

DÁIL ÉIREANN

AN COMHCHOISTE UM THITHÍOCHT, RIALTAS ÁITIÚIL AGUS OIDHREACTH

JOINT COMMITTEE ON HOUSING, LOCAL GOVERNMENT AND HERITAGE

Déardaoin, 26 Samhain 2020

Thursday, 26 November 2020

Tháinig an Comhchoiste le chéile ag 9 a.m.

The Joint Committee met at 9 a.m.

Comhaltaí a bhí i láthair/Members present:

Teachtaí Dála/ Deputies	Seanadóirí /Senators
Francis Noel Duffy,	Victor Boyhan,
Thomas Gould,	John Cummins,
Emer Higgins,	Mary Fitzpatrick,
Paul McAuliffe,	Rebecca Moynihan,
Jennifer Murnane O'Connor,	Mary Seery Kearney.
Richard O'Donoghue,	
Eoin Ó Broin.	

I láthair/In attendance: Senator Annie Hoey.

Teachta/Deputy Steven Matthews sa Chathaoir/in the Chair.

General Scheme of the Marine Planning and Development Management Bill (Resumed): Discussion

Chairman: The committee will resume pre-legislative scrutiny of the general scheme of the marine planning and development management Bill. We are joined in person by Mr. David Connolly and Mr. Peter Coyle of the Marine Renewables Industry Association. The witnesses are very welcome. We are joined remotely by Mr. Simon de Pietro, Dr. Anne Marie O'Hagan and Mr. Eoin McPartland of the MRIA, and by Mr. Justin Moran, Mr. Peter Lefroy and Mr. Liam Murphy of the Irish Wind Energy Association. The opening statements have been circulated to members. I welcome witnesses who are joining us remotely. I will first ask witnesses to make their opening statements. Members will then be invited to ask their questions. I ask members to confine their questions to five minutes, if possible.

Witnesses attending the committee room are protected by absolute privilege in respect of the presentations they make to the committee. This means that they have an absolute defence against any defamation action for anything they say at the meeting. However, they are not expected to abuse this privilege and it is my duty as Chairman to ensure this privilege is not abused. Therefore, if witnesses' statements are potentially defamatory in relation to an identifiable person or entity, they will be directed to discontinue their remarks. It is imperative that witnesses comply with any such direction.

For witnesses and members attending remotely, there are some limitations to parliamentary privilege and as such they may not benefit from the same level of immunity from legal proceedings as a person who is physically present. They are directed that only evidence connected with the subject matter of these proceedings is to be given and they are asked to respect the parliamentary practice to the effect that, where possible, they should not criticise nor make charges against any person, persons, or entity by name or in such a way as to make him, her or it identifiable. Members are reminded of the long-standing parliamentary practice to the effect that they should not comment on, criticise or make charges against persons outside the House or an official either by name or in such a way as to make him or her identifiable.

The opening statements submitted to the committee will be published on the committee website after this meeting. I invite Mr. Coyle to make an opening statement on behalf of MRIA.

Mr. Peter Coyle: I hope it is okay if I speak without my mask on because my glasses steam up otherwise and I cannot read out what I have written.

Chairman: Yes.

Mr. Peter Coyle: By the way, Mr. David Connolly represents the Irish Wind Energy Association. We are two separate bodies, but we work together in considerable harmony.

MRIA, Marine Renewables Industry Association, is an all-island body which looks after the interests of emerging offshore renewable technologies, such as wave, wind and tidal. To put this matter into historical perspective, the last time the House considered marine consenting in any detail was in the spring of 1933. That was to correct anomalies arising from the State Lands Act 1924 concerning issues like the taking of sand by landed gentry from beaches, which they were entitled to do up to that point. That legislation is clearly not adequate today.

Ardnacrusha was the first major generating plant in the country. It became operational in 1929 and it generates 86 MW which on a good day would light up County Louth. It is clearly

rather small, but it was the pride and joy of the country in 1933. The programme for Government is proposing to put 58 times the capacity, 5 GW, of Ardnacrusha into the water and have it operating by 2030, which is no mean feat.

The Bill which members are considering is part of a complex jigsaw of policy and legislation which is being developed. For example, we have a marine spatial plan coming on stream and we have the marine protected areas issue being sorted out. There is a further climate action plan is being prepared, even though the first one was published in June 2019. The most important part of this jigsaw is the marine planning and development management Bill members are considering today. It has been under consideration for at least 20 years and is extraordinarily complex. It also contains a lot of very positive things, such as the central role which An Bord Pleanála will play in offshore consenting going forward.

There are outstanding issues. For example, there is a Bill in the Department of Foreign Affairs, which is needed, called the maritime jurisdiction Bill. It will put into law very firmly a definition of our maritime boundaries. A big outstanding issue is the need for extra personnel resources in the public service in this area. Perhaps as many as 40 extra people are required in the various Departments and agencies to make this work and to realise the State's ambitions.

The most important thing I want to say is that there will be a huge opportunity arising once this Bill is passed. We have the world's most energy intensive waves. We have extraordinary and consistent wind speeds offshore. We have the capacity, over the next 20 to 30 years, to perhaps meet as much as 20% of the European Union's offshore renewable energy requirements, which were set out by the Commission just a week ago.

Above all, and I say this with some passion as I spent a long time working in the IDA and Enterprise Ireland, this Bill will enable significant job creation around the coast. It is a real instrument of economic and social development and social change. To put that into perspective, a week ago there was a leak reported in the *Financial Times* which stated that GE, the big American industrial company, was going to build a 3,000 person plant in the north east of England. It will build wind turbines for the northern part of the North Sea. Siemens is building a half kilometre long plant to employ 800 people permanently in Le Havre, to deal with the southern part of the North Sea.

Imagine the consequences and impact which facilities of that type would have on the west coast, the south coast or, indeed, in areas which I know only too well have suffered a lot of social deprivation in the past, such as Arklow and Wexford. This Bill is enabling legislation. I mean that not just for technical issues to do with planning and offshore but also for job and social creation. The projects we are talking about take a long time to be realised and involve a great deal of money. I expect that Dr. Connolly will go into this in much more detail. An offshore wind farm will take up to nine years from conception to being switched on and typically costs €1 billion. We have a 2030 target we must meet. If we do not, we will fail to meet our own targets and EU targets, encounter fines and so on and lose the opportunity for job creation and the ability to reduce our energy and security, which is significant. We import €5 billion worth of gas and electricity every year and depend to an inordinate extent on Mr. Putin for gas to turn on our electricity-generating stations on land, but we can transform all that. This legislation is urgent and important.

Chairman: I thank Mr. Coyle and invite Dr. Connolly to make his opening statement on behalf of the Irish Wind Energy Association.

Dr. David Connolly: I thank the members of the committee for the invitation. I am delighted to join them for what is, as Mr. Coyle outlined, a pivotal Bill for the future of offshore wind energy in Ireland. My first slide is a brief introduction to IWEA. Approximately 150 organisations in both onshore and offshore wind energy are members of the association, covering everything from the first stages of a project, where a site is identified, all the way through to development, construction and energisation for the 30 or 35-year lifetime of the projects. A wide range of views, therefore, comes through IWEA.

Like Mr. Coyle, I want to emphasise what this means for Ireland, in terms not just of the economy, which he highlighted well, but also of our pivotal climate action ambitions. I might take the programme for Government as my starting point. It contains a 5 GW target for 2030 for our domestic climate action. To put that in context, that target has the potential to save more carbon emissions over the next decade than that of any other solution that Ireland has available to it in any sector. That relates not just to electricity but to heat, transport and agriculture. That is the significant of what the resource has to offer. There is more carbon-saving potential than that of any other solution.

The other ambition is the 30 GW target. This is not just an opportunity for Ireland; it is a responsibility to help decarbonise Europe's energy system. We are in an extremely luxurious position, with more renewable electricity than we know what to do with. Very few countries in Europe can boast that benefit. We have to develop this renewable electricity resource to help Europe decarbonise its energy system. Europe will need hundreds of gigawatts of renewable electricity, so the 30 GW figure is just the start of what will be needed. That means there is a significant role for our offshore resource in decarbonising both our energy system and Europe's and, as Mr. Coyle noted, that creates opportunity. There is a considerable opportunity for Ireland, in respect of jobs, investment and industry, to build what could be a brand new pillar of our economy. These countries need it and we have it, and it will be needed rapidly over the coming decades. We conducted a study examining the job creation potential for the original 3,500 MW target in the climate action plan, which showed that thousands of jobs were available for that. If we achieve these programme for Government targets, there will be tens of thousands of direct jobs. I wanted to give the committee a sense of the opportunity and the climate action contribution that offshore wind can make.

My next slide might give a sense of the status. Reflecting that significant resource, our members are actively developing more than 15 GW around our coast, but they are stuck waiting for the Bill to be passed because planning is the first step in the development of large-scale infrastructure. A project cannot proceed down the nine-year path that Mr. Coyle mentioned without planning permission first. That means that if these projects do not have planning by 2025 at the latest - this is dead-end territory - they cannot be online by 2030. What we have is a significant resource; what we do not have is time. We are really short on time. I hope I have given a sense of the urgency and importance of the Bill.

