Submission on *Developing a Regulatory Framework for Offshore Renewable Energy*

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Release of information

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Responses to questions

	Chapter 4: Further detail on feasibility permits
	Following an initial feasibility permit application round, should there be both an open-door policy and the ability for government to run subsequent rounds? If not, why not?
1	Generally speaking, we think that this is a sound approach. Given the complexity of Offshore Renewable Energy (ORE) projects, competitors in an open-door application will be very hard pressed to submit a feasibility permit application within a limited time frame, if they have not already significantly progressed their own plans. In this scenario, MBIE may have to compare a first, strong application and one or more competing rather weak applications. This may mean the best potential project may not be selected. Developers on the other hand will likely prefer to have a quick, clear-cut decision and allows for speedy project development. Another scenario can be imagined where an interested developer is required to notifying MBIE a certain time in advance of their interest in submitting a feasibility permit application. MBIE can then organise another application round, either limited to that particular area, or open for all. This will maximise the chances of the best projects being selected, but may result in redundant developer efforts, an overall increase in development costs. Developers will not like this option.
2	**What size of offshore renewable energy projects do you think are appropriate for a New Zealand context?**
	New Zealand is encountering a number of challenges. The small electricity market, limited grid capacity for connection and storage and lack of export capacity calls for relatively small projects (200-500MW). On the other hand, its remote location requires large projects to even attract the attention of the handful of global marine EPC contractors that are based in and tied up in projects in North America, Europe, and East Asia and who need to transport their exclusive equipment and crews across the globe, during which time they do not generate any income. A clustered project approach may be an answer to this conundrum: several smaller sites progressing together and contracting with an EPC contractor as a single construction project. A joint project cluster below ~1GW is unlikely to succeed, for lack of interest from these global marine EPC contractors. Unless these projects can ride a wave initiated by Australian projects.
	Do you think the maximum area of a project should be put forward by developers and set out in guidance material, rather than prescribed in legislation? If not, why not?
3	We believe the maximum project area should be put forward by developers. They should provide MBIE with supporting documentation, e.g., grid capacity study, seabed conditions, maritime use restrictions, site energy potential etc. The maximum project area should neither be prescribed in legislation nor in guidance material. Rather, MBIE should specify clearly, in guidance material, how it will evaluate the supporting arguments put forward.

	However, a two-pronged approach may be of interest. The risk of land-banking is unavoidable and very real during the feasibility permit application phase, due to the complexity of ORE projects and the high uncertainties in their early stages. This will mainly be a concern in Taranaki North and South, and maybe around Bluff, but not so much in the rest of New Zealand. Those are the best sites and are likely to see the strongest competition. Government guidance may be justified here. E.g., MBIE could indicate the optimum ORE capacity of each of these sites when fully developed, with an approximate density (MW/km^2), or even indicate 'sub zones' for individual projects, i.e., a more spatially planned approach. Each of the other New Zealand potential locations will likely attract the attention of one or two developers only, and be faced with specific site constraints, e.g., grid capacity, bathymetry etc. These opportunities will differ widely, and proposed project sizes will reflect that reality. The regulation should provide enough flexibility for these projects to succeed.
Chapter 5: Commercial permits	
	Should there be a mechanism for government to be able to compare projects at the commercial stage in certain circumstances? If yes, would the approach outlined in Option 2 be appropriate or would there be other ways to achieve this same effect?
4	No. From a developer and investor point of view, this creates a huge uncertainty if this was decided after the award of the feasibility licence. It increases the likelihood of litigations and delays and lost investments. It is better to let the potentially inferior first project move ahead, than to aim for the very best and at the same time risk developers losing confidence in the system. The concern is not unfounded, though, especially in the most sought-after locations. The two-pronged approach suggested above (question 3) might provide an answer. Government may adopt a more spatially planned approach, including granting exclusive grid access with the feasibility permit in North and South Taranaki and/or Bluff. It is also important to keep in mind the business dynamics that will play out. Probably, potential customers and investors will initially align themselves with multiple projects to spread risk and gradually shift from unsuccessful to successful projects. Successful projects are not necessarily sealed off to new partners.
	Are the proposed criteria appropriate and complete? If not, what are we missing?
5	Criterium 2, Readiness of the project, should consider: • financing in place and/or secured conditional on the permit (bullet 1) • a route to market (bullet 3) Developing ORE projects is an ongoing exercise in building trust, step by step. Securing financing before obtaining all permits is virtually impossible and risks being a long and vague discussion if financing is conditional on the permit. With the commercial permit in hand, this discussion – still difficult – will be greatly facilitated. Instead, MBIE could ask for proof of advanced negotiations with a (consortium of) bank(s) to fund the project conditional on the permit.

