Limerick Chamber

Advancing business together

Limerick Chamber Submission to the Department of the Environment, Climate and Communications on the Offshore Wind Phase 2 Consultation

March 2022

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1. Introduction

Limerick Chamber is the largest business representative body in the Mid-West, with over 420 member organisations supporting over 50,000 jobs across the region. Limerick Chamber welcomes the opportunity to provide input into phase 2 of the Offshore Wind Consultation for the Department of Environment, Climate and Communications. In September 2019, the Network of Irish Chambers pledged to advocate for and support the advancement of the United Nations Sustainable Development Goals (UNDSG). In doing so, we use the Goals as a framework to identify policy priorities and communicate our recommendations, and we have a particular focus on five of the goals: encompassing decent work and economic growth (SDG 8), sustainable cities and communities (SDG 11), advancements in gender equality (SDG 5), viable industries, innovation, and infrastructure (SDG 9) and progress in climate action (SDG 13).

These Goals are used as a lens for interpreting and prioritising our policy proposals. The issue of offshore renewable energy is particularly important to Limerick Chamber given the developments at the Moneypoint facility in recent months. In this short space of time, the Mid-West region had the pleasure of welcoming such a great investment by Equinor regarding Floating Offshore Wind (FOW). This investment had the potential to boost employment and support the regional economy in a significant way. However, in the same short few months, we have seen the withdrawal of Equinor from said project in what was identified as delays in the planning process which are a result of the delayed process involved in reforming Ireland's Maritime Area Planning legislation.

As Chambers Ireland have previously outlined in their white paper on maximising the benefit of developing the national wind energy industry and the national grid, the Irish business community is deeply interested in our potential to develop an offshore renewable energy industry, and offshore wind in particular. The path taken regarding investment in renewable energy and offshore wind will play a key role in enhancing the regional environment for FDI and indigenous investment.

2. Limerick Chambers Perspective on Offshore Renewable Energy (ORE).

Limerick Chamber views on ORE are much in line with the Network of Chambers in Ireland, given that the impact of Climate Change has become ever more obvious. Previous submissions by Limerick Chamber such as our submission on the 'Shaping Our Electricity Future' Eirgrid

consultation, as well submissions by Chambers Ireland on behalf of the network of Chambers on Wind Energy Development Guidelines, the Commission for the Regulation of Utilities consultation on Price Review Five and the submission on Grid Development Policy for Offshore Wind, have all informed our below views on ORE:

1. Floating offshore wind has the capacity to transform our economy by helping us become a net exporter of energy.

2. The operations and maintenance associated with offshore wind farms have the potential to bring thousands of high-quality, highly skilled, highly paid jobs to our economically disadvantaged regions for several decades.

3. Early engagement with the challenges associated with the deep-water floating platforms will allow us to nurture a high-technology capital intensive and highly skilled industry that has growth potential over generations to come.

4. The European Green Deal is ideally timed to allow us to access cheap capital at quantity over the coming decade.

5. The abundance of energy at a zero marginal cost creates huge opportunities for the Hydrogen industry.

6. In increasingly politically turbulent times, it will offer us energy security by removing the political risk that we suffer as a result of being at the edge of Europe, and at the end of very long supply chains. This will boost Ireland's energy independence.

3. Floating Offshore Wind (FOW) & Green Hydrogen – Industry leaders?

The development of our offshore renewable energy industry is one of the greatest economic opportunities for our country since we joined the European Economic Community (EEC). There is likely to be over $5 Trillion in investment in offshore renewables expected over the coming decade[1], the bulk of which will be in green hydrogen and wind energy. The economic potential alone on the Atlantic coast has been highlighted by Shannon Foynes Port, where they have quantified 75GW of offshore wind for the Atlantic Ocean (the majority of which will be using floating offshore wind energy technology) representing over €100 billion of floating wind investment. For the current administration a nationally critical task in the coming years will be to maximise our social and economic benefits arising from the green energy boom. Central to the success of this will be positioning Shannon Foynes Port as a strategic floating offshore wind marshalling port and supply chain hub within the Atlantic.

If successful, such a legacy project would see Ireland become energy self-sufficient in the first instance, it will allow us to export excess energy to the wider European continental economy.

Limerick Chamber has previously highlighted the significant potential benefits that lie within the deep-water basin off of the West Coast of Ireland in our submission to the Eirgrid 'Shaping Our Electricity Future' consultation. Investment in FOW on the West Coast has the potential to not only support Ireland in becoming an industry leader in this sector at an international level, but also to support regional balanced growth, a core objective under Project Ireland 2040. It is already clear that our economy will face significant challenges over the next few years. Increased investment in regional areas is more crucial than ever given that regions outside of the capital are likely to lag behind in terms of the post Covid-19 economic recovery. Such an investment in the Mid-West/West regions of Ireland would address a number of challenges. Regarding regional balanced growth, the boost to employment in these regional economies will be significant. The resulting jobs brought to the region from the renewable energy sector will span across multiple industries, such as construction, engineering and manufacturing. A report published in 2020 for the Shannon Estuary has previously highlighted the economic potential of such an investment, creating between 10,000 – 20,000 jobs in manufacturing along with another 10,000 in industry alone arising from four distinct supply chain opportunities – Manufacturing, Staging and Installation, Operations and Maintenance by 2050.