My next slide will give a flavour of the granular level. Of course, this all comes back to the day-to-day of implementation. At a granular level in respect of the Bill, we submitted a position paper in advance of the meeting that goes into detail about a number of aspects of the Bill that could be improved. I will draw out the top three that members raised with us, namely, design envelope flexibility, streamlining and milestones for the maritime area consent. I will give a quick flavour of each of these and we can go into more detail on them later in the meeting.

Design envelope flexibility is an approach that was used in the UK as it rapidly expanded its offshore sector. When consent is granted, it can be four or five years before construction be-

gins. During that time, there can be significant developments on the technology front. Accommodating those developments when the construction phase is reached can really help to reduce the costs of developing offshore wind. In this consenting regime under marine planning and development management, we will advocate for a similar approach where there is some flexibility to adjust based on the technology developed between the time when planning is granted and construction begins.

The streamlining aspect goes back to the urgency issue. Any way in which we can make this more efficient would be greatly welcomed by our members, due to that lack of time. There are a number of examples in our position paper to illustrate how that could be done. One is that when planning is applied for, it could really help if there was the option to apply to one consenting body for all aspects of the project rather than having to divide it into multiple applications. Having that option could be very useful to save time for many projects.

The final aspect I raise, milestones for maritime area consent, was raised by many members and arose at Tuesday's meeting. We do not want people hoarding seabeds when they are allocated to them and, therefore, we very much support having milestones to demonstrate progress, although a bit more detail is required as to what those milestones would be. As a word of caution, in respect of our terrestrial planning, as well as the milestones, there is a period of five to ten years to develop the project. We think that period should be accommodated in some other ways. For example, if planning is refused on the first application, it may be very possible to fix the issue that was identified, reapply and get planning permission the second time. That would prevent a project having to go all the way back to ground zero and starting again, and could be accommodated in the Bill.

There are many more examples and details in our paper. I hope I have given a flavour of the importance of what is happening here, the opportunity that is available and the urgency we believe is necessary to ensure we capture this resource available to us.

Chairman: I thank Dr. Connolly. The committee has heard briefings on the Bill from both the Department of the Environment, Climate and Communications and the Department of Housing, Local Government and Heritage, and we have held a meeting with representatives of both Departments. Members have been looking through the wide range of documentation that goes with this issue. We are fully aware of the commitment in the programme for Government to meeting the 5 GW target and the requirement for people who will make significant investment in this to have surety in the planning system, with a streamlined planning system with all the aspects of planning that are required, such as public consultation and a timeframe set out.

Did Mr. Coyle state that Ireland had the potential to meet 20% of the EU's offshore renewable energy requirements?

Mr. Peter Coyle: Yes, the Commission published targets last week for offshore renewable energy-----

Chairman: I am aware there is now a higher target.

Mr. Peter Coyle: The target for 2050 is 300 GW of offshore wind and 50 GW of wave and tidal. We have a total resource, at least in theory, of at least 60 GW between the various sources. If one figure is expressed as a percentage of the other and rounded down a little, it comes out at about 20%. That is just an indication of what is possible.

Dr. David Connolly: I recommend we consider that as a minimum. As for what Europe

is trying to achieve with zero carbon, the numbers are astronomical in terms of where the resources will come from to do that. From my previous life when we conducted a great deal of research on renewable energy systems at a university in Denmark, I know that it is in the hundreds of gigawatts. I think the 300 GW target that was set will increase in time. The opportunity is enormous and the more we can contribute to that, the better.

Senator Mary Fitzpatrick: I thank all our guests for their presentation and all those who are joining the meeting virtually, including Mr. Justin Moran. I congratulate him on recently becoming a dad. I do not want to embarrass him, but it is a big milestone for any of us. I thank the witnesses for the work they have been doing to progress this legislation. It is a major opportunity for this island, both economically and environmentally. I share their enthusiasm. They have been doing great work and the Government is wholly supportive.

I have a couple of questions. The witnesses mentioned three areas affected by the legislation. I would like them to discuss those in a little more detail, specifically identifying the sticking points. Second, it was said that there will be a need to recruit 40 staff. Where does that recruitment need to take place?

My final questions relate to the future. This is something that will become a reality for us. The prospect that Ireland could generate 20% of Europe's offshore generation requirement is exciting. We should be that ambitious. What do we need to do now to realise those ambitions and for this island to take that opportunity? Planning and business cases have long lead-in times. How much upskilling will be needed? I am thinking about students in our education system. Moreover, how can our coastal communities be prepared?

Dr. David Connolly: I will discuss the flexibility of the design envelope. I will pass the issue of streamlining to my colleague, Mr. Peter Lefroy, who is joining us virtually. I will pass the question on milestones to Mr. Liam Murphy, who is also joining us online.

I will give some specific examples of design envelope flexibility, but the point applies much more widely than these examples. Six or seven years ago, offshore wind turbines were half the size they are now. The technology has developed a lot. The sizes of turbines and blades and the optimum locations have changed. If a project started on a certain site five or six years ago, the turbines would be put in certain places. Let us suppose that consent for a project was secured five or six years ago and building begins today. Without flexibility, one would find that today's technology is very different from what was envisaged in the planning application. It is desirable to have some buffer areas in certain aspects of the design envelope. Different sites will need flexibility in different areas. At some sites the location of the turbine will be very clear and it will not matter how the technology develops. The UK authorities allow projects to identify areas where flexibility will be needed. Consent for projects includes flexibility in these areas, if that is deemed appropriate through the consenting process. If it turns out that the technology is very different five years later, the project can proceed with that technology. This is very important because without that flexibility, the project is stuck trying to buy a turbine that is no longer built. It is forced to look for older technology. The big benefit of flexibility is that there is a very good chance that the price of offshore wind will be significantly lower with new technology than with older technology. Offshore wind has seen cost reductions of more than 50% in the past five to seven years. Ireland will want the lowest-cost renewable electricity it can get.

I will mention one other point, which I may come back to later. This is not just a wind opportunity. I know this will sound a bit strange. Our wind can also produce clean fuel for heat and transport. There is an enormous opportunity for Ireland to do something that no one

has fully figured out yet. This is because we have the cheapest base product, that is, wind. As such, we should have the cheapest end product. That gives us a huge competitive advantage compared to many other areas.

I will pass the other two queries to my colleagues. I will come back to the question of skills later. I am sure Mr. Lefroy will also address it.

Chairman: It seems we are not picking up the signal from the witnesses joining us digitally. Perhaps Dr. Connolly could continue.

Dr. David Connolly: I will briefly address the next two points. My colleagues may be able to build on this when the sound is working.

Regarding streamlining, there are several steps to the new consenting regime. We have tried to identify places where we feel timelines could be reduced. As I mentioned in my introduction, we need more clarity about who to apply to for which aspects of the project. In some cases, it will be very beneficial to apply for a single planning application for both the offshore and on-shore elements of the project. We do not propose that every single new project will do this, and there may be specific reasons a project does it or does not do it. This would allow projects to apply for an offshore wind farm as well as a grid connection linking the wind farm to the land in a single application. This would be preferable to splitting the application into different parts and moving through parallel processes. This is more a point of clarification than a proposal to reshape the Bill. This option could be very beneficial.

Another prominent point is the need for statutory timelines for decisions and engagement. At the moment, An Bord Pleanála has statutory objectives for terrestrial planning decisions. We believe a statutory requirement for decisions to be made within certain time periods would give developers certainty that they will at least have a decision by a certain date. The exact number of weeks could be decided according to the scale of the project, but clarity on timelines is very valuable to someone developing a project of this scale.

My third and final point concerns maritime area consent. Like the point about streamlining and milestones, this relates to land hoarding and the need to demonstrate progress. We support milestones as a way to demonstrate progress and to ensure that projects progress well. Our position paper includes recommendations on what these milestones could be. This issue is referred to in the Bill, but clarity on them would be very welcome. We propose a slight alteration, which is really a point of clarity rather than a substantive change. In the first session on Tuesday, we discussed the fact that if a project fails to get planning permission on the first run, its maritime area consent ends automatically. Terrestrial planning provides for a period of five to ten years to develop a project. If planning permission is refused because of something that can be fixed, an applicant may be able to apply for planning permission again, in recognition of the time that has been invested to get the project to that point. This means a project does not go back to square one. We support milestones in the interests of clarity. We believe that some time element would be very beneficial as a means of streamlining and improving the milestones process.

Chairman: We are out of time for this session I am afraid. I remind members that we must try to keep comments to five minutes so that we can go around the room.