Without a firmly secured route to market, no (consortium of) bank(s) will lend money to the project proponents. I.e., the financial market operators will evaluate the route to market criterium more rigorously than MBIE could ever do.

Criterium 4, Arrangements for decommissioning:

At this stage, decommissioning still lies some 25 years and more in the future. Plans will be sketchy and costs uncertain. Only a high-level plan should be expected. Most important are the financial guarantees for decommissioning. Advisian supports that the requirement to include future decommissioning is legally embedded in the permit. (See Chapter 10 below.)

Criterium 5, Energy system impacts should not include:

- whether generation is intermittent or comes with a firming solution (bullet 4)

With very few exceptions, electricity grids world-wide are powered by a combination of energy sources and technologies. The strength of one takes over where another one falls short to jointly provide cheap power and a reliable grid. E.g., coal provides cheap baseload but is very carbon intensive, hydropower can be stored but may run out in a dry year, gas is very flexible but expensive. Wind and solar power by their very nature produce a variable output, just as run-of-river hydro but they produce no carbon emissions and are very predictable.

Balancing power is a grid issue. Addressing it at the individual project level will likely yield suboptimal overall results. As with criterium 7, Health and safety credentials, it may be appropriate to demand close cooperation with Transpower on this criterium and leave out overly detailed requirements.

	Should there be mechanisms to ensure developers deliver on the commitments of their application over the life of the project? If yes, what should these mechanisms be?
6	MBIE should avoid ambiguity when comparing projects. Making vague commitments is easy to do but hard to monitor. Developers should propose a simple metric for each of their commitments by which they can be monitored. These should be incorporated in the commercial permit conditions. (Developers may not like this.)
	Is 40 years an appropriate maximum commercial permit duration? If not, what would be an appropriate duration?
7	Yes. Most developers will apply for the maximum duration to get the best financial return. What criteria will MBIE use to limit the permit duration to less than 40 years?
	Should a developer that wishes to geographically extend their development be required to lodge new feasibility permit and commercial permit applications? Why or why not?
8	A new permit should be applied for. In its evaluation, MBIE could take the existing adjacent project into account, as well as the developer's proven experience with the regulatory process.

	Consolidating permits will raise questions of aligning permit duration, specific commitments and the like. If triggered by agreement, this could work well. Yes, it seems fair that permit duration extensions can be achieved through a simpler procedure. Some components may turn out to have a useful life of more than 40 years, e.g., foundations, cables, or substation. If, for example, the wind turbines are due for replacement after 25 years, the developer will probably not invest in new turbines if those will not be allowed to operate another 25 years.
9	**Would the structure of the feasibility and commercial permit process as described enable research and development and demonstration projects to go ahead? If not, why not?**
	Generally, yes. It is however very unlikely that much R&D activity will happen, since New Zealand does not have any renewable energy manufacturing industry to speak of, and such efforts are typically done close to company headquarters.
Chapter 6: Economics of the regime	
	Is there an interdependency between the case for revenue support mechanisms and the decision as to whether to gather revenue from the regime? What is the nature of this interdependency?
10	European countries, most markedly Denmark, Germany, and Spain, have provided support for wind power as an indirect means to support their domestic turbine manufacturers (Vestas / Bonus, Siemens / Enercon…, Gamesa). Belgium and The Netherlands have provided support for offshore wind as an indirect means to support their domestic marine contractors (Jan De Nul / DEME, Boskalis / Van Oord). Both with the goal of exporting products and services. New Zealand is an importer, not an exporter, of renewable energy products and services. Furthermore, wind power has been developing for over 40 years into a mature technology. There is no case for providing revenue support to offshore wind in New Zealand. ORE projects maybe developed in the same environment as oil and gas operations but sell their product in a different market. The correct comparison is with other electricity generating businesses. ORE projects should neither receive support, nor be subject to revenue gathering. They should be treated equally with other electricity generating businesses.
	Is there a risk in offering support mechanisms for offshore renewables without offering equivalent support to onshore renewables? Are there any characteristics of offshore renewables which mean they require support that onshore renewables do not?
11	Yes, it will distort the market, which is of limited size. As argued above (10) New Zealand is an importer of ORE products and services and there is no case to provide financial support, especially not if cheaper options are available onshore. ORE projects will be uniquely attractive to international players because of their size, which is impossible to match onshore.