This will not only allow us to take a prominent position in nascent industries such as deep-sea offshore windfarm construction, but it will also allow us to be early movers in the skills-intensive offshore platform industry. It will give us a foothold in the export of green energy derived hydrogen/ammonia which will have the secondary benefit of reducing the carbon emissions of domestic industries such as farming through offering clean alternatives to fossil fuel derived fertilisers, while also helping other states decarbonise through the substitution of green energy alternatives for industries such as aviation, shipping, and transport, steel production etc. which require energy dense alternatives to the fossil fuels which they have a dependence on.

For Ireland to fully capitalise on the significant resources available, ambitious targets regarding renewable energy generation must be set. We need to consider the rapid advancement which is occurring in technologies such as Floating Offshore Wind, Hydrogen, and Nitrogen Fixing Processes for Green Ammonia. We need to ensure that the ORESS process is capable of

adapting to this rapid pace of change. We have already seen hints of the economic potential such developments could bring with recent visits from the German green hydrogen commissioner Stefan Kaufmann to Shannon Foynes Port. The market pull for green hydrogen is growing rapidly and there are direct and existing export opportunities to other EU countries such as Germany, the Netherlands and France. Germany are currently supplying just 10-20% of their domestic hydrogen demand requirement using grey hydrogen only. With Shannon Foynes Port being identified as a likely hub for Irish green hydrogen exports to other countries such as Germany, it is essential that this process is conducted as quickly as possible to avoid Ireland falling back in the pecking order when it comes to the renewable energy export market.

By adopting strategic partnerships, like those outlined in the next section, Ireland can boost its capability to deliver green energy infrastructure. However, investment in existing infrastructure and updating of the regulatory environment will need to be advanced as a matter of urgency to deploy a pipeline of sustainably sourced energy into the future.

4. International Context

With Norway's Mangora planning a 500MW floating offshore projects off the Western Isles in Scotland in conjunction with ScotWind, and their expansion of the Sydkustens Vind project in Sweden to 2GW including 500MW of floating, we need to be prepared for an accelerating pace of development, these are no longer speculative technologies. Furthermore, we need to ensure that we are keeping pace with neighbouring countries and thus ensuring our long-term energy independence. These developments off the coast of Scotland and Sweden further highlight the issues that have arisen with the long planning process involved in offshore wind in Ireland vs other nations.

To understand the context of Ireland's progress with offshore wind, it is important to further analyse the process involved regarding other countries offshore wind developments. The recent progress off the coast of Scotland has highlighted how much swifter the full process can be in terms of deploying sustainable technologies.

Through ScotWind, the first round of offshore wind leasing in Scottish waters for a decade was put to tender, where the Crown Estate Scotland (CES) raised £750m. Through 74 bids, 17 approved projects across 14 sea areas around Scotland under ScotWind have been approved. With 10 of the 17 projects being floating or mixed, a target of 10GW of renewable energy over

the next 10-year period has been set (the winning bids believed they could reach more than 24GW). This is much in contrast to Ireland max capacity of 5GW if every target is met, which is often not the case in these large-scale projects.

The benefits of this offshore wind development are clear not only regarding climate action, but also in terms of public spending. As outlined by the CEO of the Crown Estates Scotland, the £700m raised from bids for offshore wind projects is delivered straight into public finances. This further highlights the case for a swifter process regarding maritime planning permission in Ireland, where there are clear environmental benefits but also essential public finance benefits.

Establishing Ireland's current legislative process regarding maritime planning permission has been a slow development over the last number of months. The bill was officially signed into law in December 2021, however delays in the process have held up previous planned projects (such as the withdrawal of Equinor from a €2 billion wind energy project in Moneypoint, Co Clare). The issues around delays have been previously highlighted by those in the sector with Noel Cunniffe, CEO of industry group Wind Energy Ireland noting the contribution of the delayed reformation Irelands Maritime planning and regulatory framework to slowing progress.

Mr John Fitzgerald outlined, in a Joint Oireachtas Committee on Climate Action, the upward potential of adopting the Scottish model. Scotland have ensured economic efficiencies by engaging with industry to demonstrate efficacy of projects in Scottish waters – particularly with trials of new technology by Equinor. In 2017, Equinor opened the first full-scale floating offshore wind farm, Hywind Scotland. The wind farm, which generates 30MW, has the highest capacity factors in the UK for three years running. Equinor are building on this capacity by building the world's largest floating wind farm, Hywind Tampen, which will generate 88MW. Furthermore, Equinor outline that scale is key to reducing cost; between their offshore wind pilot and Hywind Scotland, CAPEX / MW reduced by 70%, and Equinor expects a further 40% drop between Hywind Scotland and Hywind Tampen.