Deputy Eoin Ó Broin: Some of the questions will overlap, so the witnesses will have the chance to address Senator Fitzpatrick's questions in reply to mine. I thank them for their

presentations. Since this Bill came to us a couple of weeks ago we have been saying that it is once-in-a-generation legislation. Given its importance, it is vital that the committee scrutinises the legislation properly. The industry and the Department have been working on this for some years but we have only had it for a couple of weeks. The last thing that a responsible committee would do is rush legislation because the last thing anybody needs is legislation that is not robust. That will cause more difficulty in future. By way of example, it is useful to go back and look at the strategic housing development legislation. It was very different but when it was introduced three years ago the committee was told by the Department and industry that it was urgent, it would solve the hugely pressing problem of housing need and it would create a huge number of jobs. The legislation did none of these things, however, because it was not fit for purpose. In fact, in many respects it led to long delays in planning applications because the planning process was not robust. It ended up in the courts and with judicial reviews, which is not where we want any of this to go. I am not saying any of this by way of opposition to the legislation because I want to see it passed in the same way as everybody else does but our scrutiny functions are key.

The legislation is not about wind farms. It is about having a robust planning system for our marine area. This means facilitating planning applications but also aquaculture, fisheries and protecting and improving biodiversity. All of these elements must be taken into account. We want to meet our 2030 renewable energy targets and so we cannot sacrifice other aspects of the well-being of the marine. In some senses, we would be answering one part of the climate agenda to the detriment of another.

I am not saying this in any way critically but this is also a hugely profitable industry. This is how the industry works, and I am not objecting to it, but it is the one word we have not heard mentioned so far. It is incumbent on us to acknowledge that while we want the industry to succeed and we want it to have a good planning regime and produce large volumes of good renewable energy and jobs, the State must also get a good return from all of this in terms of tax revenue and a community dividend. Most members will share this view.

With respect to the study on jobs, will the witnesses give us more detail on this? Specifically, what kind of jobs will be where and what will be the mix of jobs between temporary and permanent? In terms of community dividend, will the witnesses give their views on how it will work and on the industry's involvement and support for it?

I have a number of specific questions and comments. I am very concerned that what is proposed with regard to the design envelope may in some way undermine or weaken the environmental impact assessment elements. Will the witnesses reassure me this is not the case? How will the design envelope proposition impact on environment impact assessments?

We must be very careful about a single consent body because we could have perceived conflicts of interest and, therefore, eventual litigation. I would like to hear the views of the witnesses on this. I have to support fully the witnesses on statutory timelines. In fact, the board's statutory guidelines are not sufficient. I would like hard timelines. Will the witnesses talk us through the milestones a little? I am broadly sympathetic to what they have argued but I would like to hear more on it.

Mr. Peter Coyle: I will deal with jobs and the community dividend and Dr. Connolly may also want to speak on this. I will also speak on the single consent body. On the single consent body, this is a complex issue, as the Deputy has underlined, and it is important that one body is in charge for planning permission purposes. One body has a good chance of attracting and

retaining the talent required to enable proper planning decisions to be made in the area. With all sorts of issues to do with engineering, science and the environment, this area is far more complex than the areas a local authority, with all due respect to local authorities, would typically have to deal with. Dealing with this through one body, which can build up the expertise and guard the public interest as much as anything else, is very important.

With regard to jobs, I see this happening at two levels. In the initial years, as we build up experience and get into the water, there will be jobs in the final assembly of facilities and in operations and maintenance. For example, SSE Airtricity has announced it will set up an operations and maintenance base in Arklow with between 80 and 100 people. Having spent many years trying to get jobs in Arklow, this will be a major benefit and a win for everyone. As we build up scale, it will become important for developers and manufacturers to set up some facilities in Ireland. These are likely to be on the south and west coasts. This could bring us into the rich dividends of manufacturing facilities. Also, the scale of our resource means a huge scale of development and this will require a lot of heavy duty operations, with maintenance facilities and supports. Interestingly, a large supply chain is rapidly emerging in Cork. The port is about to prepare a new strategic plan. One of the supply chain companies established there in recent months, Green Rebel Marine, has bought two vessels and is buying another. It also bought an aeroplane two weeks ago to help build up the industry.

On the issue of community dividend, there are some challenges in figuring out what is the best way forward. This is different from the terrestrial experience. For example, the seabed is owned by the public and there is no private property or property rights involved. As we go further offshore and over the horizon, which community would be given the benefit and why? There is still a bit of thinking to do in this regard.

With regard to skills, we need to bear in mind that we have is one of the world's best maritime educational facilities in the National Maritime College of Ireland in Cork. Anyone who has not visited the college should do so because it is mind-blowing. The test facilities for offshore energy are located next door and run by University College Cork. At present, we need skills at the upper end of the spectrum because we are at the investigative phase which requires all sorts of engineers and scientists. As time goes on, we will need many people in more traditional areas of seamanship. We do not have many sailors. We will need many people with mechanical engineering and electrical engineering. In the first instance, there will be a lot of employment at the higher end and in the longer time there will be a big requirement for people in these skilled trades.

Dr. David Connolly: I will make some reflections of my own and I will then pass to Mr. Lefroy to speak about the design envelope specifics and to Mr. Murphy to give the specific milestones. If we run out of time, the information is in table 1 in our position paper.

I absolutely agree with coexistence and I am happy to go into more detail on that. We believe coexistence is possible and many of the areas the Deputy pointed out, with regard to aquaculture, biodiversity and fisheries, have precedents to show wind farms can coexist and contribute towards increasing biodiversity. This is an issue we are very conscious of.

With regard to community engagement and involving others, our members are already actively doing so and are very keen to do it. We have learned we need to bring others with us to have the best chance of having a successful project. With regard to profitability, the projects need to be financially viable. To give the Deputy comfort on this, the way it will work is that wind farms will all compete with each other to offer the lowest price possible to consumers. It

is only those that can offer the lowest price that are successful. We strongly believe this competitive element will ensure a very low cost is delivered to the Irish electricity consumer. Ultimately, if companies cannot do this, they will not succeed and there is huge pressure to do so.

With regard to jobs, very briefly, and I am sure we can come back to it, the report provides overviews of all of the jobs involved in developing an offshore wind sector. If the committee needs detail on the types of skills and roles, it is all in the report and I am happy to share and discuss it one to one afterwards. The report also discusses what Ireland could capture now and how we could improve what we capture as we build our own offshore wind sector. These are brief reflections because I know we are short on time. I will pass to Mr. Lefroy to discuss the design envelope and then to Mr. Murphy to discuss the milestones.

Chairman: I asked Mr. Lefroy to discuss briefly the design envelope because we will then have to move on to the next round of speakers. I am sure many of the questions will be repeated and we can come back to any issues we do not cover.

Mr. Peter Lefroy: The design envelope approach is entirely consistent with the environmental impact assessment process. The industry can demonstrate a very strong track record of implementing the design envelope approach while still complying with European directives and legislation on environmental assessments. This is about providing flexibility for projects to consider as wide a range of options as possible to find the right balance between minimising the environmental impact, producing the best technical proposal for the project and, as Dr. Conolly said, reducing the cost and increasing the efficiency of these installations in order that we reduce the cost on the energy system as a whole.

Chairman: Can I clarify one response Mr. Lefroy gave Deputy Ó Broin regarding the single consenting process? At the moment, the maritime areas consent, MAC, is from the relevant Ministry and the development consent would be from the board.

Mr. Peter Coyle: Perhaps I will ask Dr. O'Hagan, who is an international expert on all these areas, to speak on that issue.

Dr. Anne Marie O'Hagan: The current system operated under the Foreshore Act 1933 is obviously quite old. In that system, a person or organisation first has a licence which allows for environmental surveys and much of the preliminary work. The applicant then progresses onto the foreshore lease which would allow them to exclusively develop a site. This legislation basically gets rid of that system and replaces it with one where an applicant gets a single planning interest, which is now combined with a MAC. That is like a technical feasibility of how capable an applicant is. That allows them to progress into the planning process where they do the environmental impact assessment work and all the other pieces of work necessary to enable them to get consent, and the board makes a decision on that. It is much more streamlined in terms of an applicant not going to different entities for different parts. A single body would make the decision.

Mr. Peter Coyle: The current system only applies out to 12 miles. There is no system to deal beyond 12 nautical miles.

Chairman: The Bill we are addressing here will do away with that much older system and go to this, but it is a two-stage consent. It is a MAC and development consent, that is, a MAC from the Ministry and planning consent from the Department.

Mr. Peter Coyle: Correct.

Chairman: I thought Mr. Coyle was suggesting we should have a single entity to give MAC and development consent.

Mr. Peter Coyle: No, I am sorry. I wish to correct one thing raised by Deputy Ó Broin. Aquaculture is not dealt with by this Bill. It is a pity, but it is not.

Deputy Eoin Ó Broin: It may well be in the future because there is a provision to bring it in at a later stage.

Chairman: For the benefit of the witnesses, the committee discussed this on Tuesday and we are writing to the Minister for Agriculture, Food and the Marine for his position on aquaculture and the currently licensed projects that come under his responsibility.

Deputy Eoin Ó Broin: To be clear, Mr. Coyle said that while there would still be a two-stage process, one body would make the decisions in the two-stage process. It would not, therefore, be the Minister and the MAC, and the planning authority and the plan. One body would be responsible for both. Is that correct?

Dr. David Connolly: No, it might be useful if I explain that at a higher level.

Chairman: I believe this is an important point, if members will allow, because there has been discussion about public consultation on the MAC and development processes. Mr. Connolly might give us his expert view on what those two processes are.

