation that successful projects into AR4 may well include Scottish ones, which will help us to keep on track and move forward on both the UK and, of course, the Scottish Government targets.

Q190 John Lamont: What consideration are you giving to best value, not just lowest cost, for the next CfD allocation round, taking into account the net zero targets?

Anne-Marie Trevelyan: That is such an important question, John. Because of the way the scheme is set up, both decarbonisation and consumer costs are statutory considerations within the Contracts for Difference scheme. Delivering renewable capacity at low cost remains critical because of course that protects consumer bills.

In the context of delivering on the Sixth Carbon Budget, which is now in law, and net zero, we consider a wide range of factors so that we ensure that the CfD auctions deliver that best strategic value. This is not limited to which technologies can deploy quickly because, clearly, that helps us to move towards meeting that target, but also includes where there might be potential for cost reductions over time and where possible produced generation, which is correlated with existing capacity.

If you look at both wind and solar and the dramatic journey they have been on through the CfD processes to date, solar in particular is a mature technology now, which is extraordinary to see. CfD is helping to give that consistent funding stream to ensure that developers can make those capital costs and to help them through the operational life of the asset.

We are helping to drive a long-term shift, which is good for the UK taxpayer and, if you think of our export markets, is also part of that longer-term picture. We want to be world leaders and take our technologies across the world to help other countries decarbonise.

Q191 John Lamont: Minister, we had some evidence from a tidal energy company that it is not able to access the CfD funding. What are you doing to find other ways to support projects and technologies like the tidal sector that maybe cannot access as much funding as other projects from CfD?

Anne-Marie Trevelyan: At the beginning of 2020, we introduced the Smart Export Guarantee to ensure that small-scale generators of eligible technologies have a route to market for any electricity they export to the grid. Ofgem will produce a report this summer setting out the levels of deployment that these tariffs support and then we will consider whether barriers to deployment still need to be addressed. When it has had its first 18 months, we will be able to continue to monitor and assess the available deployment routes for projects and technologies that may now already, and indeed might in the future, play a future important role in that transition to net zero.

One hopes there will be more novel large-scale technologies. Wind was once, and it is fascinating to watch that development. We continually



review new evidence to assess at what point new technologies will develop the ability to have significant potential to help us to deliver on those net zero targets. For example, in allocation round 4 coming up now, we have a new category for floating offshore because the technology has matured to a level where we can see it is ready to be deployed at scale. This will be a continuous journey as we keep progressing, investing in mature and stable technologies and also watching out for and working together across the piece from our catapults to industry to help the Government make the best use of their frameworks to drive that next generation.

Q192 **Mhairi Black:** Thanks, Minister, for giving us your time. As the Chair said at the start, we had a Committee visit up to Orkney. A striking bit of evidence for me was when they spoke about the comparison between the UK and Denmark on tidal energy. They went into detail and explained how the UK missed a huge opportunity when we chose to invest in what was quick and cheap. Denmark decided to go with it and invested in the long term. Because of that, the tidal energy of Denmark is now worth €7 billion.

How can we be sure that as the UK we are not making the same mistake with marine technology as we did in the 1980s with tidal? Has there been any conscious effort to make sure that we invest sensibly, so to speak?

Anne-Marie Trevelyan: That is a good question. I am going up to visit during recess. I am looking forward to seeing it in action including, no doubt, as you have set out, issues regarding development to pace or not so far.

Across the piece, the Government have a long history of supporting the development and deployment of wave and tidal in the UK. We have provided sustained targeted support to help the wave and tidal stream sectors particularly to move from that initial concept to prototypes and the first arrays.

Since 2003, a number of bodies across the Government have provided innovation funding of about £175 million to the wave and tidal sectors. Now, because of that early concept investment, they are mature enough and are eligible to participate in the Contracts for Difference scheme. So far, nine tidal stream developers have received funding from BEIS under what was the Renewable Obligations Scheme. In addition, one tidal stream developer has received funding through BEIS's Energy Innovation Programme, which is great.

In 2008, going back a way before you or I were here, the Government undertook a two-year feasibility assessment to explore whether there was a strategic case to pursue a large tidal barrage across the Severn Estuary, which would provide something like seven gigawatts of installed generation capacity and so would have been a huge part of our mix. Interestingly, the study concluded in 2010 that because of both the high costs of developing the project and the scale of the potential



HOUSE OF COMMONS

environmental mitigation required, at that point, there was not the overriding strategic imperative for the Government to develop a Severn tidal barrage.

This is an interesting challenge. That was in 2008, 15 years ago. With the balance of risk, the complexity of the technology and all those issues drawn together, the decision was reached that, at that point, it was too hard. Interestingly, while that feasibility study came out with a perfectly valid conclusion at the time, it did not preclude independently financed projects. The Government continue to be happy to consider well-developed projects for harnessing tidal energy in the bays around our coastline.