The importance of pushing the limits of innovation regarding FOW are evident when looking at the progress that Portugal has made in this industry over recent years. In 2021, Portugal saw its second floating wind farm come into action with the technology used being the first of its

kind to be tested in EU waters. The approach taken in this project was to design floating offshore wind for the exploitation of wind power at depths of more than 40m by mounting the turbines on floating platforms that are anchored to the seabed, taking advantage of much stronger wind flows. It is important that we recognise the need for innovation regarding FOW given the success it has had in other European countries. Similarly, the West Coast of Ireland has significant untapped potential to lead the way in the floating offshore wind industry given the deep basin available to develop floating offshore wind there. The scale of the resource available was previously highlighted in a report published in 2020 for the Shannon Estuary showing the potential output of offshore wind on the west coast, where up to 70GW of floating offshore wind energy is estimated to be able to be produced (more recent estimated have suggested that up to 75GW can be produced). The benefit of such an investment is clear in the case of Portugal in terms of the positive effect it has had on local economies in the region, with German company Nercom being a core employer for locals in the area.

Recommendations:

- Deploy a model similar to Scotland to focus on delivery of offshore wind energy with a particular focus on the potential high load factors of the west coast
- Begin expanding and putting infrastructure in place to ensure that offshore wind generation on the west coast is adequately serviced, this should be a matter of priority and will decrease cost in the long term due to scale efficiencies.
- Liaise with industry to establish a partner base to bring forward strategic partnerships for offshore wind energy
- Liaise with industry to improve regulations and bureaucracy surrounding offshore wind generation. Being mindful that it was widely reported that Equinor removed themselves from the Money Point project due to the regulatory environment.

5. Rising Cost of Doing Business

We are now only getting a clearer understanding of how the economy will recover post pandemic given the removal of restrictions. Supply chain costs have risen rapidly over the 2 years, with inflation being at the highest rate since the beginning of the 2000's. Regarding inflation, energy inflation has become one of the core issues among not only individuals and households but in businesses also.

The significant resource available to Ireland as a whole regarding the deep-water basin on the West Coast is something that must be exploited for the benefit of the economy, for businesses and households. The sufficient availability of energy is not only a key concern for businesses both located within the region, but will be a key contributing factor in attracting business investment and FDI into the region. Investment in this resource will also support Project Ireland 2040s goal of reginal balanced growth, whereby regions in Ireland outside of Dublin will now have this significant pull factors to attract people to invest, work and live in regions such as the Mid-West.

Looking into further benefits of capitalising on this offshore resource, Ireland will become a global leader in renewable energy should the full potential of this resource be realised. The c. 75GW of available energy will be multiples of what the island of Ireland needs as a whole. This opens the door to a market in which the Irish economy will benefit greatly from by potentially exporting energy. However, failure to capitalise on this opportunity over the next few years to 2030 will result in other countries gaining a significant head start on Ireland.

<u>Recommendations:</u>

- Take advantage of scale efficiencies in the provision of renewable energy to decrease the cost of living and doing business in Ireland – this must be completed in tandem with infrastructure and regulatory upgrading
- The world is operating in an environment of high risk and instability. The need for countries to drastically improve their energy independence has come to the fore and will continue to dominate discourse in the coming months and years. The movement to a green and sustainable island must be advanced as a matter of urgency by adopting the recommendations outlined in this submission.

6. Infrastructure & Phasing

While we note that phase 1 and phase 2 are focused on the East Coast to 2030, we would recommend beginning work in putting the future infrastructural needs in place to expand grid capacity for the west coast. As per the 2030 offshore grid capacity map, 4,260MW will be produced along the East Coast of Ireland while just 390MW will be produced along the west coast.

It has been highlighted previously by Valencia Island Energy Co-operative that *"the weaker electricity grid and deeper offshore waters of the west of Ireland require a different solution. Using floating platform wind turbines and hydrogen energy storage, we can capture this energy and replace fossil fuels used in heating and transport".* It is imperative that these infrastructural gaps are addressed for the west coast electricity grid to have an adequate pipeline. Mr John Fitzgerald highlighted the importance of Ireland, and indeed, Europe rewiring itself to take advantage of renewable resources by highlighting that load factors on the west coast of Ireland are much better than the other coasts, but connectivity is an issue. This was highlighted in 2019.

It is clear the Phase Two 5GW target has been informed by EirGrid's Shaping our Electricity Future (SOEF) and that constraints exist with regard to capacity for connecting offshore wind onto the transmission system. However, it is important that the 5GW target is not considered a ceiling for 2030 targets. With more than 26GW of projects in development in Irish waters including 10GW of floating wind in our deeper waters[1] there are a number of floating projects in development that can deliver for 2030 through connecting to available grid capacity but also through alternative routes to market such as the production of hydrogen through electrolysis. Therefore, it is imperative that the DECC also broaden the scope of Phase Two beyond grid connected offshore wind.