Dr. David Connolly: I want to distinguish between two clear steps. One is called the State consent and another is called the development consent. I believe the word “consent” in the first one might be a bit confusing because the State consent is not an assessment of the project; it is an assessment of the applicant’s capability to deliver an offshore wind farm. In the same way, a landowner who is developing an onshore wind farm will assess someone’s capability to develop the onshore project on his or her land. It is not an assessment of the project or the environmental impact or things like that. It is more of an assessment of the applicant to see whether the State believes this person or organisation is capable of building a piece of infrastructure at the scale of an offshore wind farm. We believe that is an appropriate thing to have with the Department of the Environment, Climate and Communications.

Once an applicant passes the threshold and is deemed to be capable of delivering an offshore wind farm, he or she must go into the project at a much more granular level, which involves evaluating the site and doing the environmental studies. It then becomes very much a development consent and an assessment of the project. We believe that development consent would benefit from having a single consenting body to assess that planning application, although not in all cases because it is hard to have a blanket rule that applies to all when one is dealing with these bespoke projects. One might, however, have the option to apply for a single planning application that covers all aspects of the project and which could, in some cases, make it a much more streamlined process for that project.

Deputy Eoin Ó Broin: It is not going through the local authorities in the development consent *per se*. It is for the board to have primary, if not exclusive, responsibility for that part of the process.

Dr. David Connolly: If it is appropriate for that particular project, yes.

Mr. Peter Coyle: The local authorities are a statutory consultee in An Bord Pleanála deci-

sions in any event.

Chairman: This would include the connection to the transmission service operator.

Dr. David Connolly: Yes. To give people an idea, because of the size of these offshore projects, it is likely that their grid connections are at the scale the board is currently responsible for. Again, it is hard to say that there will be a blanket rule for all cases and that this will be what it looks like. I am giving a flavour of what it will be like compared to the current process.

Chairman: Senator Fitzpatrick wants to raise a point on that.

Senator Mary Fitzpatrick: I have a quick clarifying question on the first stage consent, that is, the State consent. When that consent is granted, is it for a specific maritime territory or is it just a generalised certification that the organisation has a capacity to potentially deliver?

Dr. David Connolly: It is for a specific area but at that point one knows very little about the area other than it looks promising. It is mainly based on desktop or resource analysis in the exact same way one would do for an onshore farm. One would look at where the wind speed is very high, where it looks promising and where the grid is located so that if one built a project, it would have a place to get connected. It is, therefore, related to the area but one still has a long way to go before one has a real project.

Mr. Peter Coyle: It is all designed to avoid gazumping and chancers and all the rest of it. The State will assess, at an early stage, whether this is a fit organisation which can come up with the money, has the track record and engineering skills and wants to do a project in this area. Hopefully, that will avoid all sorts of people playing games with sites and so forth because that would be disastrous.

Senator Mary Seery Kearney: I thank the witnesses very much. I confess I am reasonably late to the party. I have read into this and familiarised myself with it as we have prepared for this legislation. The more I read, the more excited I get. I love the notion of this as another pillar of our economy and all the potential that comes from that.

My background is more in the area of artificial intelligence, privacy and so forth. As I come from that background, I am familiar with the idea that the technology is evolving quickly. People are almost not engaging in PhDs anymore because by the time a person writes up his or her PhD, it is obsolete. That idea of a design envelope here is a great one. How does that link in with the milestones? Is there a danger one would trip up the other? I have three areas of questioning. I would like the witnesses' comments on how they think that interplays.

From a wind organisation perspective, are the witnesses in favour of the general public engaging? People on the ground will be thinking of the aesthetics so no matter what way we go around or how enthusiastic we are about employment, that will be one of the engagements. One of the challenges up to now has been the impact of aesthetics on areas. An area I am familiar with is Killala in County Mayo, where the beautiful mountain scenery is now suddenly dominated by wind turbines. I have two questions on that. First, is there a cap? Will there be some comfort for people that they are not going to look out to sea at some stage to see a view that will be there forever? Second, if the technology is evolving, will there be a built-in replacement? If the technology is evolving to provide for more efficient and smaller turbines, what is in existence now will be obsolete, antiquated or out of kilter. At some point in the future we need to have a renewable source.

On Tuesday, I questioned witnesses on the idea of education. There is a need in our secondary schools to have vision casting now for future careers to occur. To what extent have the witnesses engaged and informed the Department of Education in that regard? Do we have sufficient resources in the universities? I know there is a huge shortage of engineers. Entities such as South Dublin County Council are kept back by not being able to recruit people of sufficient competence in areas where there is a shortage. Are we anticipating future shortages here? How are we going to plug that gap?

Dr. David Connolly: I can start with a few of those questions. I might pass some of them to my colleague, Mr. Moran, who leads our work on the community engagement committee. Perhaps we can give the Senator a flavour of the types of activities we are doing on the community engagement front.

Before I pass to Mr. Moran, I will answer a few of the Senator's questions. I will start at the end and work my way back. In the report we did, we identified all the different skill sets which will lead to the types of jobs that offshore wind will create. We tried to give that profile and it is quite wide-ranging. It ranges from everything from third level degrees to apprenticeships, and includes transfer vessel drivers to bring people to and from offshore wind farms. There are a lot of opportunities but we are absolutely short in some areas. Climate action will lead to a great demand for these skills not just with offshore wind but retrofitting homes, putting in electrical vehicles and installing heat pumps. There is a shortage and it is very likely there will be a shortage. We have presented our view to some Departments. We found the Future Skills programme very promising because the low-carbon economy is a key pillar of that activity. We hope that these type of inputs will inform that and come back to third level institutes and so on.

IWEA runs a green tech Skillnets programme. We are about to launch an unemployment programme for people who have been unemployed, during the Covid-19 pandemic, to upskill now so they can enter the wind energy sector. We are doing what we can to fill those gaps with ourselves and members. There is a lot of detail in what one needs and what it looks like. As much as we can possibly get, we will have work for people to do in the coming decades if we can unlock this resource. The likes of Denmark and Scotland are building offshore wind farms. We are behind in terms of this race to use the resource but I still think we will have loads of opportunities to do so and it is just to give people a flavour of the urgency.

In terms of turbine replacement, it is typically not sensible to replace one until it reaches the end of its life because it is such a big piece of infrastructure to change even though the technology has moved on. In 1992, the very first wind turbine was built in Bellacorick in County Mayo. It is still running and I am sure that it will be replaced very soon. It is usually best to let turbines run their life and then replace them.

Senator Mary Seery Kearney: What is the lifespan?

Dr. David Connolly: For onshore, it has been typically 35 years to date. For offshore, one can expect somewhere between 25 to 35 years depending on the site.

In terms of flexibility on milestones, most developers will only look for flexibility where needed. It is important to note that it is not a blanket approach where every project will always do it for all aspects. It is very much pick what one thinks one needs depending on the seabed and location. People will try to reduce what they need and only look for what they absolutely needs in terms of flexibility. I would not imagine that it will delay the milestones progress that people have. I will pass to Mr. Moran who leads on our community engagement work to reflect

on those points.

Mr. Justin Moran: One opportunity is building on the kind of education and skills opportunities that the Senator has talked about. Earlier there was a question on the community dividend for projects. We understand and expect from the Department that, with the renewable energy support scheme, which these offshore wind farms would be looking to enter, there would be a requirement to put in a certain amount of money into the community benefit fund every year for 15 years of €2 for every megawatt hour of electricity that is produced. That means a 500 MW offshore wind farm would put somewhere between €3 million and €3.5 million into the community benefit fund every year for 15 years, which raises the issues that Mr. Coyle addressed early on about how to define a community. What it also gives is potential whereby a very large amount of money can be used to invest in coastal communities. It can be used to invest in areas to support employment, reskilling and education opportunities. Also, one of the things that the Government has done in the onshore version of the renewable electricity support scheme, is introduce a requirement that 40% of that funding is used to support community initiatives to sustainable development goals. It is about using the funding not just to provide employment and reskilling opportunities but drive just transition and the greening of our economy, and give communities the opportunity to invest and be part of the transition to renewable energy. Those are really good opportunities that, hopefully, will come from the development of these projects.

Mr. Peter Coyle: I ask Mr. De Pietro, as both a developer and the president of Ocean Energy Europe, to talk about the issues concerning new technologies, etc. that have been mentioned.

On the visual impact issue, let me take this back to front. As time goes on into the late 2020s and into the 2030s, we will be developing off the south coast and west coast. We will principally use floating wind technology off the south coast. Quite a lot of that will be over the horizon and out of sight. The same will apply on the west coast. There is also wave technology that almost, by definition, one does not see. In the immediate future, developments will take place in the Irish Sea, principally, but also some of them will take place off the south coast. In the Irish Sea, the 15 m or so contour line, which is the maximum more or less that current technology can go out to, is very close to the coast. The exclusive economic zone line is very close to the coast. In order to develop wind farms and renewable technology off the coast over the next while will depend on bottom-fixed wind, as it is called, the current technology. That is going to be principally, but not exclusively, in the Irish Sea and it is going to have some visual impact but that is part of the price we pay for decarbonisation and exploiting the opportunity. Most important of all, as part and parcel of the work that is being done around this Bill, the Department of Housing, Local Government and Heritage will be developing guidelines on the whole issue of visual impact and various tools to minimise that. There is quite a lot of advanced thinking in this area already.