One of the challenges with this is that this is a journey and we need to develop the technologies and build on all the various renewables that are available. We are not nearly finished. When we look back—when you are still here, and I am happily retired—and we see how many types of renewable technology we use, it will be much more extensive than it is now for lots of reasons. Each blocker needs to be worked through and balanced out.

Q193 Mhairi Black: Has there been any assessment of the conditions of Government funding or how these conditions could affect the uptake of funding?

Anne-Marie Trevelyan: Absolutely. In 2017, the Government published the Clean Growth Strategy, which had a strong underlining of the need for renewable technologies to demonstrate both ongoing cost reduction and the ability to compete with other, presently cheaper forms of low-carbon generation. We will continue that constant consideration and look at wave and tidal technologies in the light of that strategy. There is an iterative process here as we realise, and we have upped our game and our challenge to ourselves about how quickly we generate clean energy, and how much we need to generate, which will continue to drive choices.

We had a recent call for evidence again on marine technologies. John might be able to answer more on the detail of that for you to give you an idea of this continuous review as technologies evolve. I do not know, John, if you wanted to come in on that question about the marine.

John Waldron: Yes, Minister. Sorry about that; I had some technical issues here.

Since the call for evidence on marine technologies, we have gone on to announce a target for floating offshore wind of one gigawatt. We are also looking into the other technologies discussed in the call for evidence and are analysing those responses. We are looking at how we can support those technologies if they can represent value for money.

Q194 Mhairi Black: Forgive me if I missed it, John. Did you say when the results of that call for evidence will be published?



HOUSE OF COMMONS

John Waldron: I do not have that to hand right now, so I will have to get back to you. We can write to you with more information on what is coming following that call for evidence for all the technologies covered by it.

Q195 **Mhairi Black:** That would be a great help. Thank you very much. To follow on from that, then, have the UK Government done any work or do they have any figures as to how much UK exports of wind energy products and services are worth?

Anne-Marie Trevelyan: That is a big, chunky question, which probably in large part you ought to direct to DIT because it focuses on that. I am happy to ask them to try to give you more detail on it. I do not have the detail.

That is interesting. Of course, it is one of the important parts of what we want to do as we invest in developers. We want to see more UK supply chain. There is a huge opportunity there to drive forwards, and not only to develop our renewable energy sectors here domestically but to work in partnership with other countries. Some interesting work goes on with a number of companies around the world to make sure that the UK is seeing that benefit.

I will make sure that DIT provides the Committee with whatever that state of play is at the moment.

Q196 **Mhairi Black:** Excellent. In the evidence we have heard, a concern has come across that because it is not cheap to invest in marine technology particularly now, the options will be limited for the Western Isles, Shetland, Orkney and other potential areas where this could be a massive resource.

You were describing how the Government have their process and are open to communities and organisations and companies coming forward with plans. It might be difficult to come up with concrete plans when in actual fact you need the investment to begin with, if that makes sense. Has that been taken into consideration?

Anne-Marie Trevelyan: Yes, but that is the point. Within the different pots for Contracts for Difference in allocation rounds, it is not all at the same strike price because we know that developing technologies will, at this point in time, be relatively more expensive to develop. When people were first bidding for Contracts for Difference for wind, it was over £100 per kilowatt hour and now it is down in the £40 to £50 range. As technologies develop and grow in capacity, the price has come down.

The different pots will have different pricing allocations. It is not that you will have to be as cheap as wind to develop a new technology. We will be looking at those across the board so that where investment is coming forward that has planning support, a clear investment plan and a good supply chain, all of those things will be fed into the mystery that is the Contracts for Difference machine to drive forward more technologies.



Q197 **Chair:** I am pleased you are going to Orkney, Minister. I am sure you will enjoy yourself as much as we did. There are some fantastic things to see.

If you do visit, you probably will see EMEC and the Orbital O2, which is a fantastic new bit of plant they have to harvest some of the tidal resources, working around Orkney. This innovative, ground-breaking resource is funded by co-funding. Should the UK Government be investing heavily in this, given that it seems to be pretty much the way forward in terms of getting access to renewables?

You will probably also hear their great concern that the flag we will see appearing first on the islands around Orkney is not the UK flag but the Danish or the Canadian flags. Spanish vessels are already appearing. Do you have any great fear that we could be left behind when it comes to harvesting this fantastic resource we have in Scotland's waters?

Anne-Marie Trevelyan: We will not be left behind. As you say, there is great technology. There are great scientists and businesses there already. A whole number of UK companies are pushing that innovation in the blue energy sector both domestically and internationally as well. That is important. We are seeing them reaching out and looking for those commercial opportunities. Hopefully, to Mhairi's question, DIT will be able to give you more information on the commercial opportunities that it supports, which allow the exports of those UK companies' technologies more widely. We look forward to seeing, hopefully, some bids coming through in the CfD round at the end of this year.