Recommendations:

- Establish plan to put infrastructure in place to ensure capacity to generate and transfer wind energy throughout Ireland by 2030 and beyond.
- Diversifying wind generation location with less of a focus on the east coast.
- Establish MARA as a matter of priority
- While it is not envisaged that development permission will be required for ORESS 2 eligibility, it should be a priority matter to lend state support to feasible projects to obtain development permission as soon as possible to ensure a sufficient pipeline of wind generation capability into the future.

[1] According to Global Renewables Infrastructure Projects (GRIP) Database – Market Overview. The Renewables Consulting Group, an ERM Company

7. Transparency, project pipeline and funding

This plan needs a greater amount of transparency around project delivery, timelines and oversight. Currently, the strategy is out to 2030, but providing a longer-term plan, with key deliverables, dates, outcomes and funding behind it would bring interest and stability into the sector. It is likely not enough that plans are advanced in isolation i.e. focusing on the west coast to 2030. Plans must be advanced in a collaborative and cohesive nature to ensure efficiency in delivery. To improve transparency and clarity, further information should be provided around items like the "enduring regime".

The deployment of sustainable energy generation needs a multi-annual funding framework, ring fenced from the budgeting process that is tied to key outcomes and KPIs with accountability baked into the framework. This will ensure a long-term commitment by Government to deliver in the sector and should help to attract and retain strategic partners. While we are mindful that Ireland has a target to achieve 70% renewable energy by 2030 by delivering 5GW of offshore wind, implementing a multi-decade and pipeline plan should help ensure time and cost efficiency. But to achieve the desired outcome it must be backed by the correct legislative and regulatory framework.

Ireland's competitive advantage of enormous floating wind resources in the Atlantic will be central to supporting Europe's energy requirements. The importance of FOW and green hydrogen have previously been highlighted in the EU's Energy System Integration Strategy. There is a significant opportunity for Ireland to contribute to wider EU demand for green hydrogen through scaling up the deployment of electrolysers, developing a hydrogen manufacturing and export economy and contributing to the interconnection of hydrogen within the region.

8. Questions & Responses

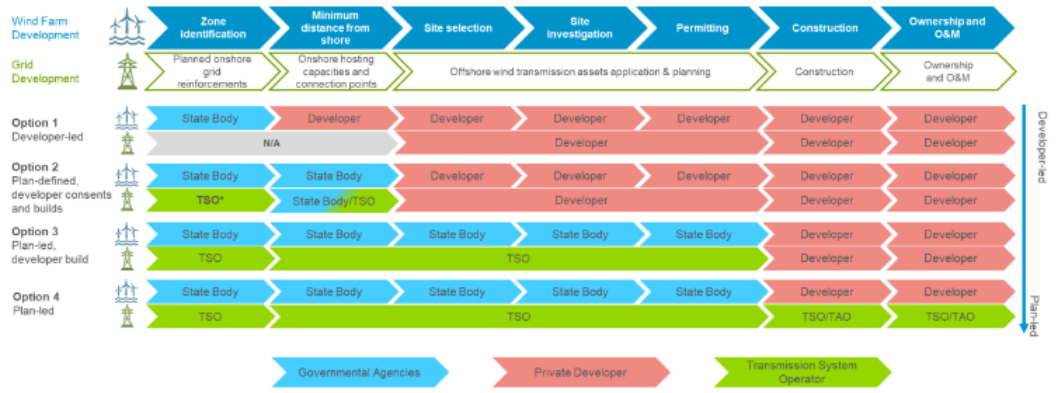
1. **Which is your preferred option and why of:**
    a. The above options?

Limerick Chambers preference is for Option B – The Competitive MAC process.
While Options C and D have their merits, they are best placed to take advantage of what we assume will be the available capacity on the Grid post-2030 under the "Enduring Regime". If

we are to map these proposed options in this consultation onto the "Grid Development Policy for Offshore Wind" decision, Options C and D are forms of the Options 3 and 4:

Option 1. Developer-led model	Option 2. Plan-defined, developer consent and build	Option 3. Plan-led, developer build	Option 4. Plan-led model
Fully developer-led grid delivery model	State defines minimum distance from shore for wind farms, as well as grid connection points and available onshore grid capacity for RESS auctions; EirGrid pro-actively plans and coordinates onshore grid reinforcements	Developers responsible for offshore wind farm transmission asset construction, ownership, operation and maintenance in plan-led model	Fully plan-led grid delivery model

Figure 3. Grid delivery model options for Ireland following the phases of a project timeline. (* In option 2 the TSO will pro-actively plan and communicate the timeline for onshore grid reinforcements early in the development process).



