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

Name	
Organisation (if applicable)	Beca Ltd
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Release of information

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Responses to questions

This is a submission on the *Developing a Regulatory Framework for Offshore Renewable Energy* consultation document made on behalf of multi-disciplinary practitioners from across Beca's technical and advisory business lines (Beca practitioners).

This submission has been developed alongside more general comments and feedback we have also provided via general submission on the Energy Strategy and other consultation documents and a specific submission made on the Hydrogen Roadmap discussion document.

Chapter 4: Further detail on feasibility permits	
1	**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?**
	No. Set rounds (e.g. annual / biennial) provide the market with a consistent and stable signal, while ensuring a relevant government department maintains, a minimum, capable expertise.
2	**What size of offshore renewable energy projects do you think are appropriate for a New Zealand context?**
	The area will be determined by the wind resource within the given area of interest. Developers acting under option 2 (developers put forward proposals; regulators assess for reasonableness) must be able to demonstrate all criteria for the full area is considered. Failure to do so will result in reduction of the area applied for. The key objective is to give full effect to the licence area and avoid developers locking up prospective areas.
3	**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?**
	No. Prescribed legislation provides a clear (and defendable) framework for all (competing interests) to abide by. Prescribed legislation must be enduring or in the least, subject to review, say every 5 years, where for instance, agreed outcomes and environmental bottom lines could be reviewed.
Chapter 5: Commercial permits	
4	**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?**
	Yes. While we recognise MBIE's preferred option is (2) it must be noted that unforeseen project comparison at the commercial permit stage will create uncertainty and delay. Large scale projects of this nature have their sequenced construction scheduled confirmed, often years in advance. Disruption to this creates unnecessary and avoidable risk.

5	**Are the proposed criteria appropriate and complete? If not, what are we missing?**
	Yes.
6	**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?**
	Yes. Annual review meetings between the government and the developer are recommended to ensure the development plan is being adhered to.
7	**Is 40 years an appropriate maximum commercial permit duration? If not, what would be an appropriate duration?**
	Yes, noting OEMs are offering performance guarantees for >30 year operational duration. Repowering may push operation life of these assets beyond 40 years. Under such (continuing) circumstances, 40-year terms may best be considered as minimum durations.
8	**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?**
	Yes. Extension to an existing development would assume, grounds favourable to do so, have presented themselves (e.g. improved market conditions) – the distinction becomes, would this resource have been best developed by the original permit award or because market conditions favouring the existing permit holder presented themselves? Should this be the case, the regulator must be able to apply a limited time duration for the developer to seek an extension.
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?**
	Initially the proposed feasibility and commercial framework may only appeal to energy generation methods with higher (Technical Readiness Level) TRL such as offshore wind. If this infrastructure can be shared with lower TRL energy generation methods to reduce the initial CAPEX then yes it can enable R&D developments.
Chapter 6: Economics of the regime	
10	**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?**
	Yes. By its very nature, offshore wind development is large and as we see in other jurisdictions' a degree of circularity has been adopted between the government and the developers. The nature of these interdependencies expressed as both support and revenue gathering mechanisms is fair. Further, the Second Discussion Document references variations on this, as adopted and subsequently matured in a number of jurisdictions. We also note that a growing number of these projects operating without any government support (e.g. North Sea, Hollandse Kust Zuid offshore windfarm) are starting to come online.

	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	*Unsure at this stage. Currently, it should be noted, both on and offshore windfarms are contending with rising cost pressures. How or when, these costs return to their downward trajectories is in unknown.* *Externalities such as the grid and required expansion, or handling facilities such as the port will require capital to assist both on and offshore expansion. Of course, it will be challenging to establish a new industry, especially one such as offshore renewable energy. However, and has historically been the case building major New Zealand energy infrastructure, state assisted support mechanisms ultimately lead to additional local and foreign investment. Large onshore renewable energy proposals may also reflect comparable scale and national significance to an offshore wind farm, at which point, a level playing field approach may be warranted.*
	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	*Yes. Unlike onshore windfarms in New Zealand, where land access or lease agreements are made between the landowner and the developer, the seafloor constitutes territorial waters and is administered and managed by the New Zealand taxpayer. An offshore windfarm development for example should therefore attract a 'lease' contract from the government who in turn, grant seabed access. Such arrangements will be structured following a standardized formula between the government and the developer (e.g. $/hectare/year payment). Allocation of these fees may offset costs carried by the administrating government department. Ultimately, the view taken here must consider the opportunity cost an operating offshore windfarm will have precluding other interests such as fisheries, mining, or tourism activities from also maximising competing returns and flow on effects for local community and nature positive outcomes.*
	Do you agree with the proposed approach to cost recovery? If not, why not?
13	*Yes.*
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	*No comment*
	Have we identified the key design opportunities to work collaboratively with iwi and hapū alongside consultation? Is there anything we have missed?
15	*No comment*