Q198 **Deidre Brock:** Good afternoon, Minister and Mr Waldron. Mr Waldron, you mentioned a target for offshore wind of one gigawatt. I was interested to hear you mention that because I have spoken to offshore wind project developers who tell me that the percentage of Scottish-based offshore projects awarded through the CfD has decreased with every round—it was slightly less than 40% in round 1, down to less than 30% in round 2 and less than 10% in round 3—and that this year CfD could see no Scottish-based projects winning through at all. The higher cost of transmission charges for Scottish projects makes their bids less competitive than projects based further south.

What work has BEIS done to look into the volatility in transmission charges? Also, what discussions have you had directly with renewable energy organisations, both large and small, about transmission charges in Scotland?

Anne-Marie Trevelyan: Both my ministerial colleagues and I—and of course our officials—meet a range of renewable energy organisations and businesses on a regular basis. The topic of transmission charging is absolutely raised. I recently had a meeting with a Scottish renewables roundtable in May and it was raised. I was talking to some of Western Isles Council this morning and, similarly, it was raised. Stakeholders have concerns about the current volatility of transmission charges and indeed whether the higher charge for generation in Scotland compared with generation across the rest of Great Britain might deter investment.



I have discussed this and raised these concerns a number of times now with Ofgem, which of course is responsible for the transmission charging arrangements and the frameworks as the independent energy regulator. From my conversations, I am comfortable that Ofgem has definitely noted this as a potential issue now and also does recognise the critical importance of renewables in achieving net zero. It is at the moment considering whether the current transmission arrangements are right for the future and it is looking at the volatility of those transmission charges as it thinks about how this goes forward. Having set that net zero challenge into law, we have to think in a more holistic and more speedy way to make sure that we are not creating blockers anywhere.

Q199 Deidre Brock: Indeed. Does BEIS set the parameters for the CfD rounds? Is that right? It could incorporate within those some sort of appreciation that makes it a bit more competitive for projects based in Scotland.

Anne-Marie Trevelyan: Transmission charging sits within Ofgem's remit. It is independent for a reason. We let it do its job. But as I say, Ofgem is considering whether the existing arrangements now work for what is required going forward. We are supportive of the fact that it is having a proper review of this.

The reality is that generation projects in Scotland have not been deterred by transmission charges. We have nearly seven gigawatts of wind generation already connected to the transmission network or under construction, which is fantastic, and there is a further nearly 12 gigawatts awaiting consent. The investors and the developers absolutely see, to the Chair's point, the natural resources that the blow across Scotland's hillsides are worth investing in.

Q200 Deidre Brock: We have heard from witnesses concerns that the transmission charging scheme is having an impact on developers choosing to base their projects in Scotland or otherwise. Claire Mack from Scottish Renewables said, "We should be looking to harness the best of resources as quickly as possible in order to achieve our net zero target".

Why can BEIS not make it easier for projects in Scotland to be developed? We have heard about the great potential for harnessing all the renewable energy that Scotland can produce. Should BEIS be trying to make that as easy as possible?

Anne-Marie Trevelyan: As I say, the grid investment and the transmission challenge is one that Ofgem understands. It has been causing concerns. I know that many businesses share their views with Ofgem as well, and that is quite right and as it should be. I look forward to the review and how it proposes to look at this next stage in our net zero journey in a different way.

Q201 Deidre Brock: Mr Waldron, I may have this wrong, but I thought BEIS set the parameters for the CfD rounds. Is that not correct?



John Waldron: That is correct. The transmission regime is a matter for Ofgem. It is outside of the CfD. The CfD itself does not include locational signals because we want to allow each technology and each location to compete against one another. But we have undertaken a call for evidence recently on the future of the CfD and how it can integrate renewables into the whole system. We have to take the best location for the system into account as well as where different projects will be competitive with each other. At the moment, it is solely for Ofgem to set those transmission network charges.

Q202 **Deidre Brock:** Could something be put into those parameters that perhaps balances out the cost of transmission charges for projects based in Scotland? Is BEIS actively considering that in an attempt to help those projects that wish to be based in Scotland? It is where a lot of the energy is created.

Anne-Marie Trevelyan: To that point exactly, that is why—all the way through, and before my time—there has been constant learning at every allocation round and thinking about not only how it is done but also the new technologies coming in. This is an iterative process.

As John said, we will be looking again and thinking in the next round about where we want to get to, not only because we are going at pace with the most effective delivery of renewable energy, but because we are making sure that there are those consumer cost impacts considered as well. There will be another review and, as John says, we have started that process again so that we can try to move with the times. As the technology moves, we move with it. It is not set in stone. We are not running the CfD as we did in allocation round 1. It looks quite different now. It is a continuous activity. We have set that in motion for that next wave.

But as I say, the Scottish investment commitments have been extensive and successful to date and I hope that will continue.

Q203 **Deidre Brock:** Minister, you talked about consumer cost, which has been the guiding principle for Ofcom up to now. The net zero targets increasingly, in the view of people throughout the UK, outweigh the consumer costs that Ofcom has hitherto been taking into account.