I ask Mr. De Pietro to reflect on the whole issue of new skills, technology and so on.

Mr. Simon De Pietro: If the committee does not mind, I will join a few of those dots together. I will put on the hat of an Irish developer based in Cork. We have been around since the first alternative energy requirements or AERs back in the middle to late 1990s developing projects in Sligo.

I will pick up one key point on the repowering question because it ties in with technology and the design envelope. Speaking from real-life experience, the first project that we ever did was a 400 KW turbine that had a 39 m rotor and 39 m tip, which is a very different proposition from what we are talking about now. In fact, that 5 MW project, could now be done with one

onshore turbine, subject to environmental impact assessment.

To pick up on the repowering, as Dr. Connolly said, typically we would expect, as would an investor, a turbine to run through its life for 25 to 30 years and then we would seek to repower the site, which may well be with fewer turbines that have higher efficiency. As with every other technology but particularly with wind and solar farms things have changed dramatically. I can tell the committee that firsthand from a project that we are constructing now. Over the three to four years since consent the project changed from a 120 m rotor to a 150 m rotor with an increased energy yield of 30% for everything. Repowering is going to be critical. It is going to be looking around that 30-year mark and maybe slightly longer for offshore.

Where does the money come from? Obviously money looks for a return and in order to get a return it looks for certainty on all of these things that we are talking through.

On the aesthetics point, we all know from being at public meetings that people say they love wind turbines and also one or two say they do not. The whole planning perspective and how it is dealt through in the accumulative impact perspective will, I expect, be addressed in planning provided that is through thorough guidelines. I doubt that we will ever end up in a situation where there is a wind turbine on every square metre of Ireland or the seabed.

Coming to the bit about education opportunities, and wearing my Ocean Energy Europe hat I pick up on Mr. Coyle's point about wave and tidal energy. Ireland has a massive wave resource off the west coast as well a wind resource. Wind and wave complement each other. I genuinely think that we can make a big contribution to the Commission's and Europe's targets. Maybe 20% is not a joking potential and that has a huge implication for skills required for businesses within Ireland. Given our current position close to our next door neighbour's leaving, the Commission is considering what it can do in an Irish context and we would be very keen to support Europe meeting those targets.

In terms of community dividend, we are looking to see what guidance we get from the Government. As we have done wind farms for 25 plus years we are very used to doing community benefit arrangements. We are also used to engaging with communities as one of the stakeholders and trying to encourage businesses to get involved. In fact, I was at a meeting pre-Covid at which we spoke to several fishermen. I encouraged them to start thinking about the opportunities in this burgeoning industry where they could participate and help deliver with guard vessel usage, offshore transfer vessels and so forth.

Chairman: We will have to leave it there as we are running over time. Many of the questions from members have been answered. My thanks to Mr. De Pietro for his engagement.

A number of wind projects are in the pipeline. It is not that people are waiting until this Bill is enacted and we will then have a big rush. Are the witnesses aware of any delays being experienced in terms of survey or pre-consultation or whatever goes with applications at the moment?

Mr. Peter Coyle: There has been a challenge with the resources available to the Department of Housing, Local Government and Heritage in terms of staffing the foreshore licence applications. This relates to applications for licences to go out and investigate sites. Both organisations have made robust representations in this matter to the Department. My understanding is that extra resources are to be provided to help to clear the backlog.

This legislation the committee is dealing with is complex. It will take until at least the first quarter of next year to pass. Then there are all the secondary trimmings that have to be

sorted out, including development guidelines. It will be later next year before the legislation is commenced. We have to be able to get on with site investigations. They have no longer term implications but people need to do them and this requires resources in the Custom House and Wexford. I hope those resources will be provided.

Chairman: We might follow that up because it probably needs to be dealt with immediately.

Dr. David Connolly: I will add a small point. It takes at least two years of survey work to prepare the bird and marine mammal assessment needed for planning applications. That is why the work needs to be done now and that is why these projects are trying to do it. The idea is that when they get to a planning application, they have the material ready. The bottleneck is a delay in getting the licences to do this survey work.

Chairman: There a seasonal aspect to this as well. If a company misses the window, it will be on the wrong timeline.

Dr. David Connolly: Yes.

Mr. Peter Coyle: I mentioned earlier what Green Rebel Marine will be used for bird surveys. Bird surveys take up to two years. Aeroplanes are constrained by weather.

Chairman: Many projects involve major public consultation, some of which is non-statutory. Those involved explain to people what will happen and what to expect, as well as the visual impact of onshore and offshore projects. Let us suppose this Bill goes through and the process is more streamlined. Will the wind industry and other industries still engage in non-statutory public consultation and outreach to the public?

Mr. Peter Coyle: It might be useful to ask a developer, Mr. Eoin McPartland. He may speak about what his company has been doing in the south east and the benefits of informal contacts as well as statutory contacts with the public and stakeholders. Mr. McPartland might talk a little about what his company has been doing on the informal side as much as anything else.

Mr. Eoin McPartland: I do not see the introduction of this Bill changing the focus we have on the informal or non-formal side of stakeholder engagement. It is the fundamental step in getting the community where we are developing the project to understand the project and, hopefully, buy in to it. At an early stage, we will go out and engage with all members of those communities. In particular we look at the marine users currently active in this sector, predominately those in fishing. Then, when we get closer to shore, it is about looking at some of the other marine users such as recreational users. We need to consider navigation pathways and dealing with the Marine Survey Office. At an early stage, we have been engaging with the fisheries through our fishery liaison officer. We also have a community liaison officer engaging with different councillors and community groups. The projects we are developing are at an early stage. They are considerably further back than a number of the projects on the east coast. It is paramount for us to engage at an early point and get buy-in. It is important that we do that. I do not see that the introduction of the legislation would change the focus of that for any developer.

Chairman: I will stick to the time because I cannot criticise everyone else for going over time and then do the same myself. There are several issues that I wish to ask about and the witnesses may touch on them in the round of answers.

My first question is on the development of Moneypoint and Rosslare. I believe there is extraordinary potential for these two ports in the east and west, especially when we move to

floating technology off the west coast and the higher target of 30 GW. There is potential for development at Rosslare, servicing the south and the Irish Sea, and this will help with the 5 GW target. One of the submissions refers to a 60-year seabed lease. Is that related to the life expectancy of an installation? An installation would be at sea for 25 or 30 years. Does that give two stages for up-powering, if that is what it is called?

Dr. David Connolly: It is called re-powering.

Chairman: One of the submissions refers to the 90-day period for consent being possibly too short. There is a suggestion of a default period if 90 days is not met. Why is 90 days not sufficient? I imagine only a handful of players can bring this technology. The authorities are dealing with the same entities under the consent process and they would be aware of the technical and financial capabilities and the ability to deliver. There is no time to answer that but perhaps the witnesses may get an opportunity to do so later.

Mr. Peter Coyle: I will talk briefly about ports and Dr. Connolly may do the rest.

Chairman: I will move on but the witnesses may respond when we have further questions on development and so on.

Senator Rebecca Moynihan: I will be brief as many of the main areas have been covered. I reiterate what Deputy Ó Broin said about a robust planning system. Sometimes industry representatives can lobby and get exactly what they want in terms of a planning system but then an application may end up getting held up by a judicial review and local communities. Robust systems are in the interest of everyone when it comes to something like this. That is why we are going through the process. On Tuesday, we had the Department officials before the committee to discuss this subject. I did not get a proper answer from the Department but I would like to get one from the witnesses. They spoke about consultation with key stakeholders. I am keen to get a sense of what consultation with key stakeholders would look like if a company was making an application. Politicians follow key stakeholders and applicants are likely to have some community resistance to things like this.

Mr. Moran referred to community gain and the benefit of local employment. What is the view of the witnesses on having these placed on a statutory footing? At the moment, larger developments and applications have local employment clauses. What if something like that was put on a statutory footing in the Bill? What if a project had to take X number of people from the live register as opposed to from a locality? I am concerned about this. Coastal and fishing communities need a just transition for employment. I am concerned that the industry players may expect the State to upskill people as opposed to doing it themselves. I can offer a hint. The national children's hospital development project has an effective non-statutory local employment clause and community engagement. Those involved have dealt with local education and training boards, colleges and schools and targeted the skills they need for the initial building and the operation. These are two different things. I can give the name of the person involved afterwards. Those are my main points.

Mr. Peter Coyle: I will speak quickly about two issues and then hand over to Dr. Connolly. There is consultation on projects but there are different issues lying behind this. This involves building trust between developers and communities and a long-term arrangement and partnership. Over the years, we have advocated the adoption of a system known as coastal partnerships. That has worked out well in Scotland and England. These are bodies set up on a long-term basis with a budget and staff and they are designed to engage all the stakeholders in coastal

communities in the development, onshore and offshore, to deal with the marine. It does much to build up trust. We have seen relatively little controversy in Scotland and off the north-eastern coast of the UK with regard to offshore development because of these coastal partnerships. We need to do something like that.