	Many developers could list a host of characteristics of ORE projects justifying support. As any other economic sector could argue their case for subsidy.
	Should there be a revenue flow back to government? And if yes, do you have views on how this should be structured? For comments on potential flows to iwi and hapū please refer to Questions 14 and 15.
12	No. As argued above (10): ORE projects maybe developed in the same environment as oil and gas operations but sell their product in a different market. The correct comparison is with other electricity generating businesses. ORE projects should neither receive support, nor be subject to revenue gathering. They should be treated equally with other electricity generating businesses.
	Do you agree with the proposed approach to cost recovery? If not, why not?
13	We caution against comparing with relatively established markets. It is far from certain how ORE developments will work out in practice for New Zealand. At least in a first round, it seems prudent to forego any cost recovery initiatives or fees. An application fee will further front-load the costs of already very capital-intensive projects. There is little need to deter non-serious applicants as they will not be able to stand up to competing applications. Levying an annual fee to recover costs creates the very real risks of regulatory capture.
Chapter 7: Māori Rights and Interests and Enabling Iwi and Hapū involvement	
	Is there anything you would like us to consider as we engage with iwi and hapū on Māori involvement in the permitting regime?
14	We note that the 2022 December 22 consultation saw 59 submissions with only seven coming from iwi. We suggest partnering with iwi to help them gather data and formulate meaningful input. Regarding this consultation in general, we would recommend wider engagement communication strategies and a variety of methods to ensure wide representation of views, not only from the designated māori representatives. This proactive approach will provide information to and seek feedback within māori communities. For example, in conjunction with iwi / hapū design some communication boards during Treaty celebrations throughout the motu with a summary of feedback survey questions. Info can also be on māori-frequented social media, posters with scan codes etc. When asking for wider feedback this can be received directly or via an iwi. (So, it will be required to work collaborative with iwi and hapū in its design and execution.) In regard to the permitting regime overall it is important to get feedback from both mana whenua and mata waka.

15	**Have we identified the key design opportunities to work collaboratively with iwi and hapū alongside consultation? Is there anything we have missed?**
	Generally, yes, assuming all key parties involved in the process are culturally adept and fully understand the principles of Te Tiriti.
16	**Are there any Māori groups we should engage with (who may not have already engaged)?**
	Engagement with mana whenua will be key. Specifics are not listed in the guidance document.
Chapter 8: Interaction with the environmental consenting processes	
17	**For each individual development, should a single consent authority be responsible for environmental consents under the Resource Management Act 1991 and the and Exclusive Economic Zone and Continental Shelf (Environmental Effects) Act 2012? Why or why not?**
	It would be easier to manage if multiple agencies are combined but not essential. It will be helpful if a strong collaborative approach among the agencies tasked with the environmental review is encouraged to improve efficiencies.
18	**Do environmental consenting processes adequately consider environmental effects such that it is not necessary to duplicate an assessment of environmental effects in the offshore renewables permitting regime?**
	We think existing regulation is adequate if it manages oil and gas, shipping, fishing and other maritime activities.
	Should the offshore permitting regime assess the capability of a developer to obtain the necessary environmental consents? If not, why not?
19	While we think that this should not be necessary, the risk of the project is big enough for potential developers to take this very seriously. The other issue is how to adequately assess the capability? Note that non-compliance issues in previous projects however should be considered.
	What is the optimum sequencing between obtaining feasibility permits, commercial permits and relevant environmental consent(s)?
20	Beyond the feasibility permit, no permitting order should be prescribed. Developers should be encouraged to progress various permits simultaneously. This will allow for maximum flexibility and speed of development. The commercial permit should be conditional on the relevant environmental consents.
21	**Are there are any other matters about the environmental consent regimes that you think need to be considered in the context of the offshore renewable energy permitting regime?**