Where do you sit on that? Does the net zero target now outweigh consumer cost issues, in your view?

Anne-Marie Trevelyan: They have to continue to go hand in hand, because we have to make sure that we deliver a just transition. It is not acceptable for the Government to do anything at any cost. Finding the right way forward that ensures that the most vulnerable do not find themselves caught in unreasonable price spikes is wrapped together with making sure that we get the most effective renewable energy delivered, alongside balancing our grid and a whole other part of this big Rubik's cube, as I think of it, as we make sure that we get all the constituent



parts moving together. You cannot pull a piece out and stick it back in. You have to do them all at once.

Q204 **Deidre Brock:** You will be aware that transmission charges in Cornwall are negative and people are paid to connect to the grid, and in Scotland transmission charges can run to many thousands of pounds—even millions, annually. I would be interested to hear your thoughts on the justification for that. Increasingly, it seems to developers in Scotland that the justification no longer exists and they want to see some action on it.

Anne-Marie Trevelyan: It is an important point that you raise there. To get some clarity on that, transmission charges are negative for generators in Cornwall, but charges are higher for demand consumers in Cornwall compared with demand consumers in Scotland. Transmission charges are charged on a cost-reflective basis and in general—even though it does not go with the geography, if you like—electricity flows in Great Britain from north to south. Siting a generator in the south minimises the transmission investment required because it is closer. It is a physical thing. That saves GB bills across the piece and saves money overall. In contrast, siting a generator in Scotland requires more transmission investment, hence the existing level of charges.

To your point, you are exactly right. That is why Ofgem is looking at this again and thinking about where the need for more renewable has now increased and we want to do so at pace, how we balance out the understanding that there is a capacity to create renewable energy from Scotland. We want to get the best of that to help us meet net zero, but there is a cost. It is a constant balance between the two.

The reality is that moving electricity has to have lots of physical infrastructure and, if it has to travel a long way to where it is needed, it means more infrastructure investment. There is a continuous balance, which is why Ofgem is looking at this again to come up with a system that tries to balance that better. We await the review.

Deidre Brock: There is quite a lot of talk about the pooling and sharing of resources within the UK. It does feel on this one that Scotland is bearing the brunt of it. I will be interested to see what further action takes place and what we hear from BEIS and Ofcom going forward. Thank you.

Q205 **Sally-Ann Hart:** Good afternoon, Minister. From our evidence sessions and from when we went up to Orkney—which you will love—it was clear that the grid capacity and the cable network may need closer attention and investment, particularly in the peripheral areas with our renewable energy sources such as around Orkney.

How are the UK Government currently making the necessary investments in the grid for the UK to meet its net zero targets?

Anne-Marie Trevelyan: Thanks, Sally-Ann. Those decisions on good investments are a matter for Ofgem as the independent regulator.



HOUSE OF COMMONS

Clearly, electricity networks are key enablers for net zero as they provide the capacity to cater for the anticipated increase in demand that we see coming because of greater use of low-carbon technologies. Ofgem is regulating and, as I said, looking at this again and thinking about how we will regulate that electricity network set of companies. It does that through a price control system called RIIO. We support the work that it does ongoing with those electricity network companies to think about how they invest and ready themselves for net zero with the challenges of this changing balance and an increase in the quantum of electricity that you and I will all be wanting to use.

Q206 Sally-Ann Hart: Is the RIIO system the type of assessment that is being used to anticipate network need and invest in the grid in areas that take into account renewable energy potential? Is RIIO used for that purpose?

Anne-Marie Trevelyan: You need to get Ofgem to explain RIIO to you properly. I will not do it properly. John might be able to better than I. It is a way of working out the requirements and how the investment pricing will work between them all and their relationship with Ofgem, and how those costs are passed on to the consumer. John will correct me if I have not explained that clearly.

The key point is that in some of the, as you say, areas where there is great renewable potential but that are at the end of the line, if that is the right way to describe it, how those transition links work is a decision for Ofgem and SSE Networks within Scotland. They are much better placed to understand the detail than I could ever be, I am afraid, to offer you that.

The Government do not get directly involved because we do feel that the stable, independent regulatory regime provides the best long-term way to make sure the right significant investments needed are made because they can look across the whole piece.

John, I do not know whether I have explained that properly or whether you need to improve on my explanation?

John Waldron: No, that was explained well, Minister, and the key balance is delivering the network investment required for net zero and maintaining affordable costs for consumers. The electricity system operator also provides advice to Ofgem and works with the network companies to formulate the package of investment allowable under RIIO. That definitely looks at the needs on the network to unblock particular bottlenecks, especially with the future targets we have and the future needs we have for more renewables and more low-carbon power.