Source: Navigant

Consultation to Inform a Grid Development Policy for Offshore Wind in Ireland, DECC 2020

The decision of that process was that we should be operating under the Developer led model out to 2025, the "Plan led" models beyond 2030 under the "Enduring Regime" (Options 3 and 4) and Option 2 during the interstitial period.

Limerick Chambers view is in line with Chambers Ireland view that given the disruption associated with the pandemic, and the delay in introducing the Maritime Area Planning regime (along with the associated legislation for MARA) that we should be extending the period where Option 1 (the developer led option) is applied. Option 1 of the Offshore Grid decision loosely maps to the ORESS1 option. If we were to follow the path towards Option C (Early ORESS 2) or Option D (Early Enhanced ORESS 2) we would be undoing the decisions that had been made under the Grid Development Policy, and we would be bringing forward the implementation of the Plan led approach.

Effectively, we would be transferring all the decision making associated with offshore wind development to the TSO in the first instance. Only within the areas that they prescribe would developers be able to consider developments. These developments would then have to assess these TSO selected areas to see where MARA's DMAPs would permit development to occur. Within those areas, developers would then have to narrow the potential windfarm sites to those areas where it is possible to construct the projects, within the allowed timeframe.

This ordering of priorities would strongly limit the quantity of electricity that can be derived from offshore renewable energy sources. And would preclude any project that may not need to have a connection to the Transmission network from seeking planning permission as a Grid Connection would be a prerequisite. Furthermore, different elements of the industry contest where there is availability for increased capacity on the network. This is particularly apparent in the discussions around Hybrid connections where thermal derived energy is displaced by renewably sourced energy which would not lead to greater demands being placed on the High-Voltage Grid. But prioritising Grid before generation capacity could prevent such large hybrid projects from commencing.

The concern is that should Options C or D be selected; Ireland will be unlikely to be able to meet its 5GW targets for offshore wind in 2030. Of Option A (Deployment Security) and Option B (Competitive MAC Process) our preference would be for Option B, less because of the benefits of Option B and more because Option A has greater issues with it.

By requiring that applicant projects have deployment securities (which are subject to the considerable administrative/legal risks associated with the new planning regime) there is a risk that the test for such projects is the capital the developers have available to them, rather than the intrinsic qualities of the individual project, it's viability, or the capacity of the sponsors to bring the project to commercial operation within the allowed period.

This test is a financing test, not a test which is founded upon the likelihood of the project being delivered. It also does not exclude the possibility of well-funded organisations using capital to strategically capture rights to develop in particular areas, it merely makes it expensive. The success of this strategy relies on the Department having an accurate capacity to model the long-term value of the rights to develop in a particular space. Should the Department miscalculate, there could be opportunities for funds to profit from arbitrage (in the case where the short run

costs of the deployment security not be sufficient to outweigh the long-run benefits that might accrue from using a more mature technology at a later point) or by postponing development until there is more certainty regarding the types of projects tend to succeed in passing through An Bord Pleanála, at which point the value of the rights to develop will have increased. Finally, in the context that rights to develop lapse in the wake of the projects not achieving COD by 2030, they will still likely be the projects that have the best chance at succeeding in subsequent rounds of ORESS as they will have more information about their sites, and the decision-making processes than naive entrants to the auctions. So, in if there is a mispricing of the Deployment Security, there is no other credible threat for an operator that games the auction.

Alternatively, should the deployment security be too high, and given the considerable risks associated with developing in areas which are as yet largely under investigated, and where environmental impact has to be assessed, and where the planning system has yet to be tested, then many projects will go unexplored because only those where the potential developers have both access to capital, and a significant appetite for risk, will be able to begin the process.

Therefore, of the four options, Limerick Chambers also supports Option B, the Competitive MAC process, which has to its benefit, regulatory flexibility, it can require developers to conduct minimum levels of site investigation such that the projects will have to be able to withstand technical scrutiny, and an assessment of the organisational capacity of the proposed developer to ensure that it is a credible proposal. The risks associated with that approach can be mitigated by adequately resourcing MARA such that it has the capacity to deal with these projects.

b. <u>The above options, variations of same, and other possible options within the parameters outlined in this paper, particularly sections 3 and 4?</u>

Our view is that neither Option C (Early ORESS 2) nor D (Early Enhanced ORESS 2) are likely to be successful strategies for delivering the levels of Offshore Renewable Energy that we need to see landed by 2030.

2. <u>Option A proposes that a deployment security is required for to apply for a MAC in Phase 2.</u>

a. How should the security be calculated and what rate should apply? If the security was to be calculated on the basis of planned capacity, what rate should apply?

There are significant risks for the department in selecting such a price, undervalue it and the entire scheme could be captured by financiers rather than developers. Overvalue it, and there are likely to be few organisations with the capacity to consider the scheme, leading to less competition, and so worsen value for the consumer. It would be better if the Department did not choose Option A.

b. Should the security be required to be in place prior to application for a MAC or post-issuing of a MAC? If post-issuing, what is a reasonable timeframe?