16	**Are there any Māori groups we should engage with (who may not have already engaged)?**
	No comment
Chapter 8: Interaction with the environmental consenting processes	
	For each individual development, should a single consent authority be responsible for environmental consents under the Resource Management Act 1991 and Exclusive Economic Zone and Continental Shelf (Environmental Effects) Act 2012? Why or why not?
17	*Yes. In much the same manner New Zealand Petroleum and Minerals (NZPAM) grants permits to oil and gas interests, so too should a single entity who administer offshore renewable energy permits. NZPAM have been a successful administrative authority, which has functioned with other government agencies to ensure outcomes consistent with the Crown Minerals Act have been reached.*
	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?
18	*Yes. Both feasibility and commercial permits will be granted once all relevant assessment criteria have been met. All inputs required to grant (or decline) a permit application would have followed prescribed and relevant legislation and consenting regimes. Duplication of this, particularly where required skill and experience may not be present would attract unnecessary error on behalf of the administrating department.*
19	**Should the offshore permitting regime assess the capability of a developer to obtain the necessary environmental consents? If not, why not?**
	Yes.
	What is the optimum sequencing between obtaining feasibility permits, commercial permits and relevant environmental consent(s)?
20	*Feasibility permit – relevant environmental consents(s) – commercial permit.* *At the discretion of the developer, all preparatory work would not be prevented to progress under this preferred option.*
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?**
	No, not presently. However, as offshore renewable energy knowledge (and lessons learnt) increase, particularly in the EEZ where data derived knowledge gaps do exist; applicable approval processes may need to be amended.
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?**

Factors outlined will no doubt have influence on where offshore developments take place. How these factors will be managed ultimately rests with the developers and findings made during their respective feasibility studies.
Several additional factors, which may drive development from territorial waters into the exclusive economic zone may include:

- *Seafloor conditions and associated geohazards. Present day bathometric contours and proximity to the shelf break where known and pronounced canyon systems are present, may for instance, lend themselves to floating developments as opposed to bottom fixed installations.*
- *New demand centres may form in the fullness of time, outside of the much-publicised South Taranaki Bight or offshore Waikato. Knock on effects of this may include higher OPEX realities in order to service these installations – away from central nucleus of Taranaki.*

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?**
	The trade-offs noted are recognised. At this early stage of offshore renewable development in New Zealand, a developer led approach remains preferrable; complementary experience in New Zealand is currently lacking to propose alternative avenues (please see Q:26).
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 offshore developer.
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 very competitive nature of this nascent industry may on one hand, require offshore developers to share costs where possible (e.g. joint connection infrastructure), while on the other hand an unwillingness to assume delivery risk of another project is not unreasonable to appreciate. *Overcoming the barriers set out, will ultimately fall upon the developers proactively managing, their portfolio risk. A commonly accepted (and adopted) marine spatial planning approach may be worth while visiting.*
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?**
	Currently - yes. Although, the recent change of Government in New Zealand, may see some of the consenting and other challenges streamlined *Regardless of these changes there is a need to strengthen the collaboration between developer and transmission owners/ operators in the front-end planning processes for interconnection upgrades, particularly where these assets are to be Crown owned and or operated. The*