Q207 Sally-Ann Hart: To clarify, RIIO is looking at the work that needs to be done to ensure that the grid will be sufficiently strong to support the pipeline of renewable energy projects coming through. RIIO looks at that. Ofgem is responsible for that.

John Waldron: Yes.



Anne-Marie Trevelyan: Ofgem looks at the whole piece and then the network companies work with Ofgem to work out the investments they need to make and how they are financed, so that it does not cause undue cost to consumers.

Q208 **Sally-Ann Hart:** Do the UK Government have any input to say, "We want you to look at what needs to be done on a long-term scale," whether it is five years, 10 years, 15 years or 20 years? Do you give direction at all, or does Ofgem take full direction and control over that?

Anne-Marie Trevelyan: We have a good relationship but, as you say, we have this major transformation of our network required with this exponential growth in renewables to move to net zero. Ofgem has not missed that we are doing this. It is with us on this. Its system for the network operators will help to facilitate that.

A great example I was talking about with someone the other day is the proposed Eastern High-Voltage Subsea Link from the east coast of Scotland to the north-east of England. I know about it because it comes in near me. This great piece of infrastructure investment will increase grid capacity by nearly two gigawatts. That unlocks huge further renewable investment in the sense that we can then move that electricity to where we need it. It will be the largest electricity transmission investment project in recent history when we get to it.

It is about thinking about effective ways to do that. Ofgem's role is to look at that in the round and to see quite clearly the policy direction that the UK Government have set, working with those network operators to come up with the best solutions.

Q209 **Sally-Ann Hart:** Thank you. Witnesses throughout the evidence sessions have asked for Ofgem's statutory duty to be expanded to explicitly include net zero, and not just the lowest cost, and also diversity of supply. Ofgem's statutory duty includes protecting the interest of existing and future customers.

Have you considered enlarging Ofgem's statutory duty to include specific consideration of net zero in its decision making? You have probably already answered this because you say that it knows what you are doing. But are you changing its statutory duty?

Anne-Marie Trevelyan: As you say, Ofgem is aligned with us or we are aligned with it—whichever way you look at it—on the interpretation of that primary objective that Ofgem should support and promote delivery of net zero initiatives at the lowest cost to consumers. The two go hand in hand, if you see what I mean.

The Government do recognise that additional costs may be incurred on current consumers to support that investment and innovation that we know we need to meet that net zero for future consumers. The view is that it is sufficiently defined in that primary objective to protect both current and future consumers as it stands. As Ofgem looks again at how



HOUSE OF COMMONS

it moves to this next iteration now that we have put the Sixth Carbon Budget into law, we see that clarity both for net zero and for consumers wrapped up together in a fairly clear balance.

Q210 Sally-Ann Hart: Do you have confidence that a balance of priorities between protecting customers, net zero and lowest cost will be achieved?

Anne-Marie Trevelyan: Yes. I have a good relationship with Ofgem and I get a comfortable sense that it is supportive of the Government's ambition to achieve net zero by 2050 and acknowledges the investment required to get there. It manages the price controls in terms of the framework to provide investment.

One of the challenges is what that looks like. The answer is that we are all still working on it. We know that we will need twice as much—maybe four times as much—electricity as we use now, but developing hydrogen technology may ease some of the challenge because we can use that in our gas networks and heavy industry. We simply do not know for certain.

We have modelled incredibly extensively out to 2050 and we are moving iteratively to build that. The length of the price controls and that investment programme is a challenge, which is why we consider that Ofgem and its expertise and its independence are good things.

Ofgem consulted in 2019 on thinking about reducing the duration of the next iteration at the beginning of 2023 from eight to five years to align, but decided that eight years was the right framework because of the kinds of investments needed, which outweighed the risk of rapidly changing impacts on the technological environment.

It is a balancing act. There is no getting away from that. But we set the framework. We have upped everybody's game with the Sixth Carbon Budget fairly extensively. Ofgem totally gets that and that is why, in this next iteration of its journey working with the network operators, it is thinking about what that looks like.

In eight years' time, we will have lots more technologies. Some we may not have cracked yet, but we will have a better idea. We will be moving toward that 2030 line when we are all moving to drive electric vehicles. We will start to see how house adaptations change. We will know more about how hydrogen technology is moving. We will be another step forward. Over this decade, there is a clear picture of making sure that we go on that journey together, that we get the investment we need for the complexity of the transmission networks, and that we also do not allow our most vulnerable constituents to fall through the net on the way. That is where the balance with Ofgem has to sit, and it has a good balance on it at the moment.

Q211 Douglas Ross: Good afternoon, Minister and Mr Waldron. Minister, you have already alluded to this in a couple of your answers, but you have a visit to Orkney coming up and you said you took part in a roundtable this



morning with some Scottish renewable businesses.

What is the engagement like between Scottish businesses, Scottish local authorities and others with a significant interest in this subject and the UK Government? Can anything be done to improve that?