I am a little concerned about a statutory requirement for certain people to be employed on developments, particularly from a safety perspective. The people working offshore are doing so in an exceptionally dangerous environment. People need all sorts of training and skills and so on. As this industry develops, anybody who wants a job and is willing to go through upskilling, training and so forth is likely to get a job in coastal communities around the country. We must bear in mind that many of these developments will take place, as time goes on, off relatively unpopulated parts of the country. We might not face the problem of a surplus of people seeking work but rather a shortage of people.

Dr. David Connolly: I will be brief and pass to Mr. Lefroy, who is going through the consultation. Perhaps he can give some examples. I may also pass to Mr. Moran so he can speak about some of the engagement matters.

The industry is already trying to upskill people and there is a Skillnet programme being done through IWEA to try to bring in new people to the sector as there is an impending shortage. We work actively with many universities in informing them of what skills will be required. It was very much of the report we launched in May to provide a document where people could see what skills would be needed and where. As an industry, we do not want a shortage and we want people to be ready and able when construction work needs to start.

Senator Rebecca Moynihan: Has it just been about universities? I am concerned about people who are now on the live register or people who do not have a third level background.

Dr. David Connolly: We are to launch a new programme in the next week that will help unemployed people join the wind energy sector. It is a specific employee assistance programme through Skillnet that would take people who are currently unemployed and bring them through a kind of introduction to wind energy that they could build on through future programmes so they can go into a specific area. The required skills are not just those taught through third level degrees. There is everything from apprenticeships to people driving crew vessels back and forth from the facilities, as I mentioned. It is a really wide spectrum.

People should also realise that this is not just about engineering as a large range of activities go through planning, environmental studies, financing and legal aspects that also support the energy sector. Members can see this in our membership profile, which touches on many areas. There is much work being done on the skills shortage and we are trying, as much as we can, to close the gap. Mr. Lefroy and Mr. Moran will speak to what is happening with community engagement.

Mr. Peter Lefroy: I will touch on some of the matters, including the question of putting local content obligations on a statutory footing. It has been done elsewhere and as an industry, we are generally supportive of the need. I suppose there is a caveat in that there is an appropriate point in time at which to do this, which is when the skills or people are available and ready to engage. The international experience has certainly been that if this is done prematurely, it can significantly put back the progress or the development of the industry.

As Dr. Connolly has mentioned with consultation, we are promoting a project off the Dublin

and Wicklow coasts and we have just finished a round of non-statutory consultation. We have gone out to engage with as broad a range of stakeholders as possible across all communities. Our plans have been hampered very significantly by Covid-19 in that the typical approach to this would be to engage in face-to-face meetings and at various locations. We were planning 12 different locations along the coast in which to hold meetings and public events but that was not possible in current circumstances.

We have had to transfer to a digital engagement platform and we have gone through various digital media, including a website. We launched a virtual consultation room, where we are able to post detailed information about the project, including statistics, preliminary environmental assessments and photo montages of what we expect the project to look like and so on. There is also significant engagement through social media and trying to engage as many stakeholders across the community as possible. In our social media engagement, our posts were seen by upwards of 700,000 people across the region and there was significant engagement through other platforms.

It is the standard that developers of these projects try to reach in principle. Across the industry, experienced developers are very keen and conscious of the need to build trust between communities and projects, as Mr. Coyle mentioned. They want to demonstrate not only the fact that these projects will have limited or negligible impact on the environment but also that they will bring significant benefits to local communities and the wider economy.

This links to employment, which is a critical part of building trust between the industry and communities, and it is where the industry can demonstrate that not only are we operating successful projects delivering green energy into the system but we are employing as many local people and contributing to the local economy as much as possible. It is a fundamental part of building the general acceptance of the industry. We as an industry are very keen to ensure that as much local content and employment is promoted as possible. As I indicated at the start, this must be predicated on the fact that there is an appropriate point to implement it.

Mr. Justin Moran: I appreciate there is very little time but Senator Moynihan would like to know there is a section in the report being highlighted by Dr. Connolly around the employment opportunities and it focuses very specifically on apprenticeships. It is a critical opportunity for so many people out there. One of the points we make in the report is that we must really focus on apprenticeships in the marine area. These are specialist marine skills to have the opportunity to get involved in this industry.

There are schemes in place and, for example, the Kerry training board runs a very good scheme for onshore wind turbine technicians. We need schemes focused on marine opportunities that give people in these communities the opportunity to get involved in the projects. There is a lack of skills, particularly in marine specialty apprenticeships, which is a challenge that must be overcome. It would be great to work with the Senator and other committee members to see if we can find the funding and supports to enable the development of those apprenticeships, ensuring this is not just about third level education opportunities. This is all about giving everybody the opportunity to participate in offshore renewable energy development.

Chairman: A paper was produced by one of the renewable energy groups on the economic value of the entire industry to the country. I wonder if that could be circulated to members as it would answer many of the questions.

Dr. David Connolly: We can absolutely do that. There is a very good two-page summary.

Chairman: Three more members are looking to ask questions, and this will leave time for the witnesses to wrap up or alert us to areas of the Bill that might be of concern and that we might include in the report.

Deputy Emer Higgins: I will be as quick as possible as Senator Mary Seery Kearney has a follow-up question. This is exciting as we have potential to deliver renewable energy on a massive scale while renewing towns and villages around the coast. Wind energy is expected to become our largest contributor to reducing carbon emissions and Ireland could become produce 20% of EU offshore renewable energy in the next number of decades. There is also the prospect of creating tens of thousands of jobs outside our core cities, which offers much potential to re-new towns, villages and local economies. It is incredible and great to see such potential being harnessed. The witnesses' passion for this project is palpable, which I love.

I welcome the response to my colleague, Senator Seery Kearney, on the education question. In my previous career, I worked as an industry party on committees that developed Skillnet, Springboard and apprenticeship projects and developed close links with institutes of technology to ensure that third level courses were being offered in high-volume growth areas, for example, technology. It is great to hear what the witnesses are doing in that respect.

Regarding the design envelope, I agree that the best possible technology should be used. It would be a failure if our planning process or this legislation held us back from using the best possible solutions available at the time of construction. However, we need to regulate this area. Would a fast-track decision-making process in respect of alterations to existing planning grants achieve that? Dr. Connolly spoke about having to go back to the drawing board if there was an issue with planning. I did not understand him fully. From dealing with plans in my time on my local authority, there is a further information section that sometimes presents the option not to do that. Is there an equivalent included in the Bill?

I love the idea of milestones and timelines. We could learn much from that idea in terms of strategic development zones, SDZs, and strategic housing developments, SHDs.

Mr. McPartland spoke about the potential to transform wind energy into fuel. Although it would be off the topic of this legislation, I would welcome a briefing note to the committee. I do not expect much, as I know the witnesses do not have a great deal of time.

Senator Mary Seery Kearney: I appreciate the full replies that have been given. This industry, like IT, will be driven by private companies and profit. It is fantastic that the nation's carbon emissions will be reduced and there will be employment and community investment, but there is a danger of this being like the story of the Pied Piper. I was not happy with the response on aesthetics, which was to the effect that we would have to live with them. While I appreciate that, there must be respect shown at all times during the transition. No one is suggesting that we will end up with a wind turbine every square metre, but respect must be shown for people's views. Facetiousness has no place in this conversation. That communities will have to transform dramatically must be respected at all levels. This is the State imposing in the public interest laws and systems for something that will be privately run for the foreseeable future.

Mr. Peter Coyle: One must bear in mind that the electricity generation industry is already highly regulated through the Commission for Regulation of Utilities and so on. That will continue. There are private and profit motives in these developments, but there is a large number of other stakeholders, for example, the sizable academic research aspect. It is worth bearing in mind that the most important and largest offshore renewable energy research programme in

the world is run out of University College Cork. Nearly 200 researchers on the new campus in Ringaskiddy are engaging on this and other forms of renewable energy. There is a profit side, but we are dealing with an industry that is highly regulated and will address targets.

There must be absolute respect for local communities. This will not work unless the public goes along with it. We have a long road to walk together in that regard.

Dr. David Connolly: I might answer some of Deputy Higgins's questions before passing to Mr. Murphy, who is present virtually, to comment on the specific suggestions around alternative approaches, including fast-tracking alterations and the further information section in planning applications. If a project does not get planning permission, its maritime area consent, MAC, is automatically ended. By virtue of that, the project must go back to the beginning.

Before passing over to Mr. Murphy, I will offer some reflections to give the committee further details on the proposals. I enjoy Deputy Higgins's excitement. In case the committee was not aware, we are No. 1 in the world in onshore wind energy. It already saves Ireland more carbon emissions every year than everything else we do combined. That is how important onshore wind energy is to us. While we have a fantastic onshore wind resource, using the resource off our coast is a step change in the scale of what is available to us. We have another significant opportunity to tap into a fantastic natural resource.