Post-issuance. It would be better to require such a security after planning permission has been granted for the project, and it no longer subject to judicial review. It is only when the administrative/legal risks of the projects have been reduced that businesses will be able to find reasonable financing options for their developments.

c. Under what terms should this security be drawn down?

The proposals within Option A are contingent upon MARA being able to make a "reasonable satisfaction" decision, and that this decision will be unchallenged, or unsuccessfully challenged.

Given that Phase 2 Grid offers will be available in 2025 at the earliest, and that this is subject to the developers having successfully navigated the planning process to completion it seems unlikely that MARA will be able to revoke a MAC and make it available to another developer in time for the new project to be delivered under ORESS 2, and by 2030.

Even in the short window where this may be possible, that MARA decision will be subject to legal challenge and that will ensure that no development will be possible on the site until at least ORESS 3.

The proposal is not practical if the priority of the Offshore Wind Phase 2 project is to ensure that there is an offshore wind fleet, which is at a 5GW minimum capacity, by 2030.

d) The security, as proposed, expires with the securing by a project of a route to market. For projects successful at ORESS 2, this is also the stage when the auction performance security is due be put in place. Would it beneficial for the deployment security to be rolled over towards the RESS performance security? How best this be managed?

Limerick Chamber does not have a view on this.

e) What other terms should apply to this security?

Limerick Chamber does not have a view on this.

3. Option B proposes a competitive MAC process.

a. What assessment criteria should be used in this process? What should the weighting of this criteria be?

The purpose of this project should be to ensure that a minimum of 5GW of Offshore Renewable Energy is delivered to the All-Island electricity market by 2030. This may require adapting the ministerial regulations in response to developments within the market. If companies (other than Equinor) also choose to exit the market, it may be necessary for the Department to adapt their proposals to make sure that the Phase 2 period is de-risked sufficiently to ensure that there is an industry appetite for development here.

If there are technological developments that permit additional in excess of 5GW to be usable in the Irish context, then it may be useful to facilitate this. The focus needs to remain on ensuring that the renewable energy potential of our offshore area is maximised.

This means that deliverability of projects must be paramount. This will require an analysis of the technological feasibility of given projects, the capacity of the team behind the project to deliver it, and the ability to finance it. The financing is likely to be the easier problem. Unfortunately, our late start in this industry means that few Irish operators have the institutional ability to deliver offshore energy projects at the pace which we need if we are to hit our 2030 targets. Therefore, the Department needs to be flexible in their approach and facilitate developers that are encountering unexpected and novel hurdles during this process.

d. Should a seabed levy auction be included in this assessment? What weighting should the auction result have?

The seabed levy has the same issues as the deployment security. The principal risks in Ireland are not the financial or technological risks but the legal and administrative risks. As we are dealing with a new planning regime, and as the planning regime is under reform, and as these new laws are as yet untested this means that the pricing of projects in Irish waters is likely to carry a considerable risk premium (in excess of developments in other countries). It is likely that many businesses in this field will not be able to accurately price this risk, and neither will the Department until long after the legislative regime is tested through the courts.

There is considerable risk that in attempting to limit the number of 'speculative' proposals, the department will narrow the field of competition such that it will ensure that customers will ultimately be paying not only the increased risk premium, but there will also be an excess on that due to the uncompetitive marketplace which has been created.

e. Should a deployment bond be maintained under this option? Why, or why not?

No. Because the risk is that there will be too few projects moving through each step of the development phases to ensure that we will be able to meet out 2030 targets. If we are reliant on a small number of large projects to meet our goals, then any problem (planning or otherwise) which delays any one of these projects, will lead to us missing our national goals on climate emissions and renewable energy supply.

4. All of the above options assume that Phase One projects retain their MACs for Phase Two.

a. Is this the correct approach? Why?

Yes. It is likely that throughout this process there will be considerable attrition at each stage of the process. Many projects will not be able to progress at the pace which is needed if they are to be delivered by 2030, much of this will be a result of planning decision delays. Creating extra hurdles that exclude participants throughout this process will only encourage those participating to remove themselves from the process and that will in turn discourage other entrants.

Much of the thought behind the Phase 2 consultation is predicated on there being too many groups interested in developing in our waters, however there is likely to be a large fall off

throughout this process. This is because those firms that have experience of Irish planning will have little experience of the practicalities of offshore project delivery, while those that do have offshore experience will struggle with planning. Furthermore, for external firms, most will likely find it easier to develop projects in other jurisdictions where the planning system is more certain, and the waters less challenging to operate in. This will reduce the demand for external experienced firms to compete in the Irish market.

b. Would requiring Phase One projects that are unsuccessful in securing a route to market, within a specified timeframe, to re-apply for MACs result in a better outcome for the sector, the State and consumers? Why?