Anne-Marie Trevelyan: I had great engagement with the group of councillors from the Western Isles I spoke to this morning. They asked and I was happy to meet them and to make sure that we are hearing all the voices where there is a commitment to wanting to be part of the renewable energy revolution. There is a continuing good relationship. We now have a turn of the wheel in Scotland and new people in post, who are, again, energetic and passionate voices. The Scottish Government and Scottish Government officials are working closely with ours in Westminster to make sure that we maximise the way we deliver existing technologies and more of them, and indeed new technologies, and the most effective way of doing that.

Q212 **Douglas Ross:** Thank you. The North Sea Transition Deal is an extremely ambitious deal that has been worked up between the Government, the industry and the sector. It is the first one to be announced anywhere in the G7.

How do you plan to turn the ambitious discussions that you have had and have put down on paper into actual projects, and deliver them to either protect the jobs that are currently on the North Sea or create more jobs here in the north of Scotland?

Anne-Marie Trevelyan: Yes, we signed off at the end of March, which was exciting and made us the first G7 country to agree a landmark deal to support our oil and gas industry in the transition to clean, greener energy, while making sure that we support those 40,000 jobs.

As ever, it is important for me, in the same way as the Government's responsibility for security of supply, in terms of ensuring that we do not have gaps in our energy supply and, as we transition in sectors where there has been a high-carbon impact, making sure that those skilled workforces are able to transition to other offshore clean energy solutions or, indeed, others. In setting our standards for a transition to clean, greener energy, absolutely, critically, we must not leave communities or vital industries behind. That is an important focus for me.

The deal between the UK Government and the oil and the gas industry will support workers, businesses and the supply chain right through the transition. The industry has been incredibly forward leaning, harnessing existing capabilities, thinking about the infrastructure and also the private investment potential to exploit new and emerging technologies like hydrogen production, CCUS, offshore wind and of course decommissioning. Through the deal, the sector—it is largely based in Scotland, but also in the north-east—the Government, industry and trade unions will work closely together over the next 10 years and beyond, in that medium-term window, to ensure that we deliver the skills, the



innovation and the new infrastructure required to decarbonise North Sea production.

It is exciting and challenging, but the sector is up for it. It was an amazing development to be part of, and it is amazing to see that tough stance they have called on themselves—“We know we must do this”—and their working with us to think about how they do that. Importantly, we must make sure that we support those 40,000 jobs in the short term.

There is an interesting narrative because we will need oil and gas for a long time. We will not need as much of it relatively soon, but we will continue to need quite a lot of it because we do not only use it in power generation. Oil has many uses. It is important that the sector can make a steady and safe transition where it needs to and maintain and decarbonise where it remains.

Q213 Douglas Ross: I absolutely agree that the engagement and enthusiasm from the sector has been extremely encouraging. That makes us even more optimistic that we will see the results of this deal.

Finally, if I could drill down a little bit more, you mentioned over the next 10 years. When can we start to see things on the ground here in the north-east of Scotland or even in the north-east of England the real impact of that deal being felt in local communities and in sectors, and people feeling they have now a future not in the oil and gas industry but in the renewables side of that industry?

Anne-Marie Trevelyan: That is an interesting challenge, Douglas. I am not sure I could give you a date but, if you look at the CCUS activity, we are seeing that move forward. The clusters have submitted their applications—I am not sure if that is the right word—for why their cluster is ready to go and make change.

These sorts of steps are the first stages in terms of creating the carbon capture and storage environments, which are of course all linked in with many of the historically oil and gas businesses that now think of themselves, quite rightly, as energy businesses in a holistic way. That work is all starting to progress. As we see those developments, we will then see changes. Things like electrification of rigs are short-term challenges for the sector to crack the technology on and deliver. There will be a lot of gentle shifts.

Importantly, for a lot of this, we are not having to invent something completely new. We need to think intelligently about the skills, training and the qualifications now and be able to rebrand them—if that is the right word—without saying we have to completely reinvent the wheel. If you have a whole series of offshore skills, that does not mean to say that your whole series of offshore skills might not work equally well in the offshore wind sector. But we do not want to have a huge lumbering system that means they have to retrain at cost, taking them out of time needed delivering what they do best. We need to think carefully about



that. One of the commitments that Deidre Michie has made is to think about that qualification framework to ensure that that workforce can move as seamlessly as possible to the next part of their career.

All those things will be happening at pace. I have no doubt you will keep me right if you think they are not going at the pace they should be and I expect no less.

Q214 **Jon Cruddas:** Good afternoon, everybody. Following on from that, everyone giving evidence to us so far has highlighted the importance of the supply chain—you have mentioned it this afternoon—and a visible pipeline of work. The 2019 Offshore Wind Sector Deal commits to a 60% lifetime UK content by 2030, which includes parts, labour and maintenance across the life of the project, yet a Scottish Council for Development and Industry report said this commitment was “overambitious”. No one we have heard from thinks these targets are achievable. Is the 60% UK content by 2030 target achievable? What plans do you have to support Scottish jobs in the supply chain for the renewable sector?