	We think that any issues worth highlighting to developers should be raised as most offshore wind developers are overseas investors who are not necessarily familiar with specific local issues.
22	**How should the factors outlined influence decisions to pursue offshore renewable energy developments in the Exclusive Economic Zone or the Territorial Sea? Are there other factors that may drive development in the Exclusive Economic Zone versus the Territorial Sea?**
	Project economics will be the main driver forcing developers close to shore as possible respecting the 12NM EEZ.
Chapter 9: Enabling transmission and other infrastructure	
23	**Are the trade-offs between a developer-led and a TSO-led approach, set out above, correct? Is there anything missing? What could we learn from international models?**
	In broad terms, yes. It is important to note that the chosen approach is mostly dictated by local conditions, e.g., grid capacity, ORE project density. It is not a stand-alone issue based on an economic philosophy or regulatory approach.
24	**Which party do you think should build offshore connection assets? Can existing processes already provide the flexibility for this to be carried out by the developer?**
	The most technically capable party should build it. If the infrastructure is considered of national interest, government may support its development with e.g., bank guarantees. When completed, ownership, operation and maintenance can be taken up by Transpower as is best suited in each case. We support a joint process between Transpower and the developer to enable more efficiencies and reduce delays. (See also 25.)
25	**What are the potential benefits and opportunities for joint connection infrastructure? Do you agree with the barriers set out and how could these be addressed?**
	The assessment is correct, these barriers are in practice most probably insurmountable for individual project developers. A spaghetti outcome seems inevitable. The two-pronged approach suggested above (3) may provide a solution canvas. In the preferred ORE development zones, notably Taranaki North and South, government should extend the national grid offshore, providing a 'plug at sea' to which individual projects then connect at their own expense. This does not imply that Transpower needs to build this piece of infrastructure, nor that it needs to be developed in advance and lay idle. MBIE could put the onus on the first project to obtain its commercial permit to build the central connector for the entire zone. Of course, adequate support mechanisms will need to be put in place. (How to support the surplus capacity put in place for subsequent projects etc.?) Same-zone developers will be quick to come together and sort out the risks and benefits of this obligation.

26	**Do you agree with the representation of the timeline challenge for onshore interconnection assets? What opportunities might there be to front load planning work for interconnection upgrades? What role do you see for the developer in this?**
	Indeed, these developments have very long lead times. On top, this is a typical chicken-or-egg problem. What comes first, the interconnection or the wind farm? Since the interconnection is much cheaper than the wind farm, this would be an excellent opportunity for the government to show leadership, take out some of the risks and instil confidence. Let the interconnection come first, and let the preliminary work start as soon as the feasibility permit applications have been submitted.
27	**What changes might be needed in order to deliver the types of port infrastructure upgrades needed to support offshore renewables?**
	It will be helpful if any consenting required for port infrastructure upgrades is supported by the relevant territorial authority and government agency where needed to remove any potential time delays and also look for future opportunities for the port.
Chapter 10: Decommissioning	
28	**Should developers be required to submit a decommissioning plan, cost estimate and provide a financial security for the cost estimate? If not, why not?**
	Yes.
29	**Should the permit decommissioning plan, cost estimate and financial security be based on the assumption of full removal? If not, why not?**
	At the time of commercial permit application there will be many uncertainties. A detailed plan cannot be expected at that early stage. The decommissioning plan should present alternatives (option 2) because of the many uncertainties, potential for future technological developments and potential benefits. The financial security, however, should be based on the assumption of full removal, as this is indeed most likely the costliest option.
30	**What are your views on the considerations set out in relation to the calculation of the cost estimate and financial security value or suggested approach for financial security vehicle?**
	The financial security, whatever its form, should be built up during commercial operation out of the cash flows generated by the project. It should neither be lodged at feasibility or commercial permit application, or at commencement of commercial operation, because in all these cases it will (substantially) increase the financial burden of already capital-intensive projects. It would be a credit incurring interest liabilities instead of an asset potentially generating interest income. It is also important to consider the timing of a potential project failure. A project failing around construction or commencement of operation is a disaster for the sponsors, developer and