No. As stated previously, the implicit assumption underlying such a process is that there is something innately problematic about the project that was delayed. However, it is likely to be the case that if there is such a project the cause of that delay is likely to be a consequence of judicial review, or some similar such process, rather than an issue with the project itself. A decision to place a time frame on the MAC will facilitate those that strategically use the legal system to obstruct developments as they will simply have to delay until a particular date at which time the project is effectively guillotined.

Considerable thought should be put to ensuring that if third party action, or inaction, is the cause of a delay in the delivery of a project, then that project should have the timelines associated with its COD revised in accordance with such delays.

c. If Option D was selected would this require unsuccessful Phase One projects to relinquish their MAC before ORESS 2? If so, should these projects be given any preference such as a right of first refusal if they match a winning bidder's terms for their MAC area?

Again, Option D should not be selected. And no, if it was selected, the developers should not be forced to relinquish their MAC. This would likely lead to less competition during ORESS 2 than we would otherwise desire.

5. To incentivise swift deployment, discourage speculative hoarding of the marine space, discourage MAC applications by projects incapable of delivering by 2030, and facilitate the coherent transition to a plan-led Enduring Regime, it is proposed

that all MACs awarded in Phase One and Phase Two will expire prior to the Enduring Regime, should the holders of these consents be unsuccessful in securing a route to market.

a. Is this the correct approach? Why?

No. It is unlikely that we will see our 5GW target for Offshore Renewable Energy by 2030 met. It is very likely that there will be many projects that will have been delayed as a result of legal and planning challenges that our courts are unable to hear within a reasonable timeframe. These risks are going to ensure less than ideal competition at each stage of the process and should a perception develop that Ireland effectively punishes the firms that engage in good faith, but suffer delays as a result of interacting with our untested legal regime, then we will find that fewer firms will be willing to participate in future ORESS auctions.

Furthermore, it is not a credible threat if we are behind targets as there will be considerable political and economic pressure to ensure that what can go ahead will go ahead. Scrapping projects that can be delivered in the two years beyond 2030 and recommencing a process that may take seven years from initiation to COD is unwise, and so incredible.

These projects should not be limited by a 2030 cliff edge for their MAC's. Contrary to swift deployment and the discouragement of hoarding of the seabed as has been stated in the consultation question, a measure such as a cliff edge will only serve to create uncertainty in the market and increase risk. Limerick Chambers position is that project MACs should be allowed to proceed with their development for a defined period of 10 years post award of MAC and in parallel to the development of a centralised enduring regime.

b. Would this approach incentivise deployment and/or discourage hoarding of the maritime space?

On balance it is more likely to discourage entrance to the Irish offshore market than it is to discourage speculation.

c. Would this approach discourage MAC applications in Phase Two from projects with poor pre-2030 deliverability?

Yes, and would also discourage other projects that had not participated within ORESS 2 from engaging.

Limerick Chamber does not have a view on questions 6, 7 & 8.

9. **Option D outlines an auction with mutually exclusive offers and multiple bidders specifying the same MAC area and/or connection point allowing multiple bidders to specify the same MAC area and/or grid node/region and using ORESS 2 results to allocate the MAC area and/or grid node/region capacity.**

As with our general opinion regarding Option D, Limerick Chamber's view is that this process would be better suited for a more mature system where there is planning certainty and significantly increased Grid capacity operating under the Enduring Regime.

10. **Hybrid grid connections are defined in this paper as single grid connections which facilitate the connection of both an existing or proposed thermal generation plant and a proposed offshore wind project**.

a. Do you support the facilitation of such connections, as defined? Why?

Yes, Limerick Chamber is deeply concerned that current plans will not afford us the capacity to integrate sufficient Offshore Renewable Energy to ensure that we meet our 2030 emissions targets. Our view, and the view of our members, is that we should be attempting to maximise the onboarding of renewable energy as we are likely to fall far short of our aims if we attempt to over-optimise our development plan.

Resilience requires redundancy in supplies, and it requires diversity of supplies, and independence in supplies. The supply of renewable energy capacity to our electricity network is no different, an over-optimised approach will not only ensure that a single instance of failure will undermine the attainment of our renewable supply targets.

Given the location of our thermal plants, they are typically well suited for landing offshore renewable energy. They are already on industrial coastal sites and much of the needed infrastructure has already been built. An added benefit of Hybrid projects is that they will facilitate the deep-water floating offshore wind projects that are likely to be available by 2030 but are currently under-considered in this consultation. Given the pace of development in this technology (along with advances in large and small wave energy generation projects) there will be several technological options available to us that are likely to be commercial by 2030 before the ORESS2 process is complete. Adding these to existing hybrid connections will allow them

to be deployed at a more rapid pace as the maritime planning permissions will not need to be accompanied by the landside planning permissions that delay so many projects.

