ANNEX B. RESPONDENT INFORMATION FORM AND CONSULTATION QUESTIONNAIRE

Draft Sectoral Marine Plans for Offshore Wind, Wave and Tidal in Scottish Water



RESPONDENT INFORMATION FORM

1. Name/Organisation Organisation Name WWF Scotland Title Mr Ms Ms Mrs Miss Dr Please tick as appropriate Surname Gardner Forename Sam 2. Postal Address Little Dunkeld Perthsire Postcode PH8 0AD Phone 01350728200 Email sjgardner@wwfscotland.org.uk

3. Permissions - I am responding as...

	Individual Please tie	 ck as a	Gro appropri	up/Organisation ate
(a)	Do you agree to your response being made available to the public (in Scottish Government library and/or on the Scottish Government web site)?		(c)	The name and address of your organisation <i>will be</i> made available to the public (in the Scottish Government library and/or on the Scottish Government web site).
(b)	Where confidentiality is not requested, we will make your responses available to the public on the following basis			Are you content for your <i>response</i> to be made available?
	Please tick ONE of the following boxes Yes, make my response, name and address all available Yes, make my response available, but not my name and address Yes, make my response available, but not my name and address Yes, make my response and name			Please tick as appropriate 🛛 Yes 🗌 No
	available, but not my address			

(d) We will share your response internally with other Scottish Government policy teams who may be addressing the issues you discuss. They may wish to contact you again in the future, but we require your permission to do so. Are you content for Scottish Government to contact you again in relation to this consultation exercise?
Please tick as appropriate Yes No

WWF Scotland welcomes the opportunity to comment on the draft Sectoral Marine Plans for Offshore Wind, Wave and Tidal Energy in Scottish Waters. WWF Scotland has been involved in campaigning for action to tackle climate change, greater marine protection and a new approach to the planning and management of Scotland's seas for many years and we welcome the development of this draft plan as an effort to address each of these priorities. Our response is limited to overarching comments on the importance of a long term strategic plan for the offshore renewables sector.

In addition to this submission WWF Scotland supports the consultation response from Scottish Environment LINK.

Climate Change

Alongside much greater efforts on energy efficiency, the rapid and large-scale deployment of renewables, including offshore renewables, is recognised to be a vital part of the solution to helping tackle climate change. Climate change presents long term, systemic risk to the marine environment. The Marine Atlas cites human activity contributing to climate change as one of two greatest impacts on Scotland's seas.¹ The recent publication of the 5th IPCC Report reinforces the already established scientific evidence regarding climate change, increasing the levels of confidence and providing more detailed understanding of climate change than previous reports. In particular:

- Scientists are now 95% to 100% certain that humans have caused the majority of climate change since the 1950's. This is an increase in certainty from 2007 (90% to 100%) and a significant increase since 2001 when scientists were at least 66% certain.
- Without an aggressive mitigation strategy that sees greenhouse gas emissions stabilize this century, global temperature looks set to significantly exceed 2°C warming above pre-industrial levels by 2100 – crossing a threshold into catastrophic warming with devastating global consequences.
- The oceans are acidifying and have been since the beginning of the industrial era, with devastating consequences for the marine environment.

The recently published State of the Oceans report² states that oceans are becoming more acidic at the fastest rate in 300m years, due to carbon dioxide emissions from burning fossil fuels, and a mass extinction of key species may already be almost inevitable as a result.

¹ Baxter, J.M., Boyd,I.L., Donald, A.E., Malcolm, S.J., Miles, H., Miller, B., Moffat, C.F. 2011. Scotland's Marine Atlas, Information for the National Marine Plan. Marine Scotland, Edinburgh

² See http://www.stateoftheocean.org/research.cfm

Opportunity and need

Scotland's marine renewable resource presents a significant opportunity that must be seized if we are to play our full part in tackling climate change. With as much as a quarter of Europe's offshore wind and tidal energy potential and an estimated 10% of its capacity for wave power, Scotland has a responsibility to play its full part in developing the expertise and technology to ensure we capture this resource.

A valuation of the UK's offshore renewable energy resource³ estimated that Scotland has 206 GW of practical offshore wind, wave and tidal resource - almost 40% of the total UK resource. Harnessing just a third of our offshore renewable energy potential could meet Scotland's electricity needs seven times over by 2050. The net value of this amount of energy, in terms of electricity sales, would be £14 billion by 2050.

The large scale development of offshore wind represents the biggest opportunity for sustainable economic growth in Scotland for a generation, potentially supporting up to 28,000 directly related jobs and a further 20,000 indirect jobs and generating up to £7 billion for the Scottish economy by 2020. It also presents an opportunity to harness the engineering skills of the North Sea oil and gas industry in a transition away from fossil fuels.

The final sectoral plan should acknowledge the important role the offshore renewables sector will play in achieving the Scottish Government's 2030 target of a power sector grid intensity of 50gCO₂/kWh.

Responsibility and learning

The scale of development in the marine environment necessary to tackle climate change over the long-term brings the potential risk of more immediate environmental harm. We therefore need to ensure that our response to climate change takes full account of the imperative to achieve clean, healthy, diverse and biologically productive seas. As a result of the level of uncertainty around the potential impacts, due effort is required both within Plan preparation and at project level (pre and post consent) to ensure that wherever possible these impacts are avoided and to ensure that potential risks to marine ecosystems are mitigated as a matter of course. This is acutely relevant given the importance of Scotland's wildlife rich marine environment, which supports strategically significant populations of certain seabirds and other marine species.

Sectoral Plan

WWF Scotland welcomes the publication of the Sectoral Plan for marine renewables. The plan provides a welcome description of volume growth that can act as a clear signal to the supply chain that offshore renewables have a long term role in Scotland's power sector. This is essential to encourage the level of deployment required to achieve economies of scale and drive down the cost of marine technologies.

WWF Scotland supports the establishment of the proposed Sectoral Plans Review Group to oversee the implementation of the plans. Any such group should involve representatives from across the appropriate stakeholder groups; including industry and environmental

³ The Offshore Valuation Group (2010): A Valuation of the UK's Offshore Renewable Energy Resource http://www.offshorevaluation.org/

NGOs. We support an on-going review process to ensure the best technical and environmental information is used to refine the sites. The collection of data and information for this review should be continuous but with the actual plan reviewed at an interval of every two years. It is important that all relevant information and data is made available to the Sectoral Plan Review Group. This should include work from government agencies such as JNCC and SNH but also from developers and industry led research groups.

Offshore wind: WWF supports the proposal in the draft plan to give consideration to expansion of any adopted Plan Options in the first instance.

Wave and tidal power: The final sectoral plan should include Plan Options for near shore wave power to ensure all possible wave technologies are afforded the same signal of support. The Scottish Government should test the implications of the 30MW limit with the wave and tidal industry to ensure it does not unnecessarily limit options in the future.