Regarding the comment on profit, I wish to emphasise that, if a project is to be successful, it must be able to offer the cheapest price or it will lose. There will be built-in losers. After spending tens of millions of euro and five or six years of effort, one will want to win the competition and will do a great deal to do so. In other jurisdictions, competitive tension has brought unexpectedly low prices for offshore wind energy. By using the same architecture in Ireland, I hope to see good-value wind energy. That might not happen in the very early stages when we are getting the industry built up, but it certainly will when we near the targets we are trying to deliver.

Mr. Liam Murphy: Good morning. I thank Dr. Connolly. I thank Deputy Higgins for her queries. Her suggestion around the capacity to provide an Bord Pleanála with a facility to process non-material changes to planning consent is excellent and one that we would support. It already exists under the strategic infrastructure development, SID, provisions. It ties into the principle of the Rochdale envelope, which Mr. Lefroy discussed. What is really-----

(Interruptions).

Chairman: I am sorry. I do not know whether Mr. Murphy can hear me, but we have lost his audio. It is not an issue with his microphone - I do not see it muted. I believe the issue is in the room here. We might return to him. Actually, we appear to have lost everyone now. We have had a power outage. We will revert to Mr. Murphy in a moment if we can fix the problem. Were all of Deputy Higgins's questions answered?

Deputy Emer Higgins: That was going to be the reply.

Chairman: We will return to it. Next is Deputy Gould. I ask members to be conscious of the time because we are close to the end and I want to leave time to wrap up.

Deputy Thomas Gould: I thank the witnesses for participating and giving their presentations. This is complex legislation and there is a great deal involved. We are trying to be as progressive and engaging as possible so that the right legislation is passed and there are no is-

sues down the road.

I have a number of questions. I apologise for my ignorance, but once a wind farm is developed, is that for all time?

Dr. David Connolly: Currently, a project gets a consent for a specific number of years. It typically goes from 25 to 30 years. That is the length of the consent regime.

Deputy Thomas Gould: Must there then be a reapplication?

Dr. David Connolly: One would have to apply again. It is called a repowering application, but one effectively has to submit the planning application all over again if one wants to extend beyond the period.

Deputy Thomas Gould: That would coincide with new technology coming on stream.

Dr. David Connolly: Exactly.

Deputy Thomas Gould: A whole site would probably be re-evaluated to determine what would be best.

Dr. David Connolly: I will give the Deputy a flavour of how that changes. The first repowering projects have just started in Ireland. Wind farms are likely to replace in the region of ten to 15 turbines with one turbine. As such, the project will look very different. It is almost a new application because there is a different type.

Mr. Peter Coyle: I will put that in perspective for the Deputy. By just a few months, the second oldest wind farm in the world is in Arklow. The technology there cannot be bought today. This technology moves quickly and, as Dr. Connolly has pointed out, repowering will be necessary.

Deputy Thomas Gould: I wish to ask about the jobs aspect. I am a Deputy from Cork and I listened to what was said about some of the industries as well as what was being done in UCC. Some committee members have touched on the education aspect. I have friends and families who worked on the oil rigs off the Cork coast. An uncle, God rest him, used to go out on the supply boats. Those were good and well-paid jobs. Obviously, there was a high degree of risk. Did Cork and other areas see a return on the profits that were made? I would say there are definitely questions about the community dividend and education aspects. It is similar to the point made on coastal partnerships and the trust with communities. To me it is a huge issue; we need to have that dividend. I know it is completely different but there was a construction of a prison in Cork and there was a community dividend that only lasted for a few years and yet the prison is projected to be there for 100 years. The witness made a point about there being a dividend of €2 for every megawatt hour of electricity for the first 15 years. What about the €3.5 million?

Dr. David Connolly: For a typical offshore wind farm of 500 MW just to be generic, that would result in around €3 million to €4 million per year.

Deputy Thomas Gould: The only issue I have then is it being capped at 15 years. To me, an ongoing dividend would be much more palatable for the community.

My last point relates to the aesthetics and the effect on the community. I have been to the west coast of England and to Wales where there are wind farms off the coast, and sometimes they can actually look quite beautiful, while at other times they can appear to be very intrusive,

depending on how they are set up. Other members made the point that this really must be taken into consideration and I think that is vital. We want this to be a success and we need to reach our target figure for 2030, not only as a nation, but as a planet. However in the short term, we need to bring communities with us, and the points I have raised, including on the issue of jobs and apprenticeships, which Mr. Moran mentioned, are important. If jobs are delivered to communities, they will buy into the whole project. Those are my concerns and questions.

Dr. David Connolly: I can certainly-----

Chairman: We have reconnected with Mr. Murphy, who was going to answer Deputy Higgins's questions, and could probably cover many of the questions posed by Deputy Gould in respect of community gain, employment and training.

Mr. Liam Murphy: I will recap because I do not know how much the committee heard the last time. Deputy Higgins made a good point on the issue of non-material changes to planning consent. That is something that is already provided for under the planning Acts and under SID. An Bord Pleanála has the capacity to do that. I think it is an excellent suggestion. I would make the point that it ties back in directly to the issue of the Rochdale Envelope, and what is critical within that is that the worst-case scenario is assessed in terms of the EIA of the design parameters that are put forward to ensure compliance with the directive.

On Deputy Higgins's second point around the term of the MAC and the applicable milestones, we did some research on international jurisdictions and what works well. We have looked at the UK and in our position paper we propose that the Crown Estate approach in the UK, in a very mature market, is the best solution for what we have in Ireland. Therefore we are proposing a ten-year term for the MAC, but to ensure that developers do not sit or hoard on that MAC, we have suggested that milestones be put in place - the first one being evidence of site development and commencement in terms of geophysical and geotechnical bird and marine mammal surveys. That needs to be done within 18 months, and evidence of a signed contact needs to be provided. The second milestone is particularly important, and concerns the planning permission application submitted to An Bord Pleanála. There is a term of five years available for that in our position paper. We think that strikes the right balance between enabling developers who have the capacity to move forward with certainty and make those investment decisions, and keeping the developers honest and not allowing a party to actually sit on the consent that has been granted.

Chairman: Deputy Higgins wants to come back on a point of information. I will then ask the Mr. Murphy to address Deputy Gould's comments, perhaps those concerning Cork in particular.

Deputy Emer Higgins: I will keep this brief. What Mr. Murphy said about the milestones and the planning permission applications being submitted within five years makes sense. However, it links back to what Dr. Connolly said about there being a ten-year term for MAC. I do not fully understand the issues around planning if a developer does not get planning permission the first time around. They have ten years in which to do so, so I do not know what further would be required.

Dr. David Connolly: There is a schematic in the FAQs of definitions of when a MAC could come to an automatic end, and one of them concerns when a developer has failed to obtain planning permission. However if there is a ten-year period, a developer may have an opportunity to apply for planning permission a second time if they feel there are things that could be fixed.

The MAC would not come to an automatic stop just because the developer failed the first planning application. Of course, a developer would only do that if there was sight that there was an issue that could be resolved in the time left within that ten-year period.

Mr. Peter Coyle: I wish to address the points made by Deputy Gould. I take his points on board, but I do not think it is reasonable to compare the little oil and gas industry that we had with the offshore wind and wave industries. We have only had gas farms in Corrib and Kinsale. We have never pumped a pint of oil and I suspect we never will, whereas this is going to be a long-term industry. The resources are there and it is only a matter of exploiting them - as complex as it may be. To give the Deputy a sense of what is happening in Cork alone, there are now six or seven companies in Cork that are looking into and investing in this industry. In the past six months, Cork companies have invested €20 million in this industry between them. As the Deputy is aware, Irish Mainport has bought a new ship, and I also spoke about Green Rebel Marine earlier. There are a variety of other companies involved, and the port itself, no doubt in consultation with many local interests such as the local authority, is working on the new strategic development plan for the port, which will include how it is going to address the offshore industry. Therefore, there is much good activity in the medium to long term in the pipeline for Cork, which will be permanent and will reach into all corners of society.

Chairman: I call on Deputy Duffy. If questioners stick to the time limit of five minutes, Dr. Connolly and Mr. Coyle will then do a summary for the committee.

Deputy Francis Noel Duffy: I thank the witnesses for their presentation today and for the insight they have provided. The marine planning and development management Bill is an exciting one, and I feel privileged to be part of the process. As a Deputy representing the Green Party, I fully support the protection of our biodiversity, and equally, the transformation of our energy sector into one which is sustainable. Reversing the importation of €6 billion of energy and instead exporting €6 billion of energy will bring thousands of sustainable jobs, and I welcome that. I concur with Deputy Ó Broin that we must ensure that the Bill is fit for purpose and not rushed. Flawed law will not assist the evolution of renewable energy.

I have two questions. I understand that as a small State we need to bring in external expertise to exploit our potential. What companies are involved, both Irish and international, and what is the ratio of Irish to international companies? What percentage of profits will go to benefiting the State, and is that factored into the licensing, if at all?