Furthermore, hybrid projects will also allow this without requiring considerable additional infrastructure to be built, and they automatically hedge the risk associated with windless days as they are intrinsically complemented by thermal plants. Ultimately, we need to facilitate an enormous expansion of our renewable energy capacity if we are to ensure that we can remove both the carbon risks associated with fossil fuels, and (as importantly) the geopolitical risks.

b. Are you aware of any other jurisdictions where such connections are permitted? Describe how hybrid connections are treated from a technical and regulatory perspective in these jurisdictions.

No, but given the constraints in the Irish market, specifically the long delays that are involved in the development of infrastructure in general, and electricity transmission infrastructure in particular, then this is an option that will facilitate the delivery of offshore energy to the Grid while mitigating planning risk.

c. Are there potentially unintended consequences associated with permitting hybrid grid connections, such as potential impact on grid system services provided by the associated thermal plant or potential impacts on the reliability of the thermal plant?

No.

d. How should proposed projects with hybrid connections be treated so as not to distort competition or afford undue competitive advantage to the incumbent owners and operators of the associated thermal generators?

They can compete within ORESS 1 and ORESS 2 as would any other project, the important element is that they deliver on projects in time.

e. Do you support the facilitation of such connections, if the definition was adjusted to, e.g. an existing or proposed onshore battery, solar or other generator?

Yes. Diversity in supply will be key to ensure that we have security of supply. Combining Wind/Wave/Solar/Battery/Hydrogen technologies – in addition to renewable biomass and biomethane options – will be core to delivering renewable energy to our electricity network

while also ensuring security of supply. The key (given our enormous offshore wind energy capacity) will be not targeting our own domestic energy needs – as was the focus of "Shaping our Electricity Future" but in positioning Ireland as an energy exporter. This will require us to manage our volatile renewable energy supply by capturing and storing our excess energy which is often the subject of curtailment (arising from the limitations of the national transmission network).

Ideally, we will be co-locating all grid connections with electrolysers, batteries and solar to ensure that we can minimise both the infrastructure that we need to develop and also the wasted energy that we are currently unable to use.

11. **Should any special allowances for innovation technologies be included in the Phase Two process?**

a. What technologies should be provided with special allowances and why?

Wave energy projects. Hydrogen electrolysis projects. Hydrogen cell electricity projects. Green ammonia projects. Offshore closed loop Hydrogen gas generation/storage/export projects. Onshored Hydrogen electrolysis twinned to port capacity that allows for the storage and shipping of green fuels.

Within Revolution, A vision for Irish floating wind energy, Wind Energy Ireland has stated their position that floating wind projects can and should contribute to 2030 targets. Limerick Chamber would like to echo the support that Shannon Foynes Port have given to this position and believe the facilitation and deployment of floating wind this decade will pave the way for floating offshore wind at scale in the 2030's and the critical development of a supply chain for delivering floating wind.

Given the commitment that ScotWind has shown towards Floating Offshore Wind during its most recent auctions, we argue that this should not be considered an 'innovation technology' and that it should be considered in the context of the general ORESS1 and ORESS2 auctions.

b. What allowances should be made? At what stage(s) of the Phase Two process? Should capacity be reserved in the MAC and ORESS processes for any of these technologies?

Limerick Chamber's stance on this is that innovation and deployment should be supported now and as part of these Phase Two designations. These 2 factors have been the core drivers for cost reductions in more mature offshore wind jurisdictions such as the UK. This would see a requirement for capacity to be reserved in the MAC process to support floating offshore wind. Given the right enabling environment for consenting and supports, we could see a significant volume of floating offshore wind operational by 2030. Limerick Chamber agrees with Shannon Foynes Port view that a certain capacity of at least 10GW should be reserved for a competitive floating preference category in the MAC process, allowing for a sufficient amount of attrition and enough competition for a ringfenced innovation pot within the design of ORESS2 and importantly for a separate but parallel route to market process / support scheme for hydrogen production.

c. Should these types of projects also be required to deliver by 2030?

Yes, though they should not be included in the 5GW target for Offshore Energy. Furthermore, MAC's should not be rescinded after 2030 for these floating projects if planning permission or a route to market has not been secured by this stage. There is currently a lack of clarity in the enduring regime and what lies beyond Phase Two and rescinding a MAC pre-2030 and prior to enduring regime will become a barrier to achieving the Phase Two objective.

d. What level of offshore wind capacity could be deployed before and after 2030 that does not depend on the Irish grid for offtake? i.e. generation that is instead utilised for non-grid offtakes such as green fuel generation or export by cable to another jurisdiction?

This is irrelevant to the ORESS system, it should be facilitating the maximum potential amount. If we are producing more energy than we need, there is a ready market for energy, renewable energy has an even higher demand, and that market will only grow. Even if it doesn't have a domestic route to market, such energy production will be facilitating decarbonisation in other states**.** There are no Grid constraints to be considered in the context of Green Fuels.