Anne-Marie Trevelyan: Thanks, Jon. That is the sector’s own target. We strongly support it and are happy to support it, but the sector reached that assessment.

In doing that, in the Government supporting that call, I hope we are giving confidence to the market so that the supply chain can invest with real confidence. We have set this clear plan, No. 1 in the 10-point plan, for 40 gigawatts of offshore wind by 2030, at least a gigawatt of which we hope to be floating wind, which is a huge supply chain. In a literal sense, it is enormous. We have set out those strong decarbonisation commitments alongside to give that confidence to the industry to invest.

We have also directly supported some new investments into some of our historically neglected coastal communities. For instance, a £160 million offshore wind manufacturing investment scheme was opened right across the UK and two projects were announced last week, one in Humberside and one in Teesside. We hope to be able to make more in the near future, as they say. I could not give you a timeline yet, but we understand that we need to make sure those ports are fit for purpose for the modern renewable supply chains that the industry needs.

We will continue to improve the market design to help the sector to deliver that 60%. As we were talking about earlier, reforms to the Contracts for Difference supply chain process, which we confirmed last week, do give us as a last resort the ability to terminate contractors if generators are not making a sufficient effort to deliver their commitments, which I hope will ensure that developers act in a way that reflects their strong influence on a long-term health proposition for the industry as a whole.



HOUSE OF COMMONS

The Government have set out strongly 40 gigawatts by 2030 but, if you look at the modelling out to 2050, we are talking about something like 100 gigawatts. No doubt they will not look like what they look like now and technology will change and improve, but that commitment to understanding offshore wind, however it is put together over time, will be a critical and continuing part of our renewable solutions. I hope that will give strong support to what, as I say, was the sector's own commitment.

Q215 Jon Cruddas: Taking that slightly forward in terms of the overall strategic direction, we have had the UK industrial strategy replaced by the Build Back Better agenda. Can you detect any way that this shift in strategy has taken the supply chain issues forward? The Aberdeen Energy Transition Zone was mentioned in the Build Back Better agenda, but are any more specific renewable energy projects mentioned in terms of supply chain support in Scotland? How specifically will the Build Back Better agenda create this pipeline of projects going forward?

Anne-Marie Trevelyan: That strategic oversight sits differently. The North Sea Transition Deal is a key sectoral deal with the Government on the sectoral assessment. That is very much the level that we think about it. The ports investments, the work we are doing to invest in industrial clusters for CCUS and the investments we will see in time in a number of areas will help through that transition to ensure good green jobs across all four nations of the UK and drawing in private investment will do that. Within BEIS at an energy level, we are driving forward through each of the sectors to make sure we can get the pace we need and indeed we can support industry as it wants to drive forward.

There is a genuinely amazing—from talking to those who have been here for a while—and even in the last year an exponential shift in the commitment from the boards of major energy companies to understanding, and wanting to lead on delivering and transitioning to, renewables and clean energy. The shift is impressive. The Government's clear commitment in law and in a number of ways that this is the direction of travel we need is driving that investment, alongside Government investment, too.

Q216 Wendy Chamberlain: Thank you, Minister, for your time today and to Mr Waldron as well. I want to move on to talk about renewable jobs.

Two key elements of the Government's strategy are the energy White Paper and the 10-point plan for a green industrial revolution. How quickly are those strategies being developed? We have been assured that an overarching net zero strategy will be published before COP this November.

Anne-Marie Trevelyan: Thanks, Wendy. Not only to support Scottish jobs, but clearly important as we recover from Covid and the huge challenges that has had, this is an all-nations effort to drive forward how we make that transition to good green jobs across all four nations.



HOUSE OF COMMONS

Importantly, the Green Jobs Taskforce is about to publish a hugely impressive piece—

Chair: We seem to have lost the Minister. She is back. Sorry, we lost you briefly there.

Wendy Chamberlain: We heard about the impressive piece of work in relation to the Green Jobs Taskforce report and then we lost you, I am afraid.

Anne-Marie Trevelyan: Thank you. I will turn off my video. Does that make it better? It says my internet is unstable, which is never a good sign. Is that a bit better?

Wendy Chamberlain: Yes, you are clear. Thank you.

Anne-Marie Trevelyan: I am excited about the work that the Green Jobs Taskforce has done, a huge piece of work, which I think will be published this week—but do not quote me on that—and which will set out a wide-ranging assessment of needs when jobs have to transition either for upskilling or, as we were talking about in the oil and gas sector, to skills being used in a different sector, and also importantly how we harness the as yet untapped human capital of our young ones to make sure we think about how we drive all the skills development they will need to do green jobs. If you are a 10-year-old and you want to be a plumber like your dad and you also understand and are passionate about saving wildlife, those two are not incompatible. They are incredibly compatible because the retrofitting of all our homes will be a critical part of making sure we reach net zero. There is a huge amount of opportunity and work to think about how we make sure we match the skills that will be needed with delivering enormous sectoral change to meet all those challenges. The car mechanic of today will become the software engineer of tomorrow because the EV is a software thing rather than an internal combustion engine. There is so much work to do on that. There is a huge amount of opportunity in terms of supporting jobs and seeing the opportunity for not only the energy sector within our net zero challenge, but across the piece to make sure that we provide jobs.