investors alike. There are no bad intentions at play and there is no need for punishment. Project sponsors will do all in their power to safe their investment that is about to start making them money. On the other hand, an operator who walks away from a worn-out asset, leaving the taxpayer to pick up the tab, is negligent at best.

This means that requesting a financial guarantee is justified only towards the end of project life, and that there is an opportunity for the government to assume some of the decommissioning risks during the early project stages. (Considering necessary insurances, checks and balances etc.).

31 **What should the developer be required to provide in relation to decommissioning at the feasibility application stage?**

Nothing.

The feasibility stage is too early to evaluate decommissioning plans and capabilities. All developers can be expected to be fully aware of decommissioning assumptions (full removal) and financial guarantee requirements if these are clearly spelled out in the commercial permit requirements.

An incapable developer will strengthen its technical capabilities by broadening its partnering base or hiring specialised help. An unwilling developer will see its project development stalled until the issues are resolved or the project company holding the feasibility permit sold. Either scenario is rather unlikely: this is a highly professional, international business.

32 **What ongoing monitoring approach do you think is appropriate for the decommissioning plan, cost estimate and financial security?**

The building up of the financial security over the productive life of the ORE project should be monitored on an ongoing basis. Provisions to make this possible should feature in the commercial permit conditions.

The financial security value should not be revised a first time before well into the operational phase to provide some stability, say ten years, and thereafter no more than every five years, preferably less, with a final review during the year before decommissioning.

The financial security vehicle should not be subject to review. An operator may seek MBIE's agreement to change the vehicle.

33 **Are there any other ways in which the regulatory regime could encourage the refurbishment of infrastructure or the recycling of materials?**

TRANSFERS AND TRAILING LIABILITY

"Furthermore, should a scenario arise in which the transferee cannot decommission, it could be appropriate to have provisions in place for the liability to revert to the previous permit holder."

This sounds highly problematic. How can an investor ever sell a project without a remaining liability risk? The most straightforward option seems to be to proceed with the sale and

subsequently financially drain and collapse the selling company. MBIE will be left with no one to revert this liability to.

MBIE should thoroughly assess the transferee's decommissioning capacities beforehand and refrain from any provisions to revert liability.

"Finally, if an alternative to full removal is progressed and approved by the relevant authority, then we consider it appropriate for the liability to sit with the permit holder for any ongoing maintenance works and/or monitoring."

No investor can accept an open-ended financial liability without an income stream to support it. Only full removal will inspire investor confidence, which may not be the optimal solution. If an alternative is progressed, a similar reaction as described above is likely and MBIE will be left with no one to hold responsible.

34 **Should offshore renewable energy projects applying for a consent to decommission be required to provide a detailed decommissioning plan related to environmental effects for approval by consent authorities? If not, why not?**

We think that environmental issues are already addressed as part of the installation process. If any new issues arise, then the regulatory body will need to raise new issues which would then be included in the decommissioning plan. Decommissioning should follow all existing EHSQ rules, occur in full cooperation with government bodies, but not be subjected to new additional requirements.

Chapter 11: Compliance

35 **How can the design of the regulatory regime encourage compliance so as to reduce instances of non-compliance?**

By far the most important aspect of developing and operating projects with this level of complexity is an environment of trust and transparent communication between all actors involved.