Dr. David Connolly: On the question of the external expertise, I do not know the exact ratio, but there is certainly a mix of international and Irish companies involved. Even looking at the witnesses here today, there is Mr. Murphy from ESB, Mr. Coyle from RWE, Mr. McPartland from Energia, and Mr. de Pietro from DP Energy, so there is a wide mix of difference companies involved.

Mr. Peter Coyle: There also local companies like DP Energy from Buttevant in Cork, and Simply Blue Energy that has its headquarters in west Waterford, and which are both very ambitious companies, and there are others in the pipeline.

Deputy Francis Noel Duffy: Great.

Dr. David Connolly: At the moment we are learning much from other countries which have already started on the offshore cycle, so we are currently in learning mode rather than leading mode, but we have the resources to put us in leading mode in the long run. What was the

Deputy's second question?

Deputy Francis Noel Duffy: It concerned the assimilation to the State.

Dr. David Connolly: Effectively the MAC process will establish whether a developer is fit and able, and the State will have a price for the lease of the seabed, so that will be direct income for the State as part of that project.

Deputy Francis Noel Duffy: Does Dr. Connolly have any idea what those prices are?

Dr. David Connolly: We do not know yet as it has not been assessed.

Senator Mary Fitzpatrick: Will it be determined on a case-by-case basis for each MAC? Will it be MAC-specific?

Mr. Peter Coyle: I doubt it. I suspect the Department is working on a policy that is yet to be revealed.

Dr. David Connolly: It probably would have to take into account the size of the particular project. For example, if one is developing an offshore wind farm of 500 MW, it is likely to be much more if one is developing a project for 1,000 MW.

Senator Mary Fitzpatrick: It is a very interesting question. My understanding of the MAC is that it gives one a licence to demonstrate one's capacity to prepare an application for the development of an offshore wind farm, or a wave or tidal one. My understanding is that the maritime area consent, MAC, gives one licence to demonstrate one's capacity to prepare an application for the development of an offshore wind farm or of a wave or tidal energy installation. An applicant will not actually be generating revenue at that point. In fact, the applicant will be incurring an awful lot of costs in exploring and designing the project and so on. Is it at the next stage that a revenue share, a profit share or some other form of dividend to the State is paid?

Dr. David Connolly: Perhaps someone might clarify if I have misunderstood, but my understanding is that one is told what the fee will be at the MAC stage but that it is once one starts generating revenue that one pays that agreed fee.

Mr. Peter Coyle: If one were to determine today that one wanted to develop a wind farm or a wave farm, one would incur costs for an average of nine years before starting to generate revenue at the start of the tenth year. This is a very high-risk business for developers. Profits are not in any way guaranteed.

Senator Mary Fitzpatrick: Who is investing?

Dr. David Connolly: Is the Senator asking who is investing in the projects? It is typically the developer of the project that spends the money until generation begins.

Senator Mary Fitzpatrick: Who funds the developer?

Dr. David Connolly: The companies fund themselves.

Senator Mary Fitzpatrick: Are such companies publicly traded?

Dr. David Connolly: It varies. Ireland's own semi-State companies are actively involved in the wind energy sector, as are private companies. There are standalone companies, companies that are headquartered in Ireland and international companies. It is a diverse mix. There is

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Senator Mary Fitzpatrick: Is there much pension fund investment in such companies?

Dr. David Connolly: Pension funds typically buy assets that are up and running rather than those at development stage. The risk at development stage is too high for pension funds.

Mr. Peter Coyle: Smaller local companies such as DP Energy and Simply Blue Energy are negotiating with larger partners to develop their projects. They both have good track records in that regard.

Deputy Thomas Gould: I asked a question a few minutes ago but I did not get a response. I have no doubt that was because a lot of questions were being asked. It related to aesthetics and the effects this might have on communities.

Chairman: I am sorry that I cannot bring Deputy McAuliffe, Senator Cummins or Deputy O'Donoghue back in on this matter. We are reaching the end of the time for which we are allowed to remain in the room. I want to give Mr. Coyle and Dr. Connolly an opportunity to conclude and to highlight to the committee the issues they have included in their position paper. I will be honest; I have not yet read through every head of this Bill. It is huge. I am working my way through it. Will Mr. Coyle and Dr. Connolly highlight the concerns they have raised in their position paper?

Dr. David Connolly: I will very briefly answer Deputy Gould's question. It may reassure him to know that a visual impact assessment must be carried out as part of the planning process. This will ensure that as much as possible is done to reduce the visual impact. The process also takes account of the cumulative impact. In other words, if one develops another project later, it will have to account for what is already there.

We identified the three critical key areas in our introduction. Our position paper gives a number of very thorough recommendations and clarifications on top of that. As I said at the outset, the three key areas are design envelope flexibility, streamlining the overall consent process and the milestones for the MAC process. The issue of the time period also needs to be addressed so that it does not automatically end. Those are the three critical issues from our side.

I will very briefly provide clarity on some of the Chair's questions, if I may. The idea of the 60-year lease was developed in the context of having two life cycles for the project. We addressed the 90-day consent in the way we did because we felt the time was more than sufficient. This reflects the Chairman's own comments to the effect that it would be a very long period of time in which to do it. We felt 90 days was more than sufficient to reply.

I can only agree with the Chairman that there is a great opportunity here for Rosslare, Monypoint and the ports of Ireland. This goes back to Deputy Gould's point on local jobs. When there is a very large piece of offshore infrastructure, many things get channelled through the local port, which is where the expertise, jobs and support services for that infrastructure are based. It is not just that the ports have a vital role in servicing offshore wind farms but that efforts are concentrated into that area, which is of great benefit with regard to buy-in from the local community. They see the real tangible benefits of having this infrastructure.

To reflect what Mr. Coyle said, offshore wind energy is very different from oil and gas. One is dealing with infrastructure rather than a resource to extract and move on. This infrastructure requires a lot more manpower and labour to build and maintain. The benefits for the local area

are, therefore, more concentrated.

Mr. Peter Coyle: I thank Deputies and Senators for the opportunity to listen to them this morning. That is as important as them listening to us. I have two or three quick points to make. On the staff issues that were raised, Ireland has developed all of these new policies and legislation, which are very complex, on the backs of a small number of dedicated and brilliant civil servants. I pay tribute to them all because they have done a remarkable job. In Scotland, the closest analogy I can draw, there are 35 or 40 people working full time on the kind of issues about which we are talking this morning. In Ireland, there have probably been half a dozen or so. We have carried all of this on the backs of a very small number of people. That is not sustainable as we go into the execution phase. People are required in An Bord Pleanála, in the Sustainable Energy Authority of Ireland, which has a core part to play in all of this, in the Department of Housing, Local Government and Heritage and in the Department of the Environment, Climate and Communications. All of these are important bodies and they all need extra staff. In relative terms, we are talking about a handful, 35 or 40 people. We cannot continue to do this without resources. We have gone as far as is possible. I again pay tribute to the people involved.

On the harbour side of things, our ports policy has traditionally been to leave them alone because they are profitable. That was fine but the world has now changed. A review of ports policy is due. It is going to have to look at the role of ports and how they are going to be supported to develop. The Port of Cork is going to play a very important part in all of this. In time, we will probably need to develop substantial new port facilities on the west coast. The area around Shannon Foynes Port, including Moneypoint, will be part of this, and the north west is another side to that coin. That will be challenging and expensive and a lot of notice will be required.

As everyone has said, this legislation is very exciting, although very complex. We probably will not get it all right on the first go. We will probably be back here in a couple of years' time to look at amendments and so on. It represents the third phase in our industrialisation policy as a State. The first phase started in 1932 with the self-sufficiency policy introduced by the Fianna Fáil Government that came to power in that year. This led to employment and, in some respects, it sustained us right on through the 1960s and into the early 1970s. In the early 1970s we moved on to a second phase, which was based on attracting foreign investment and the building-up of the food industry and indigenous technology. We are now moving into a third phase, developing a massive indigenous resource which we can export as well as use to meet our own needs. This will create tens of thousands of jobs if we handle it well and will leave us self-sufficient in the area of energy while producing employment and income through the exploitation of a local resource of infinite scale. It will be there forever and will not run out like oil or gas.

I thank the committee for its time. This is great legislation. I am sure we will see the committee again because there is still a lot of road to walk.

Chairman: I thank Mr. Coyle. With the amount of questions arising, we could have had another two hours on this. If it was not for Covid, we probably would have. I am conscious that we did not cover areas such as hydrogen capture, that is to say the potential to produce hydrogen from wind energy rather than from a fossil fuel resource. That is very important with regard to emissions. We did not talk about wave technology. The University of Limerick was involved in such technology many years ago and probably still is, although I do not know. We also did not discuss cables and interconnectors, which is especially relevant considering we are now developing an interconnector with France. This legislation will also cover that area; it is

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not just about wind turbines.

I thank the witnesses for their attendance, Mr. Coyle and Dr. Connolly who are in the room as well as those who attended virtually. I believe this is the most witnesses we have had attend a meeting yet. I thank them all for their time this morning. We will be meeting with environmental NGOs next week and will hear their concerns, which will feed into our report on this Bill.

The joint committee adjourned at 11 a.m. until 10 a.m. on Tuesday, 1 December 2020.