The taskforce's publication is being done jointly with the Department for Education and Minister Gillian Keegan is my co-chair. We will work hard over the summer to try to provide a comprehensive response, which will then feed into—as one of the constituent parts of your point, Wendy—the net zero strategy, which looks not only at the holistic part of jobs but the whole strategy with all the constituent parts that will help us to deliver net zero in the timeframe we have set ourselves. We will publish that before COP26 in the autumn.

Q217 **Wendy Chamberlain:** I am hearing there that things are on track. Reflecting on the evidence we have heard over the last few weeks and also when in Orkney, you talked about transitioning oil and gas in your responses to Douglas Ross, but Deidre Brock made a point earlier in



terms of potentially some of the challenges around Contracts for Difference in relation to Scottish projects.

We heard from the unions last week that there is a challenge about transitioning people into the sector because, potentially, they do not see a long-term future in it, because jobs in the sector tend to be fixed-term contracts in nature and there is not the sustainability that people can see about making the move now; and, secondly, because of how they see that for their long-term future, particularly when we know that jobs in oil and gas, for example, have been incredibly well paid. Do you expect the actions from the taskforce to include looking at how we have that sustainable future in the industry so that people make the move to it?

Anne-Marie Trevelyan: That is an interesting challenge and is absolutely one of the areas the taskforce has looked at. Where there are well-paid technical jobs in sectors that have high carbon emissions now, either those sectors will in due course disappear completely and move to something else or, indeed, as in oil and gas for many years to come, they will be an important part of our energy security of supply. It will be a shrinking industry over time but it will not disappear.

Thinking about how that sector maintains its workforce is part of the challenge and part of the North Sea Transition Deal challenge as well, but it has worked with the Taskforce to think about exactly that point. This is not doing something one way today and differently tomorrow. This is a journey and, from the Government's perspective, security of supply will always be the most important. Ensuring we can maintain what we need as we need it is important.

Q218 **Wendy Chamberlain:** Thank you. Finally, in terms of the evidence we have received both in response to the energy White Paper and to the 10-point plan, basically, there is a lack of ambition from the Government in terms of, first, what they are intending to do and, secondly, how they are intending to deliver that. I am interested to hear your thoughts in relation to that. How would you respond?

Anne-Marie Trevelyan: Goodness. We are one of the most ambitious countries in the world in what we are trying to do and we are leading the way in doing it. We started in 2008, setting the Climate Change Act into law and, in doing that, created the Climate Change Committee, which has provided the Government with a continuous and growing voice, looking across the piece to assess where we need to make change and invest in terms of how we live our lives and how we decarbonise to meet that net zero challenge. We are the first to bring net zero into law and our Sixth Carbon Budget is incredibly challenging, but it is driving financial, regulatory and policy change, and thinking, at a genuinely world-leading pace.

I am excited. We are not only doing it for ourselves so that we can meet our own challenges, but we put out only 1% of the world's carbon dioxide emissions. We are not the bad guys in the broad scheme of things, but



HOUSE OF COMMONS

we are world leading in trying to find ways to deliver clean energy and to change the tools we use to live our daily lives that help us to meet the reduction of that 1% globally. We also, therefore, have the opportunity to take the technologies and the skills we learn globally and help others to develop and change as well. That is an important part of our moral responsibility as part of the climate change challenge we face.

Q219 **Chair:** Lastly, Minister, when do you expect the Green Jobs Taskforce to report and what particular actions are you expecting to come out of the green jobs action plan?

Anne-Marie Trevelyan: I hope they will publish this week, Chair. I hate to give you a date because then things will change and you will be cross with me. It is ready to go. The Department for Education and indeed DWP, which has been involved as well with us, and BEIS will think about how we draw that together to put forward the action plan, which will feed into the net zero strategy, which will come out before COP. It is all hands to the pump at the moment to get that whole next stage of work up and running.

Q220 **Chair:** Fantastic. Is there likely to be a statement, written or verbal?

Anne-Marie Trevelyan: That is a good question. I do not know. I will take that away. I am not sure. That is a good point.

Chair: We will look out for it with great interest, as always. That is all from us, Minister. We are grateful for your time once again. You have been before this Committee twice in the past few weeks and you will always be welcome here. We may come back to you about a couple of little points and issues we need clarification on, or maybe some supplementary evidence. We got around most of your little technical issues and we did not get to see you at the end. For today, to you and to Mr Waldron, thank you very much for attending this afternoon's session