We suggest the establishment of an ORE monitoring group which will meet on a regular basis, say biannually, open to all reasonably affected parties: MBIE, developers, port authorities, fishing industry, iwi, etc. This could be on an individual project basis but probably more time efficient is to bundle all projects. Confidentiality agreements may need to be put in place but there is little competition between developers/operators past the feasibility permit stage.

In such a monitoring group potential issues can be raised early on, and lessons learned shared.

36 **Is the compliance approach and toolbox in Chapter 11 appropriate for dealing with non-compliance within the regulatory regime?**

Permit revocation does not seem to be the right answer for very serious or persistent breaches. This could create a huge uncertainty for potential lenders and investors.

	Neither the offshore infrastructure, nor the investors are at fault here. The project should be allowed to continue to operate, providing employment and income. The problem lies with the operational management team. MBIE should be able to force a change in control.
Chapter 12: Other regulatory matters	
37	**Should the decision maker within the regime be the regulator but with an option for the Minister to become the decision maker in a specific set of circumstances? If not, why not?**
	The Minister should make the decision. (Option 1) In a democracy, the only viable option is that the Minister takes up the full responsibility of the post he has accepted. He is ultimately the only one accountable to the electorate. Option 2, where the regulator makes the decision, fits a technocracy and option 3 is the slippery slope towards one.
38	**Should there be an opportunity for public submissions on the commercial permitting decision? What would this capture that the environmental consent decision does not? If not, why not?**
	Option 1 suffices, i.e., no additional public submissions on the commercial permitting decisions. However, the public should be informed in full transparency of any applications, permits, environmental impacts and the like. In Belgium for example, all offshore wind permit applications, advice, permits, environmental studies are published and publicly available on MUMM's website.
39	**Should permitting decisions be able to be appealed and if so which ones? Which body should determine such appeals?**
	Yes, all decisions. ORE projects should not be treated differently in this regard from any other businesses. The principle of separation of powers requires that the judicial branch settles appeals.
40	**What early information would potential participants of the regime need to know about health and safety regulations to inform decisions about whether to enter the market?**
	All potential participants can reasonably be assumed to expect the highest health and safety standards to apply. This will not be an obstacle to their entering the market. No need to provide extra information. MBIE could point out inspiring examples for participants to orient themselves, e.g., common practices in the NZ oil and gas sector, or the UK offshore wind sector. It may also indicate the limits of potential additional regulations it could impose, e.g., the most stringent offshore wind regulations in any particular matter effective in any locale.

41	**What are your views on the approach to safety zones including the trade-offs between the different options presented?**
	Option 2. New Zealand has the tenth longest coastline in the world for less than five million people. ORE projects will most probably be developed in less populated areas, and, in terms of recreational activities, relatively far out to sea. Professional parties (shipping, fishing etc.) are expected to understand the importance of safety at sea and prefer to keep a large distance. Clear guidelines should be communicated to all parties involved.
42	**Do you have any views or concerns with the application of these proposals to other offshore renewable energy technologies?**
	These proposals can be applied to other ORE technologies if needed.

General comments

ORE projects are highly complex and challenging. Many players are involved with a variety of interests and opinions. New Zealand is remote and its power market small and stagnant. But the offshore wind industry has matured over the last decades and the potential is enormous.

To be successful, the government will have to lead the way in a convincing manner. Be bold and 'think big'! An example could be to direct the full output of the first projects to hydrogen or synthetic fuel production, or to zero-carbon process heat. Another example could be a firm commitment to floating foundations, which would make sense with 10MW+ turbines and the challenging bathymetry. NZ would be a global pioneer; the world will notice.

A sidenote on economic opportunities with māori (Table 3): with new industry come new opportunities. There is no mention of any training programs or the like to empower and educate māori into the future. "Indirect economic involvement" does not improve māori statistics; It merely reflects the current status quo of filtering down benefits into the māori community. There is an opportunity for hand up not hand out in the design plan.