	responsibilities of the Crown as a Treaty partner (and its related infrastructure planning and delivery entities) should see this occurring more readily across the whole sector, not just as it relates to Offshore generation. Notable though for the offshore generation and onshore interconnection will be seabed occupation, impacts on mauri, and wider environmental and social costs and benefits of these connections.
27	**What changes might be needed in order to deliver the types of port infrastructure upgrades needed to support offshore renewables?**
	Without currently knowing the extent ports may need to transform and the ultimate role supporting offshore wind development, makes it difficult to suggest what changes will be needed.
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. A decommissioning plan should be submitted. Although cost estimate accuracy will be difficult to currently establish. A rough order of magnitude (ROM) cost estimate (class five +100%/-50%) could be considered. The ROM midpoint value is lodged as a financial security to 'cover' the possible developer insolvency during the construction phase. Additionally, an accruing abandonment fund (ABEX) builds over time in the form of diverting cents/kwh (or similar) to an interest-bearing fund.
29	**Should the permit decommissioning plan, cost estimate and financial security be based on the assumption of full removal? If not, why not?**
	Yes. An exception to this may occur by way of artificial reef colonisation which may have occurred over the life span of the asset. Under guidance or legislation of the day, a case may present itself to leave in place partial structures to benefit ongoing marine life growth.
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?**
	All have their merits. Views between the developers will likely differ depending on their respective financial health or experience operating in other jurisdictions'. However, the four financial securities outlined, provide clear signals of acceptance to the developers, while parent company guarantees, and insurance products, do not.
31	**What should the developer be required to provide in relation to decommissioning at the feasibility application stage?**
	Broken down into well-defined stages, the developer should provide inflation adjusted, net present value, class five cost estimates only of likely decommissioning scenarios and preferred contractors. These estimates could for instance, be revised under statutory requirement, every 5 years.

32	**What ongoing monitoring approach do you think is appropriate for the decommissioning plan, cost estimate and financial security?**
	As with oil and gas Operators in New Zealand, who are subject to annual 'permit' reviews, it is not unreasonable therefore to suggest a similar mechanism is deployed for offshore wind developers operating in New Zealand. *Over time, subsequent review of these annual meetings, which will include decommissioning plans and associated costs, will provide the regulator an historical picture of corporate stewardship. This maybe particularly useful when assessing a transfer or change of control to a new Operator, and the consequential expectation therefore set upon them by the regulator.*
33	**Are there any other ways in which the regulatory regime could encourage the refurbishment of infrastructure or the recycling of materials?**
	Not at this stage. Although the characteristics of any decommissioning or repowering advancements remain presently unknown, grounds to amend the relevant Act of the day could present themselves once more is understood.
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?**
	Yes. To fully (or partially) decommission an offshore windfarm, would be to assume all relevance to original seafloor conditions is measurable. A detailed decommissioning plan would therefore allow accurate determination of this staged process, which can be measured during actual decommissioning.
Chapter 11: Compliance	
35	**How can the design of the regulatory regime encourage compliance so as to reduce instances of non-compliance?**
	At the earliest instance (pre-feasibility stage) the regulator 'should' be able to determine the credibility of the proposed developer by having an office of individuals tasked administering offshore energy development. A subset undertaking being contemporary due diligence of known and suspected developers operating in the global industry. *The actual design of the regulatory regime which, broadly speaking follows the existing CMA, needs to make clear both the proactive and reactive tools ready for regulator deployment. These conditions will be set out under the Act, in the 'programme' as agreed between the Crown and the developer.*
36	**Is the compliance approach and toolbox in Chapter 11 appropriate for dealing with non-compliance within the regulatory regime?**
	Yes. The VADE model is appropriate.

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?**
	Yes. Option 3 should be pursued where matters of national significance or where current legislation is ambiguous.
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?**
	No. Notification only. The expectation being the public have been notified under both statutory and voluntary obligations by the developer(s) leading to the award of a commercial permit. Further, all legislative requirements, as administered by the relevant agencies, would all have undergone their respective processes by this point. Processes, where the public have had the opportunity to comment, or act.
39	**Should permitting decisions be able to be appealed and if so which ones? Which body should determine such appeals?**
	Yes. An appeal is more likely than not to occur at the award (or not) stage of a commercial permit. Under exceptional circumstances, appeals may arise when a permit is revoked for serious breach of permit conditions. In order to address these (and other) such circumstances, the regulator must be equipped to handle these permutations, which enforces the case for competent regulators with capable and experienced staff.
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?**
	As set out under the Health and Safety at Work Act 2015 with guidance provided by WorkSafe.
41	**What are your views on the approach to safety zones including the trade-offs between the different options presented?**
	Option 2. Automatic 500 metre safety zone around all infrastructure (including the sea to shore cable corridor).
42	**Do you have any views or concerns with the application of these proposals to other offshore renewable energy technologies?**
	No.
General comments	